The Kutztown University Undergraduate Catalog 2025-2026 is being revised for Accessibility Compliance. While the remediation is being completed please contact RegOffice@kutztown.edu if you need any information. Thank you.

UNDERGRADUATE CATALOG

2025-2026

Kutztown University of Pennsylvania

The Undergraduate Catalog provides information about Kutztown University and its undergraduate programs. The contents of this catalog are not to be considered binding or a contract between the University and its students.

Each step of the educational process, from admission through graduation, requires continuing review and appropriate approval by University officials. The University, therefore, reserves the right to change the requirements and regulations contained in this document.

The provisions of this catalog are not intended to create any substantive rights beyond those created by the Commonwealth of Pennsylvania and are not intended to create, in and of themselves, any cause of action against Pennsylvania's State System of Higher Education, the Board of Governors, the Chancellor, an individual president or university, or any other officer, agency, agent, or employee of the State System of Higher Education.

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Introduction

Mission, Vision, Purpose, and Institutional Learning Outcomes of the University

Mission

The mission of Kutztown University is to provide affordable high-quality undergraduate, graduate, and lifelong learning opportunities that empower students of all ages for their intellectual, social, civic, and career endeavors.

Vision

Kutztown University aspires to be a regional center of excellence providing opportunities for advanced academic, cultural, and public service experiences, within a caring community, designed to promote success in a global society.

Purpose

Grounded in regional history and focused on innovative futures through the colleges of Business, Education, Liberal Arts & Sciences and Visual & Performing Arts; Kutztown University:

- offers a contemporary liberal arts education as the foundation for inspiring and challenging students to grow intellectually, professionally, ethically, civically, and socially;
- provides support for students to reach their unique potential;
- commits to access and diversity, drawing upon international, national, regional, and community partnerships to prepare new generations of global citizens;
- values the life experiences of students, faculty, and staff to create a caring community on a beautiful campus;
- cultivates opportunities for students to engage the world and pursue meaningful lives and careers through collaboration, mentorship, and intentional working relationships.

Institutional Learning Outcomes

1. **Communicate Effectively**
   Students will demonstrate the ability to communicate clearly and effectively.

2. **Think Critically and Creatively**
   Students will demonstrate the ability to effectively access, evaluate, and interpret information; adapt to changing situations; and, use creative and novel ideas and solutions to better solve problems and make complex decisions.

3. **Value Diversity**
   Students will demonstrate an understanding and ability to live and work within diverse communities.

4. **Acquire Knowledge**

Students will demonstrate a depth and breadth of knowledge.

5. **Practice Social and Professional Integrity**
   Students will demonstrate the ability to act ethically and with empathy, honesty, and responsibility.

History of the University

Kutztown University is a member of Pennsylvania's State System of Higher Education. Founded on September 15, 1866 as Keystone Normal School, it became Kutztown State Teachers College in 1928, Kutztown State College in 1960, and Kutztown University on July 1, 1983. The University is located between Reading and Allentown on 289 acres in southeastern Pennsylvania and includes 11 residence facilities which accommodate 4,000 students. The faculty and staff complement is approximately 1,000 headcount including 470 faculty with an 18:1 student to faculty ratio. Most of the University's $175 million in revenue sustains its instructional and support programs, although $44 million represent auxiliary fees such as room and board which is used to pay for costs in those areas.

The University is comprised of four academic colleges: College of Business, College of Education, College of Liberal Arts and Sciences, and College of Visual and Performing Arts. At the undergraduate level, there are over 100 majors, minors, and concentrations appropriate to each college, along with a University general education program. At the graduate level, there are 31 Master's programs, ten certifications, and two doctoral programs.

Accreditations

Kutztown has both institutional and specialized accreditation. It is accredited by the Middle States Commission on Higher Education (MSCHE), Accreditation Board for Engineering and Technology, Inc. (ABET), American Chemical Society (ACS) (program approval), Association to Advance Collegiate Schools of Business (AACSB), Commission on Sport Management Accreditation (COSMA), Council for Accreditation of Counseling and Related Educational Programs (CACREP), Council for the Accreditation of Educator Preparation (CAEP), Council on Social Work Education (CSWE), National Association of Schools of Art and Design (NASAD), National Association of Schools of Music (NASM), and National Council for Accreditation of Coaching Education (NCACE).

Non-Discrimination Statement

Kutztown University does not discriminate in employment or educational opportunities on the basis of sex, race, ethnicity, national origin, age, disability, religion, sexual

orientation, gender identity, or veteran status. To discuss a complaint of discrimination, please contact the University's Title IX Coordinator located in the Office of Social Equity, Old Main A-Wing, Room 02, by phone at (610) 683-4700 or by email at pena@kutztown.edu or the Office for Civil Rights located in the Lyndon Baines Johnson Department of Education Building, 400 Maryland Avenue, SW, Washington, D.C., 20202-1100, by phone at (800) 421-3481 (TDD: (800) 877-8339), by fax at 202-453-6012, or by e-mail at OCR@ed.gov.

All students must complete the University-offered online sexual harassment, anti-harassment, and anti-discrimination training. Information about how to complete the training is available at the Kutztown University Office of Social Equity website: https://www.kutztown.edu/about-ku/administrative-offices/social-equity/social-equity-policies-training.html. Questions can be addressed by calling 610-683-4700 or sending an e-mail to socialequity@kutztown.edu.

University Calendar 2025-2026

FALL SEMESTER 2025

Residence Hall Occupancy for Returning Students	Fri., Aug. 22, - Sun., Aug. 24
Faculty Meeting	Friday, Aug. 22
Residence Hall Occupancy Begins (New Students)	Thursday, Aug. 21
Classes Start	Monday, Aug. 25
All Students Late Registration and Drop/Add Period	Mon., Aug. 25 – Tues, Sept. 2
Withdraw "W" Period	Wed., Sep. 3 – Fri., Nov. 14
Labor Day Holiday (No Classes)	Monday, Sept. 1
Saturday Classes Start	Saturday, Aug. 30
Fall Break Day	Monday, Oct. 13
Follow Monday Schedule	Tuesday, Oct. 14
Mid Term	Tuesday, Oct. 14
Thanksgiving Recess	Wed., Nov. 26 – Sun., Nov. 30
Last Day to Withdraw from University	Friday, Nov. 14
Last Day of Regular Classes	Saturday, Dec. 6
Finals Week Begins	Monday, Dec. 8
Residence Hall Occupancy Ends	Friday, Dec. 12
Final Week Ends	Saturday, Dec. 13
December Commencement	Saturday, Dec. 13
Last Day of Semester	Saturday, Dec. 13

WINTER SESSION 2026

Classes Start	Wednesday, Dec. 17
Last Day of Session	Tuesday, Jan. 13
Martin Luther King Day Holiday- School Closed	Monday, Jan. 19

SPRING SEMESTER 2026

Residence Hall Occupancy Begins	Sunday, Jan. 25
Classes Start	Monday, Jan. 26
All Students- Late Registration and Add/Drop Period	Mon., Jan. 26 – Mon., Feb. 2
Saturday Classes Start	Saturday, Jan. 31
Withdraw "W" Period	Tue., Feb. 3– Fri., Apr. 24
Mid-term	Friday, March 13
Spring Break	Sun., March 15 – Sun., March 22
Last Day to Withdraw from University	Friday, April 24
Last Day of Regular Classes	Saturday, May 9
Final Week Begins	Monday, May 11
Residence Hall Occupancy Ends	Friday, May 15

May Commencement for Masters and Doctoral-Level Students..... Friday, May 15
Final Week Ends..... Saturday, May 16
May Commencement for Undergraduate Students..... Saturday, May 16
Last Day of Semester..... Saturday, May 16

SUMMER SESSION 2026

Session I
Residence Hall Occupancy Begins..... TBD
Begins..... Wednesday, May 27
Ends..... Friday, June 26

Session II
Begins..... Monday, July 6
Ends..... Thursday, Aug. 6

Ten Week
Begins..... Wednesday, May 27
Ends..... Thursday, Aug. 6

Admission Requirements

Freshman Admissions

1. Complete the application for admission. www.kutztown.edu/apply

2. Submit a non-refundable $35 application fee. Kutztown University subscribes to the NACAC or CEEB fee waiver program. Students should request submission of the fee waiver form through their guidance counselor.

3. Request an official copy of the high school transcript and send directly to the Office of Undergraduate Admissions. GED results must be sent directly from the Department of Education.

4. Submit ACT or SAT test scores. (Note: For students entering Fall 2024, Kutztown has elected to use a test optional policy.

5. Complete any other requirements as prescribed by the intended major by the appropriate date. Example: portfolio review, music audition.

6. Kutztown University strongly encourages students to pursue a college preparatory program in high school which consists of: 4 years of English, 3 years of Social Science, 3 years of Mathematics, and 3 years of Science.

7. Applicants will be considered on a rolling basis.

8. When approved for admission to the University, applicants will be required to make a non-refundable advance registration deposit by May 1.

9. A favorable admission decision is based upon the student's qualifications at the time of the offer and is contingent upon the student maintaining those standards through graduation from high school. The Office of Admissions reserves the right to rescind the offer of admission should a student's grades fall below the level of admissibility, or if the student does not remain in good standing with that school. Students must also submit a final official transcript that includes the date of graduation to the Office of Undergraduate Admissions. A formal hold will be placed on the student's account until this is submitted.

Transfer Student Admissions

1. Complete the application for admission. www.kutztown.edu/apply

2. Submit a non-refundable $35 application fee.

3. Request an official copy of the high school transcript and send directly to the Office of Undergraduate Admissions. GED results must be sent directly from the Department of Education.

4. Request official copies of college transcripts from all post-secondary institutions attended and send directly to the Office of Undergraduate Admissions.

5. Transfer students with 12 or more college level credits must have a minimum 2.0 GPA on a 4.0 GPA scale. Students who earned less than 12 credits will be required to submit their official high school record that will be used as part of the review process.

6. Complete any other requirements as prescribed by the intended major by the appropriate date. Example: portfolio, music audition.

7. Transfer students with 39 or more college level credits must enter with a declared major.

8. Applicants will be considered on a rolling basis.

9. When approved for admission to the University, applicants will be required to make a non-refundable advance registration deposit by May 1.

10. A favorable admission decision is based upon the student's qualifications at the time of the offer and is contingent upon the student maintaining those standards through the end of the semester. Students must submit a final official transcript to the Office of Undergraduate Admissions.

International Admissions

Application
International students may submit either the Kutztown application or the Common Application. They will apply as international freshman, international transfer or international second degree.

Academic Records
Academic records must be in English or translated into English by an official authority (students should not translate their own documents). Transcripts can be unofficial for an admissions decision, but a student must submit official transcripts before they begin classes. Final transcripts MUST be official.

International Transfer students must submit official college/university transcripts/academic records from all universities they attended.

College and university records from non-U.S. institutions must be translated to U.S. educational equivalency by a NACES recognized evaluation company. Translation is at

the student's expense and they must provide a course-by-course evaluation. Evaluations should be sent to the Office of Admissions directly by the evaluation company.

International transfer students will be required to submit an official final secondary school certificate unless they meet one of the following requirements:
1) Student has earned the equivalent of a U.S. associate's degree or;
2) Student has earned the equivalent of a U.S. bachelor's or higher degree or;
3) Student has earned 30 or more college-level semester credits (or 45 quarter credits).

Test Scores (SAT/ACT)
Students who are unable to submit an SAT/ACT score will be considered for admission based on their secondary school performance & English language proficiency. Students without an SAT/ACT score will still be considered for merit scholarships.

English Proficiency

The language of instruction at Kutztown University is English and as such, all students must provide evidence that they have achieved a high enough level of proficiency in the English language to be successful in their courses. Students may prove English proficiency in one of the following ways:

1) Examination Results

Submit results from an English proficiency examination. Scores must be less than two years old. Unofficial results are accepted for the application review; official score reports are required before the student enrolls at KU.

- IELTS: 6.5 Overall Score
- TOEFL: 79 internet-based test
- PTE: 53 Overall Score
- Duolingo English Test: 110 Overall Score
- SAT: Evidence-Based Reading and Writing score of 560 (KU School Code 2653)
- ACT: 21 English/Writing Score (KU School Code 3706)

2) Waiver

Students will receive a wavier of the English proficiency exam requirement if they are from one of the following countries:
Anguilla, Antigua and Barbuda, Australia, Bahamas, Barbados, Belize, Bermuda, Botswana, British Virgin Island, Brunei, Canada (except Quebec), Cayman Islands, Dominica, Falkland Islands (Islas Malvinas), Fiji, Gambia, Ghana, Gibraltar, Grenada, Guyana, Ireland, Jamaica, Kenya, Kiribati, Lesotho, Liberia, Malawi, Mauritius, Montserrat, New Zealand, Nigeria, Papua New Guinea, Philippines, Samoa (Western), Seychelles, Sierra Leone, Singapore, Soloman Islands, South Africa, St. Kitts and Nevis, St. Lucia, St. Vincent & the Grenadines, Swaziland, Tanzania, Tonga, Trinidad & Tobago, Turks and Caicos Islands, Tuvalu, Uganda, United Kingdom, Vanuatu, Vatican City, Virgin Islands, Zambia, Zimbabwe

3) Study at a U.S. High School
We will waive the English language requirement if a student studied at a U.S. high school for at least two academic years, and has earned a C or higher in core English language classes.

4) Study at a U.S. College/University
We will waive the English language requirement if a student studied at a U.S. college or university for at least one academic year, earned at least 24 college-level semester credits (or 36 quarter credits) and has completed the equivalent of CMP 100, Effective Composition, with a grade of C or higher.

Exchange Students

Application
Exchange students must submit the KU Exchange Student Application Form after a nomination has been received from a partner institution.

Academic Records
Provide College/University Academic Records in English.

English Proficiency

Students may provide a letter from the international office of their home university verifying that they have a high enough level of English language proficiency to be successful as an exchange student at Kutztown University.

Alternatively, students may submit results from an English proficiency examination. Scores must be less than two years old. Unofficial results are accepted for the application review; official score reports are required to complete your application record when they enroll at KU.

IELTS: 6.5 Overall Score
TOEFL: 79 internet-based test
PTE: 53 Overall Score
Duolingo English Test: 110 Overall Score

Re-Entry Students

The University welcomes the return of students who did not complete their degrees. The student's previous Kutztown University academic record will be the major criterion in determining re-entry. Students should be aware that some major programs have restricted enrollments and/or specific entrance requirements.

Readmitted Students: Any student who has previously attended Kutztown University is required to complete a Request for Readmission at the Office of the Registrar.

Transfer Readmitted Students: Students applying for re-admission who have attended other institution(s) since leaving Kutztown University must submit an official transcript from each college. Students are required to apply through the Office of the Registrar and complete a Request for Readmission.

Second Degree

A student who has earned a bachelor's degree at a college or university in one field of study and wishes to earn a second undergraduate degree in another field of study is classified as a second degree student. This does not apply to anyone interested in the field of Education. Students must complete an application for admission, pay a $35 application fee, and submit official copies of their college transcripts from all post-secondary institutions attended.

Transient Students

This classification applies to a student who is enrolled at another college or university, excluding visiting students from Pennsylvania's State System of Higher Education institutions, and who wishes to take courses at Kutztown University. Transient students are required to submit an application for admission to the Office of the Registrar.

Visiting Students

This classification applies to a student who is enrolled at another Pennsylvania State System institution who wishes to take courses at Kutztown University. All credits and grades accrued at other State System universities shall be accepted in full by the home university, and thereafter treated as home university credits and grades. A student may take a maximum of 24 credits via the Visiting Student Policy. Visiting students are required to submit a Visiting Student Application available in the Registrar's Office.

Homeschooled Students

Kutztown University welcomes applications from students who have been homeschooled. Please review the guidelines under the freshmen/transfer sections as well as the following information: https://www.legis.state.pa.us/cfdocs/legis/PN/Public/btCheck.cfm?txtType=PDF&sessYr=2013&sessInd=0&billBody=H&billTyp=B&billNbr=1013&pn=4174

1. Homeschooled applicants should submit a grade transcript if available and the official evaluation for each grade from 9 to 11. A final grade transcript (if applicable) and evaluation must be submitted when the final year of homeschooling is complete.

2. Transcripts do not need to come from an accrediting agency (i.e., Homeschoolers Association, Department of Education, etc.); "…a high school diploma awarded by a supervisor or an approved diploma-granting organization

shall be considered as having all the rights and privileges afforded by the Commonwealth, a Commonwealth agency, including, but not limited to, the Pennsylvania Higher Education Assistance Agency, a political subdivision, a local agency and an authority or instrumentality of the Commonwealth or a political subdivision to a high school diploma awarded under this act…"

Tuition and Fees

While subject to change without notice, the following tuition and fee amounts apply to all Kutztown University undergraduate students at press time:

All required tuition and fees are listed and defined on these websites:

For Undergraduate Program Tuition and Fees see the Office of Student Accounts at https://www.kutztown.edu/affordability/tuition-and-fees-(undergraduate).html

For Graduate Program Tuition and Fees see the Office of Student Accounts at https://www.kutztown.edu/affordability/tuition-and-fees-(graduate).html

Deposits

Advance Registration Deposit - An Advance Registration Deposit of $300.00 must be paid when an applicant wants to accept the offer of admission after submitting an application. This can be paid online using MyKU log on information, by mail with check or money order, or in person with cash, check, or money order. This fee is non-refundable under any condition.

Housing Application Fee - Incumbent students must pay a $100 application/preference fee for each year they choose to live on campus. First semester students do not have to pay this fee. For housing requirements and more, please contact Housing and Residential Services 610-683-4027.

Delinquent Accounts

No student with an account in delinquent status shall be enrolled, graduated, or permitted to receive a transcript of records or diploma until all outstanding fees have been paid in full. Any student account in delinquent status at the end of a semester may be placed with the Pennsylvania Office of the Attorney General and/or collection agencies for collection and legal action.

Withdrawal and Refunds

From the Institution - Students withdrawing from the institution must inform the Registrar's Office in writing. In the event that all courses are dropped via MyKU, notification of such must still be sent to the Registrar's Office. Failure to do so could affect a student's academic status, as well as the student's financial aid eligibility. The official date of withdrawal for the purpose of a refund (or reduction of charges) will be the date the Registrar's Office receives notification. The percentage below is the amount by which the student's charges will be adjusted. This applies to students who withdraw from all University courses and no longer have a schedule. Any students receiving

financial aid are encouraged to meet with Financial Aid Services prior to withdrawing as all, or a portion of, aid received (or refunded) may have to be returned. The tuition technology fee is non-refundable. This schedule pertains to Fall and Spring semesters. The Drop Period in Summer/Winter Sessions is the first two days of the session.

During the Drop Period (roughly the 1st week of the semester) ….. 100%
Through the end of week 2 ..... 80%
Through the end of week 3 ..... 60%
Through the end of week 4 ..... 50%
Through the end of week 5 ..... 40%
After the fifth week 0%

Students withdrawing from the institution who are residence hall students and/or have a meal plan please see the appropriate sections below.

From a Course(s) - Students withdrawing from a course or courses and not withdrawing from the Kutztown University completely, may do so via MyKU through the Drop Period for a refund or reduction of charges. Course withdrawals processed in the Registrar's Office will have an official date of the date they receive notification. The percentage below is the amount by which charges will be adjusted. The tuition technology fee is non-refundable. This schedule pertains to Fall and Spring semesters. The Drop Period in Summer/Winter Sessions is the first two (2) days of the session. Please note that if the student withdraws from a course or courses after the Drop Period there is no refund or reduction in charges.

During the Drop Period 100%
After the Drop Period 0%

Withdrawal from Residence Hall - Students who cancel housing after July 1, but are continuing full-time enrollment at Kutztown University, are responsible for payment of the Fall and Spring semester housing fees. Room fees are refundable (charges reduced) according to the policies described in the Housing Contract. Students eligible for an actual refund will have it issued by the Office of Student Accounts via the normal refund process and using the refund policies. The reduction in charges for students withdrawing from the University during the semester will be based on the date of official check-out from the residence hall.

Withdrawal from Meal Plan - A meal plan change or cancellation may be requested, in writing, prior to the start of the semester or during the first two weeks of the semester. No changes to, or cancellations of, the meal plan will be permitted after the second week of the semester. When a student contractually withdraws from a residence hall, a meal plan change or cancellation may be requested in writing. Withdrawal from a residence hall does not automatically cancel the student's meal plan contract. If a student withdraws from the University, the unused portion of the meal plan is refundable in accordance with University policy. If withdrawal from the meal plan is required after the second week of the semester because of special circumstances, such as serious illness or other emergency

situations, a student may qualify for a reduction in charges and subsequently a refund through the Office of Student Accounts via the normal refund process and using the refund policies. The appeal process for special circumstances should be addressed to the Dining Services Office at (610) 683-1314 or kudiningservices@kutztown.edu.

Refund Policy - The most up-to-date withdrawal/refund policy can be found on the Office of Student Accounts Website: https://www.kutztown.edu/about-ku/administrative-offices/student-accounts/withdrawal.html

Billing and Payment Information can be found here
- https://www.kutztown.edu/affordability/bills-and-paying-your-tuition.html

General Student Account information can be found here
- https://www.kutztown.edu/about-ku/administrative-offices/student-accounts.html

Coronavirus Pandemic Interruptions

Policy Changes. Two temporary policy changes were extended from Spring 2020 into Fall 2020 and Spring 2021. On a course-by-course basis, undergraduate students could choose to (1.) keep the posted letter grade which was calculated into the student's GPA; (2.) choose to change the grades of A, A-, B+, B, B-, C+, or C to a PA (pass) which earned credit, but did not impact a student's GPA; (3.) choose to change the grades of D or F to NC (no credit) which neither earned credit nor impacted a student's GPA. FN grades could not be changed due to federal reporting (Title IV). Incomplete (I) grades were given if the faculty member determined that the student should be given additional time to complete the course requirements. Students were able to choose an alternative grading option for one week following the change of grade by the faculty from an I to a letter grade A-F. For students who did not complete the course, the F remained. Students who did not select any alternative grading option were identified as having selected to keep the posted letter grade.

For Fall 2020, unlike Spring 2020, the University ran academic standing against the cumulative grade point average for undergraduate students. If the cumulative grade point average was below a 2.0, the student received a negative standing:

- After posting a cumulative grade point average less than 2.0 the first time, the student was placed on Warning.
- After posting a cumulative grade point average less than 2.0 the second time, the student was placed on Probation.
- After posting a cumulative grade point average less than 2.0 the third time, the student was dismissed from the University.

For Spring 2021, the University suspended academic standing for undergraduate students.

The second policy endorsed and approved was the extension of the "Emergency Withdrawal Policy." This policy extended withdrawal from a course until the end of regular classes in Spring and Fall 2020 and Spring 2021.

Spring 2020. During the week of March 16 to March 20, Kutztown University suspended face-to-face classes to give faculty the opportunity to prepare to offer their courses online for the rest of the semester. Faculty continued to interact with and support their students throughout the scheduled changes. The University extended Spring break from one week to two weeks from Monday, March 9 to Friday, March 20. The end of term date remained Saturday, May 9. Most administrative offices were operating during normal business hours (Monday through Friday, 8:00 a.m. to 4:30 p.m.), with most staff working remotely. Appointments were conducted via telephone or remotely, when possible. On-campus appointments were scheduled as necessary. Questions were directed to individual offices through University e-mail. Residence halls, dining facilities, and auxiliary buildings were closed. Tutoring services were provided online via Zoom.

Summer 2020. As directed by the Chancellor and to protect the health and safety of students, faculty, and staff, there was continuation of no in-person instruction during the 2020 Summer session. All face-to-face events (both academic and non-academic) scheduled during Summer 2020 were moved to a remote delivery modality. No in-person experiential learning occurred, including but not limited to clinical rotations, student teaching, internships, field experiences, and other types of academically-related placements. Classroom faculty and experiential learning supervisors continued to provide remote learning opportunities for students to achieve appropriate learning outcomes. Exceptions were made for students in extraordinary circumstances. The normal grading policy was in effect for the summer.

Fall 2020. The University's decision to successfully open in the Fall semester as a residential campus was dependent on the health and wellness of students, faculty, and staff and the businesses in the surrounding community. The Emergency Management Team provided guidelines for not only on campus but also throughout the Kutztown community.

Adjustments to course schedules were due to enhanced social distancing measures in the classroom and faculty family leave requests. Students who chose to live on campus to attend face-to-face and/or hybrid classes and had their schedules altered to mostly online were given the ability to cancel on-campus housing before Saturday, September 5 at no cost. The Fall semester started, as scheduled, on Monday, August 24. Students were able to modify their schedules through Monday, August 31. Face-to-face classes ended the week before Thanksgiving and the semester finished in an online environment, with finals ending Saturday, December 12.

Spring 2021. For Spring 2021, classes began on Tuesday, January 19, using a 100% online format for the first two weeks. Residence halls were open on Friday, January 29 and classes returned to their originally-scheduled course modalities, including face-to-face instruction, beginning Monday, February 1.

Fall 2021. Kutztown University returned to a primarily face-to-face environment for the 2021 fall semester. While some health and wellness protocols may remain in place, KU's course offerings and residential experience will more-closely reflect its traditional on-campus environment.

Academic Policies and Procedures

Academic Forgiveness for Undergraduates
Academic readiness and situational factors may affect the academic performance of undergraduate students, especially first-time students, in the university setting. For a variety of reasons, including poor performance, students separate from the University and involve themselves in work and other life experiences. At present, students with a history of poor performance who choose to return to Kutztown University after years of separation often face obstacles created by their previous academic record.

The academic forgiveness policy applies to undergraduate students who seek readmission to Kutztown University after having been separated from the University for at least four years. Students must submit a completed Academic Forgiveness Application to the Office of the Registrar at the time of readmission to the University. If granted, the student will start the rest of the program of study with a 0.00 GPA. Academic Forgiveness may only be applied once to a student's academic record and will only be applied if the student earns a semester GPA of 2.0 or above during the student's first semester back. Academic Forgiveness will be applied to the student's record after the student completes the first semester with a GPA of 2.0 or higher. The student must be registered for at least 12 credits during that first semester.

A student who receives Academic Forgiveness must take at least 24 additional credits of graded coursework at Kutztown University before a degree will be granted. The GPA calculations and individual course grades earned during the previous period of attendance will remain part of the permanent transcript record. A notation will be made on the transcript indicating that the Academic Forgiveness Policy was applied and that the calculation of the overall GPA is based solely on grades earned after re-admission to the University. Students would keep credits earned previously in courses for which a final grade of "C" or better was recorded. As is the case for transfer credits from other institutions, credits toward a degree will not be granted for courses in which a grade less than "C" was earned during the previous period of enrollment at Kutztown University.

This policy does not replace or alter the "10-year" rule and so students must be aware that courses in the major taken over 10 years prior to re-entry may be judged to be not applicable toward a degree.

Academic Honesty
Undergraduate students at Kutztown University are expected to be honest and forthright in their academic endeavors. Any acts of academic dishonesty by students, such as

plagiarism on written papers/projects, falsifying the results of research, or cheating on examinations, threaten to undermine the educational and ethical goals of the University for its students. Such violations are of the utmost seriousness. Academic dishonesty is any action that constitutes a violation of the Academic Honesty Policy and includes, but is not limited to, the following:

1. Providing or receiving unauthorized assistance in coursework, examinations, or lab work.
2. Using unauthorized notes, materials, and devices during examinations or quizzes.
3. Plagiarizing or representing someone else's words, either spoken or written, ideas, formulas, solutions, or data as one's own work.
4. Presenting material to fulfill course requirements that was researched or prepared by others (such as commercial services) without the knowledge of the instructor.
5. Fabricating or falsifying information, including, but not limited to research findings, data, or statistical analyses; forging signatures; or altering dates.
6. Engaging in academic misconduct such as tampering with grades or participating in the distribution and/or receipt of any part of a test before its administration.
7. Possessing or arranging for someone else to possess course examination or quiz materials at any time without the consent of the instructor.
8. Altering or adding or expanding upon answers on exercises, examinations, or quizzes after the work has been graded.
9. Making fraudulent statements, excuses, or claims to gain academic credit or influence testing or grading.
10. Taking examinations or quizzes under the identity of another person or arranging to have another person take examinations or quizzes in place of the person registered for the course.
11. Intentionally evading Kutztown University academic policies and procedures; for example, improperly processing course withdrawals, grade changes, or other academic procedures.
12. Buying, selling, stealing, or engaging in the unauthorized exchange of, or improperly acquiring and/or using, any assignments, papers, or projects.
13. Misrepresenting a mastery of subject matter in an academic project or attempt to gain an advantage by the use of illegitimate or unauthorized means, such as misrepresentation of one's credentials.
14. Gaining unauthorized access to the computer system and/or electronic devices of Kutztown University or another person. Violations include tampering with or copying programs or data or access codes associated with coursework.
15. Using graded assignments in another course. Exceptions to this guideline must be specifically stated in the course syllabus.

Academic Warning, Probation, and Dismissal

All newly admitted, re-entry, and transfer students must meet the following minimum requirements for continuing enrollment in good academic standing – maintaining a minimum cumulative grade point average (CGPA) of 2.00 or higher for all work taken at Kutztown University.

Academic Warning: Any full-time student falling below the 2.00 CGPA at the end of any Fall or Spring semester will be placed on academic warning. Part-time students will be evaluated every 12 credits and will receive an academic warning whenever this evaluation shows their CGPA to have fallen below 2.00. Only one semester of academic warning is allowed during a student's academic career at Kutztown University. In an academic warning semester, the student: (1.) is not considered to be in good academic standing; (2.) is prohibited from participating in any sporting organization activity or leadership position in student organizations; (3.) is expected to contact the Department of Academic Enrichment and to use academic support services to remediate academic difficulties; and, (4.) may register for no more than 15 credits for the subsequent semester. Academic warning in the Spring is not effective if the student takes courses during the winter and attains a CGPA of 2.0. Academic warning in the Fall is not effective if the student takes courses during the summer and attains a CGPA of 2.0.

Academic Probation: A student who falls below the 2.00 CGPA after one full-time semester of academic warning shall be placed on academic probation. The CGPA of a part-time student who has received an academic warning must be brought up to 2.00 or higher within 12 credits attempted or the student will be placed on academic probation. The University will notify the student, in writing, regarding the danger of dismissal. Only one semester of academic probation is allowed during a student's academic career at Kutztown University. During the semester of academic probation the student: (1.) is not considered to be in good academic standing; (2.) is prohibited from participating in any sporting organization activity or leadership position in student organizations; (3.) is expected to contact the Department of Academic Enrichment and to use academic support services to remediate academic difficulties; and, (4.) may register for no more than 15 credits for the subsequent semester. Academic probation in the Spring is not effective if the student takes courses during the winter and attains a CGPA of 2.0. Academic probation in the Fall is not effective if the student takes courses during the summer and attains a CGPA of 2.0.

Academic Dismissal: A student who falls below the 2.00 CGPA after one full-time semester of probation will be dismissed from the University. The CGPA of a part-time student who has been placed on academic probation must be brought up to 2.00 or higher within 12 credits attempted or the student will be dismissed. Dismissal letters are sent out at the end of the Fall and Spring semesters. Dismissal in the Spring is not effective if the student takes courses during the winter and attains a CGPA of 2.0. Dismissal in the Fall is not effective if the student takes courses during the summer and attains a CGPA of 2.0.

Readmission of Dismissed Students: A student dismissed from the University must petition the Undergraduate Exceptions Committee (UEC) for an additional semester of academic probation prior to readmission. Students readmitted to the University will have a maximum of two full-time semesters (24-30 credits) to reach a CGPA of 2.00. During that time, the student must maintain a CGPA of at least 2.0 for each semester of work following readmission. Failure to maintain a CGPA of 2.0 for each semester until the CGPA reaches 2.00 or higher will result in a second dismissal. Any student who is dismissed from the University for failure to maintain a CGPA of 2.0 a second time is not

eligible for future readmission.

Advanced Placement
Students enrolled in Advanced Placement courses during high school are administered the Advanced Placement Examinations in May by the College Entrance Examinations Board, Princeton, New Jersey, to test the extent to which they have succeeded in meeting the university-level demands of certain introductory courses at the university. Students earning a grade of "3-Qualified" or better are given advanced standing and university credit for the courses in question. In some cases, students must earn a grade of "4 – Well Qualified" to be given advanced standing and university credit for the courses in question. Contact the Registrar's Office for further information.

Auditing Undergraduate Courses
Registrations for the auditing of courses will be considered tentative until the close of regular registration. If the registration of regular students fills the class quota or if regular registrants occupy all facilities, the students who have registered for auditing will be required to withdraw. The student would register "not-for-credit" and would pay the full fee. The student would not be required to take examinations, would be allowed to take the course only with the approval of the instructor, and would not be given a grade in the course. Once the student had enrolled "not-for-credit," the student cannot change part way through the course except through special action by the Undergraduate Exceptions Committee, upon receipt of approval from the department chairperson, and the appropriate college dean. The student could take the course for credit at a later date. The student is permitted to audit no more than one course per semester.

Change of Major, Minor, or Academic Advisor
Any student may request a change of major, minor, or academic advisor, however individual academic departments often have special criteria that must be satisfied before approval for change of major is granted. Students should check the college and department requirements carefully before making such a request. All changes of major, minor, or academic advisor will become effective on the date that the request is received in the Registrar's Office. A student who changes into a new major/minor, adds an additional major/minor, or re-enters a previous major/minor program must comply with all course and degree requirements that are in force on the effective date of the change, addition, or re-entry. For all changes of advisor, major, track/concentration, or minor, students should see the chairperson of the department that administers that major, track/concentration, or minor.

Class Attendance
Regular attendance in class is expected of all students at the University.

Class Attendance: The individual instructor has both the authority and responsibility for managing student attendance. The instructor's policy regarding attendance for each course, including its potential effect on the final grade, should be written in the course syllabus or first day handout and communicated to students during the first week of the semester. While, as stated above, classes are conducted on the premise that regular

attendance is expected, the University recognizes certain activities and events as legitimate reasons for absence from class.

Class Absence: Legitimate reasons for absence include, but are not limited to, death in the immediate family; documented illnesses, childbirth, and pregnancy (for as long as medically necessary); religious observance; academic field trips; participation in an approved performance or athletic event; military duties; direct participation in University disciplinary hearing; or jury duty. Nevertheless, the student bears the responsibility for providing appropriate documentation and for fulfilling all course expectations in a timely and responsible manner. Instructors will, if requested, without prejudice, provide students returning to class after a legitimate absence, with appropriate assistance and counsel about completing missed assignments and class material, depending on the nature of the work missed.

College Level Examination Program (CLEP)
The College Level Examination Program (CLEP) enables both traditional and non-traditional students to earn college credit by examination. Furthermore, CLEP assists students with prior experience to earn college credit by examination. Advanced standing and credits are awarded for both the General Examination and the Subject examinations when the student earns an acceptable score as recognized by the University. The General Examination measures college-level achievement in five areas of the Liberal Arts and Sciences: Mathematics, Humanities, Natural Sciences, Social Sciences and History. The CLEP Subject Examination measures achievement in specific college courses. These examinations emphasize principles, concepts, relationships, and applications of course materials.

Students may earn up to 21 credits from the battery of CLEP General Examinations in the following distributions: English – 3 credits; Mathematics – 3 credits; Humanities – 6 credits; Natural Sciences – 6 credits; and Social Sciences and History – 6 credits.

Course Repeat Policy
A student will be limited to a maximum total of six repeats. Repeats of a single course for grade improvement will be limited to a maximum of three repeats. When a student repeats a course, the credits are to be counted only once in determining the semester grade point average (GPA) and the total credits needed for graduation; the credits attempted are to be counted only once in determining the GPA, and the most recent grade in the course (regardless of whether it is higher or lower) will be used to calculate the semester GPA as well as the CGPA.

Course Withdrawals
When a student registers for classes, the student is responsible for those classes. To be relieved of this responsibility, the student must officially withdraw from those classes through the Registrar's Office. Failure to withdraw from a class for which a student registered, but is not attending, will result in a grade of “F” for that course.

Courses dropped during the first week of the semester will not be recorded on the student's permanent transcript unless the student withdraws from all classes, in which case a grade of "W" will be awarded. Students may withdraw from a single course or a full semester of classes with a grade of "W" between the second and twelfth week of the semester. After the twelfth week of the semester and through the last day of classes, a student who officially withdraws will receive a grade determined by the instructor.

The latest date for withdrawal from individual courses in a Summer Session will be published prior to the beginning of the specific session.

Credit by Examination/Course Challenges
A full-time or part-time student who, by experience or training, acquired academic background or comprehension comparable to that required of students who complete a given course, with the written approval of the department Chairperson and professor concerned, may submit a request for the privilege of taking an examination in the course for the purpose of establishing credit for it (Challenge Examination). The appropriate form is available at https://www.kutztown.edu/about-ku/administrative-offices/testing-services/credit-by-examination.html. A $25.00 administrative fee is charged for each Challenge Examination. The student can go to https://commerce.cashnet.com/openpay to log in and pay 25.00 using their ID. Please write in Credit by Exam as the reason. The Chairperson of the department concerned and the professor who is designated will prepare and administer a special examination in the course within 60 calendar days from date of approval. After grading the examination "Pass" or "Fail," the Chairperson and designated professor will report the result in writing to the Registrar. For a grade of "Pass," the student will earn the academic credits that ordinarily are earned by completing the course covered by the examination. If a grade of "Fail" is achieved, "Fail" will be entered for the course on the student's transcript and the student must take the course for credit. No re-examination may be taken.

Please Note the Following Limitations: Approval for credit by examination will not be granted for students who:

- failed the course in a classroom situation.
- failed a challenge examination and want to repeat credit by examination.
- do not have verification of required qualifications by department Chairperson and faculty offering the examination.
- do not have the agreement of the department/faculty member to offer the examination.

Dean's List
To qualify for the Dean's List in a particular semester, a student must take at least 12 credits of graded courses, excluding courses not used in calculating the GPA. In order to be placed on the Dean's List for a particular semester, the student must achieve a GPA of 3.60 or higher.

Double Major/Dual Degrees
Students at Kutztown University may apply to pursue more than one undergraduate major/degree concurrently with the first. Multiple diplomas will be awarded to students completing multiple degrees. A single diploma will be awarded to students completing multiple majors but not multiple degrees. Students must be admitted to each major/degree and must fulfill all requirements listed below.
To earn a multiple majors/degrees:
1. The student may not be graduated until each major/degree is completed.
2. A GPA of at least 2.0 is required in each major unless the major has a specific GPA requirement.
3. Clearance for graduation must be approved by each department or area.
4. A course required in multiple major/degree programs does not have to be repeated for each major/degree.
5. For any two majors/degrees that a student earns, they must earn at least 18 major credits that are not counted as major credits in the other major/degree. Major credits do not include Directed General Education, Concomitant, or Free Elective credits.
6. All University requirements, such as minimum GPA and number of credits taken at Kutztown University in the major, must be met for each degree separately.

GPA Calculations and Transfer Grades
Except where mandated by Board of Governors Policy, the GPA will be calculated on the basis of courses taken at Kutztown University for which a letter grade is given. Grades for courses taken at other institutions cannot be used in the calculation of the GPA at Kutztown University, and the grades for courses taken at other institutions will not appear on official Kutztown University transcripts, except where mandated by Board of Governors policy.

Grading
The system of grading at Kutztown University for undergraduate students is as follows:
A (4.0) A- (3.67) B+ (3.33) B (3.0) B- (2.67) C+ (2.33) C (2.0)
D+ (1.33) D (1.0) F (0.0) FN (0.0) (unearned failing grade) FA (failing grade)
PA (passing grade) S (satisfactory grade) U (unsatisfactory grade) NG (no grade reported) NC (no credit) W (withdrawn) M (military withdrawal) I (incomplete grade)

I (incomplete grade): The grade awarded to students who have not satisfied all requirements of a given course. For undergraduate students, all deficiencies must be removed by the end of the tenth week of the next semester. Failure to meet this requirement automatically changes the “I” grade to an “F” grade.

There is no A+, C-, or D-. There is no “D” grade for student grading in 400- and 500-level courses.

Under Title IV of the Higher Education Act of 1965, the awarding of Federal student aid is based on students attending school for the entire period for which financial aid is

awarded. A university is required to determine the earned and unearned portions of Title IV aid as of the date the student ceased attendance based on the amount of time the student spent in attendance.

I

Graduation Requirements

Students who plan to complete requirements for the degree at the end of a current semester must apply for graduation through MyKU. Students who intend to participate in Commencement exercises must be within six credits or one internship of the total number of credits required for their program of study.

Independent Study

Independent Study is a course of study specific in nature, content, and level that is not provided as a regular course offering of study at the University. An Independent Study would be designed by a faculty member with possible input from the student in question. The Independent Study would be subject to the approval of the Chairperson of the department in which the course of study is undertaken. The option of offering a course by Independent Study within a particular academic department must have been previously approved through the University curricular process. A student wishing to pursue a course by Independent Study should contact a faculty member interested in offering such a course or the department Chairperson in the department in which the Independent Study would be taken.

Individualized Instruction

For graduate students, Individualized Instruction is only available after approval of degree candidacy and completion of 12 graduate credits. Professional credit students cannot register for an Individualized Instruction. In order for a student to request a course to be taught by Individualized Instruction, it must be a regular University course that is not scheduled to be taught that semester. In addition, it must be a required course in the student's program of study. A student may take only one course by Individualized Instruction per semester. A student may not repeat any course by Individualized Instruction for which the student originally received a grade of "D" or "F." The student initiates the request for an Individualized Instruction with the appropriate department Chairperson. The course instructor, the appropriate department Chairperson, and the appropriate dean must all approve that a course be taught by Individualized Instruction. The completed form must be submitted to the Registrar's Office by the last day of the Add/Drop of that semester. A student enrolled in a course under Individualized Instruction may expect to meet with the instructor for at least five contact hours per credit offered. Examinations and other work will be comparable to the requirements of the course when regularly offered. A student may not repeat a course (taken by the normal method) via Individualized Instruction without the approval of the Undergraduate Exceptions Committee, as applicable.

Minors

Minor(s) are available on the following basis:

1. Each minor area requires between 18-21 credits.

2. Each department offering a minor determines the specific sequence of study that constitutes the minor.

3. The minor should reflect a minimum of six credits of advanced standing coursework.

4. A GPA of at least 2.00 is required in the minor.

5. In order to receive transcript recognition of a minor program, a student must complete half of the minor course work at Kutztown University.

Permission to Study at another College or University
Students wishing to study at another college and to transfer the credits earned to Kutztown University must obtain permission, in writing, prior to enrollment. The following conditions must be met: (1.) The college at which the student wishes to study must be a regionally accredited institution of higher education; (2.) The student must be currently enrolled and eligible for registration at Kutztown University the next semester: (3.) A student cannot repeat a course for credit at another institution for which the student earned a "D" or better at Kutztown University; and, (4.) Thirty (30) semester hours of the last sixty (60) semester hours of credit required for graduation must be completed at this institution. A minimum of thirty (30) semester hours must be taken at Kutztown University. Grades earned in courses taken at another institution will not be included in determining a student's GPA since only grades earned at Kutztown University affect this average. However, a minimum grade of "C" must be earned at the other institution for the credit to be accepted at Kutztown University.

Portfolio Assessment
Portfolio assessment is an alternative vehicle for defining, demonstrating, and documenting college-level learning achieved outside the classroom. Students who have the appropriate reading and writing competencies may take a three-credit independent study course available in the Fall and Spring semesters. The course encompasses relevant academic content, skill development, and ongoing guidance during the process of developing a learning portfolio. After completion of the course, students may submit the learning portfolio for evaluation for possible college credit. Evaluation of the portfolio is not part of the Independent Study course. The evaluation is done by faculty experts in the academic disciplines reflected by the student's learning and is subject to a separate assessment fee. For further information contact the Office of the Registrar.

Residency Requirements
All first baccalaureate degree students must complete at least 30 of their last 60 credits at Kutztown University and at least 50% of their major credits (including required cognate courses) at Kutztown University in order to meet graduation residency requirements. Students are not required to take more than 30 credits.

Second Degrees
A student may pursue a second baccalaureate degree after earning a first degree either at Kutztown University or another accredited institution. The student must be admitted to the second degree program through the undergraduate admissions process after completing the first degree program. Only coursework earned after admission to the second degree will fulfill the following: (1.) All requirements for the curriculum of the major and required related courses of the major of the second degree must be satisfied; (2.) A student must earn at least 30 credits at Kutztown University after matriculation to the second degree. At least 18 of these credits must be in the admitted major of the second degree; (3.) The department will determine the currency of the prior learning for major courses completed as part of the first degree. Courses that are deemed currently completed as part of the first degree do not have to be repeated for the second degree; (4.) Completion of the first degree satisfies all general education requirements of the second degree. However, required related courses must still be completed. For example, a second degree Physics major would still need to complete Calculus coursework, even though there would be no general education mathematics requirements; and, (5.) All University requirements, such as a minimum GPA of the major and number of credits taken at Kutztown University in the major, must be met.

Ten Year Rule
Kutztown University welcomes the return to higher education of students who for various reasons did not complete their degrees. Such students should be aware that courses taken in their major discipline ten years or more prior to the resumption of study perhaps might not be counted toward graduation because such courses may no longer be considered current or may no longer be required for the degree. The Registrar, in consultation with the appropriate department Chairperson, will determine the acceptability of these credits.

Transfer Credits
Advanced standing credit will be given only for equivalent courses completed in regionally accredited degree-granting institutions of a collegiate level. No student may obtain a degree without a minimum residence of one year (30 semester hours) at Kutztown University. All baccalaureate degree students are required to take at least 30 of their last 60 credits and at least fifty percent (50%) of their major courses at Kutztown University.
Some courses that do not have good equivalencies at Kutztown University will transfer in as numbers 880s and 890s under the appropriate course prefix.

Transfer Credits in Major/Minor
In order to graduate from a particular major/minor at Kutztown University, students transferring from any other institution of higher education to Kutztown University will be required to complete at least half of the minimum credits required in their major/minor field at Kutztown University. The courses to be taken to fulfill this requirement must be at the upper level. In some cases, in order to comply with this regulation, a student may be required to complete more than 120 semester hours for the degree.

University Withdrawals
Any student dropping out of the University prior to the end of any academic term must officially withdraw. This is accomplished by completing a formal withdrawal form available in the Registrar's Office. Failure to follow this procedure when withdrawing from the University may result in failing grades in all courses being taken at the time of withdrawal. The date the Registrar is notified in writing, with the student's original signature, is the official date of withdrawal. If the student completes the withdrawal process with the Registrar's Office prior to the two weeks before the beginning of final examinations, then the student will receive "W" grades for all courses. If the student completes the withdrawal process with the Registrar's Office within two weeks of the beginning of final examinations, then the student will receive "F" grades for all courses when withdrawing from the University. A student who fails to formally withdraw can apply to the Undergraduate Exceptions Committee, claiming extenuating circumstances. The Undergraduate Exceptions Committee may then award the student a grade of "W" for all courses being taken when withdrawing from the University.

Veteran, Military-Affiliated, Army ROTC – Course Scheduling
The University will provide eligible students who are veterans, actively serving military members, ROTC Cadets, and family members using qualifying military and VA educational benefits with the opportunity to register for classes earlier than students who do not qualify, to enable these students a better chance of enrolling in a full course load and to maximize military education benefits before they expire. A veteran student who is not receiving benefits but who has self-identified as a veteran is responsible for providing documentation (e.g., DD214 Member 4 copy) to the Kutztown University Registrar's Office showing that he or she was discharged or released from such service under conditions other than "dishonorable," in order to be eligible for early registration.

Student Life

Athletics
The University is a member of the Pennsylvania State Athletic Conference, and competes at the NCAA Division II level. Varsity schedules for men include football, cross country, basketball, wrestling, tennis, indoor and outdoor track and field, and baseball. Women compete in acrobatics & tumbling, tennis, field hockey, volleyball, softball, cross country, swimming, soccer, indoor and outdoor track and field, golf, basketball, bowling and lacrosse at the inter-collegiate level. Interested students should contact the coach directly. A wide offering of club, recreational, and intramural sports is provided for both men and women through the Office of Recreational Services.

Career Development Center
One function of a college education is to foster the growth and development of the student in preparation for a meaningful and satisfying life after college. The Career Development Center helps students to enhance self-knowledge, design their educational and career plans, and build connections to secure meaningful experiences. They facilitate student learning and development by empowering them to actively pursue professionally rewarding lives. The following resources and services are provided to help students work

on their career development plan and prepare for professional opportunities after graduation:

Career Programs and Workshops - The staff offers a variety of programs in collaboration with academic departments, campus clubs and organizations, and residence hall groups.

- Workshops on designing one's career path, internship and job-search strategies including using social media, interviewing strategies, salary negotiation, graduate school selection, and workplace and dining etiquette are also offered.
- Employer panels and networking sessions are offered to educate students about career paths and industries, employers, and to provide the opportunity to network with professionals.
- Practice/mock interviews with area recruiters.
- Walk-in hours are offered for in-person resume and cover letter reviews.
- A career certificate program is offered to encourage students to work on their career development plan.

Individual Counseling/Coaching **-** Students are encouraged to meet with a career coach to discuss their major selection, career development plan and goals, search strategies for internships and jobs, and effective interviewing.

Career Tests **-** Helping students identify their skills, abilities, and interests is key to a successful college experience. To help students in this area, a variety of assessment instruments are offered including the Career Key, Kuder Journey and StrengthsFinder.

Internships and Full-time Positions **-** To assist students with their search, the Career Development Center offers an on-line career management system for students to view postings and apply.

On-campus Interviewing and Career Fairs **-** Staff members work with business, industrial, government, and educational representatives who visit each year to present their organizations at fairs and to interview with students on campus. A graduate school fair is also offered yearly.

Career Resources **-** Numerous online and in-print resources are available to students, in addition to a professional clothing closet.

Disability Services

Disability Services strives to create an accessible living and learning environment for students and employees with disabilities. Self-disclosing and requesting accommodations is voluntary although necessary in order to provide reasonable accommodations on an individual basis. Students seeking accommodations are strongly encouraged to notify Disability Services and provide all supporting documentation early to allow adequate time for planning. For more information concerning specific documentation guidelines, please refer to the Disability Services website at www.kutztown.edu/DSO. For more information about Disability Services, please contact: Disability Services Office, 215

Stratton Administration Building, P.O. Box 730, Kutztown, PA 19530. Telephone: (610) 683-4108, TDD: (610) 683-4499, Fax: (610) 683-1520

General Regulations and Conduct
Specific regulations regarding organizations, conduct, and discipline of students and related matters are to be found in the student handbook, *The Key*.

Health and Wellness Center
Health and Wellness Services is located on the first floor of Beck Hall and includes the following departments: Clinical Services, Counseling and Psychological Services, Health Administrative Services, and Health Promotion and Alcohol and Other Drug Services. The Health and Wellness Center supports the academic mission by providing quality health care, health promotion, counseling, and prevention services to the campus community. All matriculated undergraduate students who have paid the health center fee are eligible for services.

Clinical Services is staffed by registered nurses, physicians, and mid-level providers. All services are by appointment only Monday through Friday, 8:30am – 4:00pm during the fall and spring semesters. Nursing services are available during the summer months for undergraduate students who are enrolled in summer courses, working, and/or living on campus and have paid the summer health center fee. Services include routine illness and injury care, basic physical exams, and reproductive health exams. Emergency care is limited to first aid; all urgent medical and mental health issues are referred to community providers or emergency services.

Although nursing and provider appointments are covered at no charge under the health center fee without additional charges, some specialized services, treatments, diagnostic testing, and equipment require a nominal fee and will be charged to the student's account. A self-care station is available without an appointment for students seeking over-the-counter medications, period products, condoms, and first aid supplies.

In addition to departmental outreach programs, the Wellness Center provides a variety of health promotion activities and resources during open hours for students, staff, and faculty.

Counseling and Psychological Services (CPS) is staffed by licensed mental health professionals and offers short-term, time limited counseling services to matriculated graduate students struggling with emotional and psychological difficulties. Our faculty counselors work with students to foster personal and academic growth and success. Services are also provided by masters and doctoral level student counselors in-training under the supervision of professional faculty counselors. Counseling services provided by CPS are confidential, within the limits of applicable laws. CPS is open 8:00 a.m. - 4:00 p.m. Mondays and Fridays, and 11:00am – 7:00pm on Tuesdays, Wednesdays, and Thursdays. CPS is only open during the fall and spring semesters.

CPS services include individual and group counseling, outreach, and crisis intervention. In order to avoid dual relationships, students who receive counseling services through CPS may not concurrently or subsequently work at CPS (as a practicum student, intern, student worker, or graduate assistant, etc.).

Students who require more intensive, long-term or specialized psychological services not offered by CPS will be offered referrals to appropriate services in the community.

For further information about Health and Wellness Services, call the Health Center at (610) 683-4082, or the Counseling Center at 610-683-4072, or review the web site at www.kutztown.edu/healthandwellness.

Kutztown University Activities Board (KUAB)
Students have diverse opportunities in which to invest leisure time and to learn and develop outside the formal academic environment. Activities are conducted for the personal development of those who initiate, plan and engage in them, and as a varied co-curricular adjunct to academic programs.

The Kutztown University Activities Board, under the guidance of the Office for Student Involvement, consistently produces a wide array of lectures by prominent personalities, concerts by musicians, performances by professional artists and actors, movies, art exhibitions, excursions, panel discussions and special activities. Such a variety of programs ensure opportunities for students with all types of interests and needs. The Kutztown University Activities Board office is located in Room 166 of the McFarland Student Union and can be reached by dialing (610) 683-1383.

Kutztown University Student Services, Inc. (KUSSI)
Kutztown University Student Services, Inc. is an independent, non-profit affiliate of Kutztown University. KUSSI works with the University and Student Government Board (SGB) to provide free and low-cost services to students and student-led organizations. KUSSI offers a variety of services to students through three operating divisions: KUSSI Service Center, KU Campus Store, and Dixon Marketplace. KUSSI receives no subsidies and contributes its operating surplus to student activities, campus athletics, and Kutztown University student scholarships. For additional information, please visit the KUSSI website at https://www.kutztown.edu/kussi.

KUSSI Service Center
KUSSI Service Center offers a multitude of accounting and auxiliary services to students and student-led organizations within the Student Government Association (SGA). The service center provides SGA accounting services (such as deposits, purchase orders, check requests) to all Gold status (sponsored) student organizations on campus, and manages private accounts and cash boxes for both Maroon status (registered) and Gold status student organizations. The office supports student organizations through the SGA budgeting process and funding initiatives, along with SGA vehicle rentals and copier services for all eligible organizations. KUSSI Service Center also manages a variety of student-related Auxiliary services, including campus laundry facilities, snack and

beverage vending machines, MicroFridge rentals, Graduation Festival, regalia, and senior portraits. KUSSI Service Center is located in the McFarland Student Union Room 173 and can be reached at (610) 683-4090.

KU Campus Store

KU Campus Store, a division of KUSSI, is a one-stop shopping location for all official Kutztown University merchandise. The store offers a wide array of apparel and gifts, computers and technology accessories, convenience items, art supplies, school supplies, and course materials. KU Campus Store has a large selection of new, used, rental, and digital course materials in-store, as well as convenient online ordering and payment options. A book voucher program is offered through the Financial Aid office enabling eligible students to purchase required course materials during the first two weeks of each semester using their anticipated aid. Every student registered for class has access to KU Campus Store's Virtual Shelf, a customized app that automates each student's course list with a single sign on, providing the most convenient way to view and acquire all required course materials at the lowest prices offered by the store. Other services offered by KU Campus Store include money orders, check cashing, shipping, and daily textbook sell back. KU Campus Store is located on the lower level of the McFarland Student Union and can be reached at (610) 683-4099. For more information, or to shop online, please visit www.kubstore.com.

Dixon Marketplace

Dixon Marketplace, a division of KUSSI, is the official marketplace for student goods such as convenience items, health and beauty aids, dorm and school supplies, Kutztown University apparel, and gifts. Students are able to take advantage of daily services such as copying, faxing, and photo processing. Dixon Marketplace is located on the ground level of the Dixon Residence Hall, and is open until midnight, seven days a week. For additional information, please contact Dixon Marketplace at (610) 683-4966.

Military and Veterans Affairs

The specific needs of the campus subgroup consisting of students who are considered "Military-Affiliated" (Veterans of U.S. Military Service, Active Duty, National Guard, Reserve Military, and Military Dependents) are the responsibility of the Office of Veterans Services. The Veterans Services Office assists students using military and VA educational benefits with the required paperwork, and also provides support and referral services for all military-affiliated students, on a variety of special concerns. Veterans liaisons are in key areas such as admissions, financial aid, student accounts, career services, disability services, housing, and the registrar to further assist military-affiliated students throughout their academic career.

Office for Student Involvement

Recognizing the value of co-curricular experiences as part of the general education of students, Kutztown University promotes and encourages student involvement outside the classroom. By challenging and supporting them to reach their unique potentials, the University helps students become active, responsible, and involved leaders in today's society.

Through the Office for Student Involvement, the University offers a variety of resources and services designed to support student involvement. As a result, the Office oversees the registration and maintenance of all student organizations. Whether seeking to become involved in programs that are career-oriented, athletic, religious, literary, artistic, social, or political in nature, students can find a student organization to match their interests and are encouraged to take advantage of these experiential opportunities to prepare for post-graduation employment or education. The Office for Student Involvement is located in 153 McFarland Student Union and can be reached at (610) 683-1383.

Public Safety and Police Services

Kutztown University places the safety of every member of the University community as a top priority and espouses the belief that all members of the community are responsible for assisting with maintaining as safe and secure an environment as possible. The Department of Public Safety and Police Services is the primary administrative office responsible for safety, security, and police services at Kutztown University. The department consists of sworn police officers plus civilian administrative and support staff and utilizes an outside security agency to perform dispatch, security, and parking-related functions. Public Safety protects and serves the Kutztown University community 24 hours a day, every day of the year. The staff is on duty 24 hours a day to take calls for campus emergencies 610-683-4001 and non-emergencies 610-683-4002.

Residence Life, Housing, and Dining Services

Campus Residence Halls

Kutztown University offers a multi-faceted residence hall system with a living-learning environment as its foundation. The Office of Residence Life, working in concert with student staff, hall councils, and other University offices, provides educational and personal growth opportunities by offering educational and social programs in the residence halls and apartments. In addition, students are afforded the opportunity to develop their leadership skills through participation on residence hall councils, the Residence Hall Association, and the National Residence Hall Honorary. Daily advisement and guidance are provided by in staff and trained student staff.

Facilities and Security

Each Kutztown University residence hall has a 24-hour desk operation that provides security, information, and equipment checkout. Desks are staffed by Residence Life – trained student desk receptionists. Other residence hall features include a multipurpose/recreation room, fully-equipped kitchens, television rooms, study lounges and laundry machines. In addition, resident students have access to game tables, DVD's, computers, board games, and much more. These amenities are provided by individual hall councils.

Residence Hall Technology

Kutztown University residence hall system offers high speed wifi access in each of the rooms and common areas. In addition each hall also offers a wired internet access port for each resident as well a landline telephone system, and digital cable service. These

amenities provide basic cable television service to each student room, allow each student direct access through the student's personal computer to computer networked services and the World Wide Web, and improved telephone service to all resident students.

Lifestyle and Visitation

Kutztown University's 11 residence halls and two apartment villages provide a variety of living and lifestyle options. Included in these options are both coed and gender inclusive housing.

Housing and Residence Life Policies

The Kutztown University residence hall system provides on-campus housing for over 4,000 students. Freshmen and sophomores are required to live on campus unless an exception is provided. https://www.kutztown.edu/about-ku/administrative-offices/housing-and-residence-life/housing-information-and-residence-halls/residency-requirement.html

All resident students, except Golden Bear Village and Honors Hall residents, are required to participate in the on-campus meal plan. A number of meal plan selections are available to meet resident student needs.

The Kutztown University residence hall system is closed during recess periods. Housing is available to international and exchange students, and student teachers, at an additional cost, during break periods. Students are to contact the Residence Life and Housing and Dining Services Office concerning break housing policies.

Housing Process

For further information, please contact the Residence Life and Housing and Dining Service Office at 610-683-4027 or housing@kutztown.edu Website: www.kutztown.edu/housing

Housing License

All students offered on-campus housing must sign a housing license for the accommodations provided. Signed licenses must be on file with the Housing Office prior to student occupancy of a room.

Off-Campus Housing

The Dean of Students Office maintains a web site of available off-campus housing locations for students. This listing is available at och.kutztown.edu. The University does not approve, recommend, inspect, or regulate off-campus housing. Students make all arrangements independently. Leases or rental agreements are a private arrangement between the tenants and a property owner. The Borough of Kutztown and other municipalities, through housing codes and licenses, inspects and regulates all rental properties within its jurisdiction. These off-campus locations are periodically inspected by Housing Code Enforcement Officers.

Dining Services

Dining Services offers a variety of meal plans that are categorized by meal type. The types include seven-day and five-day plans, Block plans and Dining Flex plans. Any student registered for classes may purchase a meal plan. Students living in the residence halls (except Golden Bear Village Apartments, Honors Building, and the efficiency Apartments in Dixon Hall) must select a seven-day meal plan.

Meal Plan Options
Kutztown University meal plans offer flexibility and freedom to eat what, where, and when the student wants with the convenience of two all-you-care-to-eat dining and seven retail locations across campus. The follow meal plans are available:

The following meal plans offer seven-day unlimited access to the South Dining Hall and Cub Café:
MyTime Dining Diamond includes $250 Flex, 16 guest meal swipes
MyTime Dining Platinum includes $150 Flex, 16 guest meal swipes
MyTime Dining Gold includes $50 Flex, 8 guest meal swipes

The following meal plans offer five-day (M-F) unlimited access to the South Dining Hall and Cub Café:
MyTime Dining Maroon Plus includes $200 Flex, five guest meal swipes
MyTime Dining Maroon includes $50 Flex, five guest meal swipes

Additional meal plans include (meal swipes to be used at the South Dining Hall or Cub Café):
MyTime Dining 150 Block includes 150 Meal swipes and $250 Flex, five guest meal swipes
MyTime Dining 75 Block includes 75 Meal swipes and $100 Flex, five guest meal swipes
MyTime $500 Flex Plan includes $500 in Flex to use at any location
MyTime $250 Flex Plan includes $250 in Flex to use at any location

Dining Flex Dollars
Students have the option to have a dining flex dollar "declining debit" account. With a dining flex dollar account; the student can purchase food at any of our dining locations on campus. Meal plans already include dining flex dollars. If the student does do not have a meal plan, the student can start a dining flex dollar account with a deposit of $25.00. Additional flex dollars may be added to all dining flex dollar accounts in increments of $25.00. Unused dining flex balances at the end of the Fall semester will roll over to the Spring semester. However, at the end of the Spring semester, any remaining dining flex dollars are non-refundable.

Rohrbach Library
The Rohrbach Library provides a wide range of resources and services to its patrons, such as access to full-text databases, research-related services, reserving study rooms, laptops and other equipment, interlibrary loan access, computer labs and printing stations. The Library houses various collections of books, DVDs, and electronic resources.

Electronic resources include access to over 750,000 eBooks and millions of full-text articles located in one of 200+ searchable databases that students can access from on and off campus. Interlibrary loan is available to obtain books and periodical articles not owned by Kutztown University from libraries throughout the United States. Students can also find a number of computer labs and printing stations available for use as well as collaborative learning spaces with technology which are available for students and faculty to use while working on assignments or for classroom instruction.

The Library also houses a café and outdoor balcony for its students. In addition, the Rohrbach Library has their very own creative space called STEAMworks that contains equipment, such as 3D printers, poster size printers, button makers, sewing machines, craft supplies, and virtual reality technologies. Rohrbach also houses other important units that include the Curriculum Materials Center **(**contains pre-K through grade 12 resources for pre-service and in-service teachers). The CMC's main mission is to support the College of Education students and faculty by maintaining a representative collection of curriculum-related materials commonly used in U.S. public schools. The collection includes books (textbooks, activity books, and other teacher-focused books), kits (diagnostic tests, manipulatives, games, etc.), and teaching posters. Adjacent to the CMC is the Library Science Collection of children's literature. Together these collections offer students and faculty over 40,000 educational items for use in planning, learning, and teaching. The collections are overseen by the education librarian, whose office is located in the area. In addition, there are 10 open tables that are available when classes come to access the collections during class time or for individuals and groups to use for working on assignments. Also, there is a room that librarians use for teaching College of Education classes or other groups about the Library's resources).

The Rohrbach Library staff is available to help students with a wide variety of services. Our research services office provides students with one-on-one research consultations with librarians throughout the semester. Librarians meet frequently with classes from all areas of curriculum to discuss specialized research tools and teach over 200 information literacy classes per year to help students use the library for class assignments.

Rohrbach Library staff encourage students, faculty, and other patrons to become familiar with Library services and collections and to take advantage of this important intellectual resource as they participate in the various programs of study at the University.

Student Government Association (SGA)

All students enrolled at Kutztown University are members of Student Government Association (SGA) upon payment of the Student Activity Fee. Kutztown University Student Services, Inc. (KUSSI) is responsible for all of the SGA assets and is authorized by the University President to administer certain financial operations through SGA for the benefit of the students. The Student Government Board (SGB) is the legislative body governing SGA. KUSSI works closely with the SGB to provide financial assistance and other support services to students and student-led organizations at Kutztown University. Access to funding and free/low cost services are contingent upon the adherence to certain standards as determined by the SGB. For more information on these policies, please

contact the SGB Office at 610-683-4045 or email SGB@kutztown.edu or visit the SGB at https://engage.kutztown.edu/organization/student-government-board.

Student Conduct

Kutztown University has developed student conduct standards, policies, and procedures for addressing student and student organization misconduct which are outlined in the student handbook, *The Key*. Information related to the ***Student Code of Conduct*** including behavioral expectations, disciplinary processes, reporting forms, and support services can also be found on the Student Conduct website at https://www.kutztown.edu/studentconduct. For additional information or questions, please contact the Student Conduct department within the Dean of Students Office at studentconduct@kutztown.edu.

Vehicle Registration

Anyone who wants to park a vehicle on campus, whether it be for a day, a week, or a semester, must present a valid vehicle registration and driver's license to the Department of Public Safety. A temporary hang tag or permanent sticker will be issued to the person requesting parking privileges. This pass must be displayed properly on the registered vehicle at all times when it is parked on campus.

ACADEMIC DEGREES & PROGRAMS

Kutztown offers more than 100 undergraduate-degree majors, minors, certificates, and concentrations in four major colleges: College of Business, College of Education, College of Liberal Arts & Sciences, and College of Visual & Performing Arts.

COLLEGE OF BUSINESS

The Kutztown University College of Business, part of the Pennsylvania State System of Higher Education, emphasizes teaching and learning enriched by applied and pedagogical scholarship and community engagement. We serve students from diverse backgrounds, the business community, and other stakeholders of Southeastern Pennsylvania and the surrounding areas. Our Small Business Development Center assists in this effort and promotes economic development throughout the area. Our undergraduate and graduate degree programs provide high quality, affordable business education. Faculty lead and engage students to prepare them for intellectual, social, ethical, and career challenges.

-Dr. Anne Carroll, Dean

Bachelor of Science

B.S. Sport Management

Bachelor of Science in Business Administration

B.S.B.A. Business Administration: Accounting

B.S.B.A. Business Administration: Entrepreneurship

B.S.B.A. Business Administration: Finance

B.S.B.A. Business Administration: General Business

B.S.B.A. Business Administration: Human Resource Management

B.S.B.A. Business Administration: Management

B.S.B.A. Business Administration: Marketing

B.S.B.A. Business Administration: Personal Financial Planning

B.S.B.A. Business Administration: Supply Chain Management

Minors

Business Minor

Business Analytics Minor

Coaching and Fitness Administration Minor

Economics Minor

Supply Chain Management and Logistics Minor

B.S. Sport Management Requirements

The Department of Sport Management offers areas of study leading to careers in professional and collegiate sports, athletic coaching, the fitness industry, and other sport-related industries. The Sport Management program at Kutztown University of Pennsylvania has received specialized accreditation through the Commission on Sport Management Accreditation (COSMA).

Student Learning Objectives:
Upon completion of the sport management major students will be able to:

1. Demonstrate knowledge and understanding of fundamental principles requisite for professional success in the sport management profession.
2. Demonstrate the ability to make sound ethical decisions in the sport management profession.
3. Demonstrate the ability to solve problems inherent in the sport business industry.
4. Demonstrate the ability to communicate effectively in oral formats utilized in the sport management profession.
5. Demonstrate the ability to communicate effectively in written formats utilized in the sport management profession.
6. Demonstrate the ability to articulate the global scope of sport.
7. Demonstrate the ability to recognize diversity issues in sport management.
8. Demonstrate the ability to use technology effectively in the application of sport management practice.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. Students in the SM major are required to have a 2.0 GPA in the required courses to graduate.

Required Sport Management Core Courses – 48 to 54 credits

SPRT 160 Introduction to Sport Management (3 credits)
SPRT 195 Accounting Survey for Sport Management (3 credits)
SPRT 212 Sport Public Relations and Communication (3 credits)
SPRT 230 Leadership and Team Building (3 credits)
SPRT 236 Personal Selling in Sport (3 credits)
SPRT 260 Principles of Sport Finance (3 credits)
SPRT 265 Managing Sport Organizations (3 credits)
SPRT 270 Sport and Society (3 credits)
SPRT 285 Sport Marketing (3 credits)
SPRT 290 Fundamentals of Sport Law (3 credits)
SPRT 305 Emergency Care and Risk Management (3 credits)
SPRT 320 Sport Ethics (3 credits)
SPRT 330 Event and Facility Management (3 credits)
SPRT 345 International Sport Business (3 credits)
SPRT 350 Internship in Sport Management (6-12 credits)

Directed General Education Courses – 3 credits

While counting toward General Education fulfillment, this course is required for completion of the major.
CPSC 101 Computer Applications (Category C2) (3 credits)

University Electives – 21 to 30 credits

Program Plan Code: BS_SMPT
Effective Date: Fall 2018

BSBA Accounting Requirements

The accounting program at Kutztown University provides students with a knowledge base in both financial and managerial accounting. The accounting courses expose students to a broad array of accounting skills which are necessary for management responsibility within a company, in the field of public accounting, or for pursuing a graduate program. The program provides customizable coursework through three discipline tracks (Business Analysis & Reporting, Information System and Controls, or Tax Compliance & Planning), which prepare students for the Certified Public Accounting (CPA) exam.

Please be aware that Pennsylvania and most states require individuals to complete a minimum of 150 hours of college credits to qualify for CPA licensure.

Student Learning Objectives
Upon completion of the accounting program, students will be able to:

1. Prepare financial statements which are useful to external decision-making.
2. Solve business problems analytically to make well-informed decisions.
3. Demonstrate research skills and use technological tools to solve accounting problems.
4. Recognize ethical issues and their implication in professional judgement.

Note that all students must achieve a minimum of 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for BSBA/Accounting and business core courses, separately, are also 2.0.

Required Business Core Courses – 33 credits

ACCT 121 Financial Accounting (3 credits)
ACCT 122 Managerial Accounting (3 credits)
BUSN 131 Legal Environment of Business (3 credits)
MGMT 210 Principles of Management (3 credits)
MKTG 210 Principles of Marketing (3 credits)
BUSN 220 Regression Analysis and Data Analytics (3 credits)
BUSN 275 Business Data Management and Information Systems (3 credits)
FINA 350 Financial Management (3 credits)
MGMT 351 Operations Management (3 credits)
International Elective (ECON 360, FINA 365, MGMT 352, **or** MKTG 370) (3 credits)
MGMT 399 Business Strategy and Policy (3 credits)

Required Courses for Accounting Program – 21 credits

ACCT 305 Cost Accounting & Data Analytics (3 credits)
ACCT 312 Accounting Information Systems (3 credits)
ACCT 317 Tax Accounting I (3 credits)
ACCT 321 Intermediate Accounting I (3 credits)
ACCT 322 Intermediate Accounting II (3 credits)
ACCT 323 Advanced Accounting (3 credits)
ACCT 330 Auditing Practice and Standards (3 credits)

Restricted Elective Courses for Accounting Program – 9 credits

Choose one discipline track, to customize the accounting program.

Business Analysis & Reporting Track – 9 credits

ACCT 325 Not-For-Profit and Governmental Accounting (3 credits)
BUSN 310 Business Intelligence, **or** SCMG 362 Supply Chain Analytics (3 credits)
CPSC 105 Introduction to Data Visualization (3 credits)

Tax Compliance & Planning Track – 9 credits

ACCT 318 Tax Accounting II (3 credits)
FINA 351 Personal Financial Planning (3 credits)
FINA 386 Retirement and Estate Planning (3 credits)

Information Systems & Control Track – 9 credits

ACCT 335 Forensic Accounting (3 credits)
CPSC 111 Computer Forensics, **or** CRJU 170 Introduction to Security Management, **or** CPSC 253 information Technology Systems, **or** CPSC 351 Digital Forensics (3 credits)
SCMG 366 Enterprise Systems and Integrated Business Processes (3 credits)

Business Administration Elective Course – 3 credits

*Any ACCT, BUSN, ECON, FINA, MGMT, MKTG, **or** SCMG course. You cannot double count any business courses on your check sheet.*

Directed General Education Courses – 9 credits

These courses may be taken in fulfillment of General Education, as university electives, or as part of a minor. All must be approved General Education courses.
ECON 110 Principles of Macroeconomics (Category B) (3 credits)
ECON 120 Principles of Microeconomics (Category B) (3 credits)
MATH 140 Applied Statistical Methods (Category C2), **or** BUSN 120 Principles of Business Statistics (Category C2) (3 credits)

University Electives – 12 credits

Any university course that counts towards graduation.

Program Plan Code: BSBA_BSAD_ACCT
Effective Date: Fall 2022

BSBA Entrepreneurship Requirements

The entrepreneurship program is designed to provide students with a thorough understanding of the principles, strategies, and practical skills necessary to identify, develop, and manage successful business ventures. Entrepreneurship students gain insights into various facets of entrepreneurship, including opportunity recognition, business planning, financial management, marketing, and innovation. Internships and competition offer practical experience and valuable skills, helping students build networks and demonstrate their talents. The program prepares graduates to undertake their own ventures or contribute to innovative initiatives within established organizations.

Student Learning Objectives
Upon completion of the entrepreneurship program, students will be able to:

1. Demonstrate the ability to recognize, generate and articulate creative business ideas.
2. Assess the risk and commercial viability of business opportunities.
3. Evaluate the appropriate amounts and sources of funding for an entrepreneurial enterprise.
4. Develop a fully integrated business plan.
5. Understand strategies for growth and sustainability of an entrepreneurial enterprise.

Note that all students must achieve a minimum of 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirements for BSBA/Entrepreneurship and business core courses, separately, are also 2.0.

Required Business Core Courses – 33 credits

ACCT 121 Financial Accounting (3 credits)
ACCT 122 Managerial Accounting (3 credits)
BUSN 131 Legal Environment of Business (3 credits)
MGMT 210 Principles of Management (3 credits)
MKTG 210 Principles of Marketing (3 credits)
BUSN 220 Regression Analysis and Data Analytics (3 credits)
BUSN 275 Business Data Management and Information Systems (3 credits)
FINA 350 Financial Management (3 credits)
MGMT 351 Operations Management (3 credits)
International Elective (ECON 360, FINA 365, MGMT 352, or MKTG 370) (3 credits)
MGMT 399 Business Strategy and Policy (3 credits)

Required Courses for Entrepreneurship Program – 9 credits

MGMT 327 Small Business Management (3 credits)
MGMT 328 Entrepreneurship: From Concept to Launch (3 credits)
FINA 352 Entrepreneurial Finance (3 credits)

Restricted Elective Courses for Entrepreneurship Program – 9 credits

Select three from the following courses.
BUSN 390 Internship in Business (3 credits)
MGMT 335 Human Resource Management (3 credits)
MKTG 330 Personal Selling and Sales Management (3 credits)
MKTG 362 Digital Marketing (3 credits)
SCMG 260 Principles of Supply Chain Management (3 credits)
SMTS 101 Introduction to Social Media Theory and Strategy (3 credits)

Directed General Education Courses – 9 credits

These courses may be taken in fulfillment of General Education, as university electives, or as part of a minor. All must be approved General Education courses.
ECON 110 Principles of Macroeconomics (Category B) (3 credits)
ECON 120 Principles of Microeconomics (Category B) (3 credits)
MATH 140 Applied Statistical Methods (Category C2) **or** BUSN 120 Principles of Business Statistics (Category C2) (3 credits)

University Electives – 27 credits

Any other courses in the department of Business Administration or any university course that counts towards graduation.

Program Plan Code: BSBA_BSAD_BENT
Effective Date: Fall 2021

BSBA Finance Requirements

As an affiliated university of the Chartered Financial Analyst (CFA) Institute Affiliation Program, the finance program portrays to students and employers that its curriculum is closely tied to the practice of investment management and is helpful to students preparing for the CFA program exams. Our Applied Investment Management program, where students manage real money, is one of the most rewarding experiential learning opportunities that you will ever encounter. Students who graduate with a degree in finance can enter careers in domestic and multinational corporate financial management, management of financial markets and institutions, personal financial planning, and investment analysis and portfolio management.

Student Learning Objectives
Upon completion of the finance program, students will be able to:

1. Estimate and Evaluate: Identify the inputs needed to value a financial asset and apply a valuation methodology to estimate an asset's intrinsic value.
2. Summarize and Interpret: Summarize the historic risk-versus-return relationship for financial assets and interpret various measures of risk and reward.
3. Assess and Justify: Assess the inputs needed and justify the decision-making methodologies used to determine if resources should be allocated to an investment opportunity.
4. Justify and Consider: Justify the purpose and consider the operations of financial markets and institutions.

Note that all students must achieve a minimum of 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for BSBA/Finance and business core courses, separately, are also 2.0.

Required Business Core Courses – 33 credits

ACCT 121 Financial Accounting (3 credits)
ACCT 122 Managerial Accounting (3 credits)
BUSN 131 Legal Environment of Business (3 credits)
MGMT 210 Principles of Management (3 credits)
MKTG 210 Principles of Marketing (3 credits)
BUSN 220 Regression Analysis and Data Analytics (3 credits)
BUSN 275 Business Data Management and Information Systems (3 credits)
FINA 350 Financial Management (3 credits)
MGMT 351 Operations Management (3 credits)
International Elective (ECON 360, or FINA 365) (3 credits)
MGMT 399 Business Strategy and Policy (3 credits)

Required Courses for Finance Program – 12 credits

FINA 351 Personal Financial Planning (3 credits)
FINA 354 Investments (3 credits)
FINA 360 Financial Markets and Institutions (3 credits)
FINA 363 Intermediate Financial Management (3 credits)

Restricted Elective Courses for Finance Program – 6 credits

Select two from any 300-level FINA courses, not including business core courses and required courses for Finance and Personal Financial Planning tracks.

Directed General Education Courses – 9 credits

These courses may be taken in fulfillment of General Education, as university electives, or as part of a minor. All must be approved General Education courses.

ECON 110 Principles of Macroeconomics (Category B) (3 credits)
ECON 120 Principles of Microeconomics (Category B) (3 credits)
MATH 140 Applied Statistical Methods (Category C2) **or** BUSN 120 Principles of Business Statistics (Category C2) (3 credits)

University Electives – 27 credits

Any other courses in the department of Business Administration or any university course that counts towards graduation.

Program Plan Code: BSBA_BSAD_FINA
Effective Date: Fall 2021

BSBA General Business Requirements

The general business program provides students with a broad understanding of various aspects of business, including management, marketing, finance, accounting, supply chain management, economics, human resource management and personal financial planning. It covers a variety of foundational principles and skills necessary for success in diverse business environments.

Student Learning Objectives
Upon completion of the general business program, students will be able to:

1. Communication
    a. Oral Communication: communicate effectively by speaking clearly, concisely, and convincingly, using appropriate business conventions for the field of study.
    b. Written Communication: communicate effectively by writing clearly, concisely, and convincingly, using appropriate business conventions for the field of study.
    c. Interpersonal Skills: demonstrate effective interpersonal skills, especially working in teams.
2. Critical Thinking
    a. Data Analysis: analyze data by using appropriate technology.
    b. Decision Making: analyze issues critically and make relevant decisions by identifying and assessing the significance of key factors and assumptions.
    c. Functional Knowledge: identify, define, and apply current fundamental concepts, principles, and practices in the disciplines of business, including globalization.
3. Societal Impact
    a. Ethical Judgment: identify ethical breaches and how they adversely impact stakeholders.
    b. Social Responsibility: evaluate how business decisions impact the welfare of society.

Note that all students must achieve a minimum of 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for BSBA/General Business and business core courses, separately, are also 2.0.

Required Business Core Courses – 33 credits

ACCT 121 Financial Accounting (3 credits)
ACCT 122 Managerial Accounting (3 credits)
BUSN 131 Legal Environment of Business (3 credits)
MGMT 210 Principles of Management (3 credits)
MKTG 210 Principles of Marketing (3 credits)
BUSN 220 Regression Analysis and Data Analytics (3 credits)
BUSN 275 Business Data Management and Information Systems (3 credits)
FINA 350 Financial Management (3 credits)
MGMT 351 Operations Management (3 credits)
International Elective (ECON 360, FINA 365, MGMT 352, or MKTG 370) (3 credits)
MGMT 399 Business Strategy and Policy (3 credits)

Required Courses for General Business Program – 9 credits

One course from ACCT or FINA 300-level course (3 credits)
One course from MGMT or MKTG 300-level course (3 credits)
One course from BUSN, ECON, or SCMG 200-level or higher course (3 credits)

Restricted Elective Courses for General Business Program – 9 credits

Select three from 300-level courses in any of the following: ACCT, BUSN, ECON, FINA, MGMT, MKTG, or SCMG.

Directed General Education Courses – 9 credits

These courses may be taken in fulfillment of General Education, as university electives, or as part of a minor. All must be approved General Education courses.
ECON 110 Principles of Macroeconomics (Category B) (3 credits)
ECON 120 Principles of Microeconomics (Category B) (3 credits)
MATH 140 Applied Statistical Methods (Category C2), **or** BUSN 120 Principles of Business Statistics (Category C2) (3 credits)

University Electives – 27 credits

Any other courses in the department of Business Administration or any university course that counts towards graduation.

Program Plan Code: BSBA_BSAD_GENB
Effective Date: Fall 2021

BSBA Human Resource Management Requirements

The human resource management program equips students with a comprehensive understanding of the principles, practices, and strategies involved in managing an organization's most valuable asset – its human capital. Courses cover topics such as recruitment, employee relations, training and development, compensation and benefits, employment law, and organizational behavior. Graduates are well-prepared to contribute to the success of organizations by fostering a positive work environment, aligning human capital with organizational goals, and addressing the evolving needs of the workforce.

Student Learning Objectives
Upon completion of the human resource management program, students will be able to:

1. Understand the foundations of strategic human resource management, including creating diverse workforce to achieve organizational goals.
2. Organize strategies for the recruitment, selection, training and retention, and development of employees.
3. Develop compensation, benefit and reward systems that attract, retain and motivate employees in alignment with organizational goals.
4. Address the legal and ethical implications of human resource management in an organizational setting.
5. Effectively use teamwork, leadership, motivational and conflict management skills to address human resource challenges.

Note that all students must achieve a minimum of 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for BSBA/Human Resource Management and business core courses (as well as ECON 110, ECON 120), separately, are also 2.0.

Required Business Core Courses – 33 credits

ACCT 121 Financial Accounting (3 credits)
ACCT 122 Managerial Accounting (3 credits)
BUSN 131 Legal Environment of Business (3 credits)
MGMT 210 Principles of Management (3 credits)
MKTG 210 Principles of Marketing (3 credits)
BUSN 220 Regression Analysis and Data Analytics (3 credits)
BUSN 275 Business Data Management and Information Systems (3 credits)
FINA 350 Financial Management (3 credits)
MGMT 351 Operations Management (3 credits)
International Elective (ECON 360, FINA 365, MGMT 352, or MKTG 370) (3 credits)
MGMT 399 Business Strategy and Policy (3 credits)

Required Courses for Human Resource Management Program – 9 credits

MGMT 335 Human Resource Management (3 credits)
MGMT 338 Managing Compensation (3 credits)
MGMT 340 Talent Acquisition and Development (3 credits)

Restricted Elective Courses for Human Resource Management Program – 9 credits

Select three from the following courses.
MGMT 318 Gender and Diversity in Organizations (3 credits)
MGMT 330 Employment Law (3 credits)
MGMT 350 Organizational Behavior in Management (3 credits)
PSYC 333 The Psychology of Leadership in Organizations (3 credits)
PSYC 336 Diversity in Organizations (3 credits)
PSYC 350 Personnel Psychology (3 credits)
PSYC 355 Organization Development and Change (3 credits)

Directed General Education Courses – 9 credits

These courses may be taken in fulfillment of General Education, as university electives, or as part of a minor. All must be approved General Education courses.
ECON 110 Principles of Macroeconomics (Category B) (3 credits)
ECON 120 Principles of Microeconomics (Category B) (3 credits)
MATH 140 Applied Statistical Methods (Category C2) **or** BUSN 120 Principles of Business Statistics (Category C2) (3 credits)
PSYC 11 General Psychology (Category B) (3 credits)

University Electives – 27 credits

Any other courses in the department of Business Administration or any university course that counts towards graduation.

Program Plan Code: BSBA_BSAD_HRSC
Effective Date: Fall 2022

BSBA Management Requirements

The management program provides comprehensive education in the principles and practices of organizational leadership. Throughout their coursework, students explore key areas such as human resources, organizational behavior, and the relationship among business, government, and society. Through their required and elective courses, students gain an understanding of how businesses operate. During their course of study, students may engage in case studies, team projects, and internships to apply theoretical knowledge to real-world scenarios. The management program equips future leaders in the business world with the tools to navigate dynamic corporate environments, to inspire teams, and to contribute to the overall success and sustainability of organizations.

Student Learning Objectives
Upon completion of the management programs, students will be able to:

1. Understand and apply human resource management principles, concepts, and paradigms, especially in the areas of recruiting, staffing, training, retention, evaluation, and compensation.
2. Apply theories of individual and group behavior, i.e., personality, motivation, leadership, and communication to organizational settings and environments.
3. Examine, analyze, and apply the principles of ethics to the relevant issues of the business of society interface.
4. Recognize, analyze, evaluate, and solve strategic challenges in organizations.

Note that all students must achieve a minimum of 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for BSBA/Management and business core courses (as well as ECON 110, ECON 120), separately, are also 2.0.

Required Business Core Courses – 33 credits

ACCT 121 Financial Accounting (3 credits)
ACCT 122 Managerial Accounting (3 credits)
BUSN 131 Legal Environment of Business (3 credits)
MGMT 210 Principles of Management (3 credits)
MKTG 210 Principles of Marketing (3 credits)
BUSN 220 Regression Analysis and Data Analytics (3 credits)
BUSN 275 Business Data Management and Information Systems (3 credits)
FINA 350 Financial Management (3 credits)
MGMT 351 Operations Management (3 credits)
International Elective (ECON 360, FINA 365, MGMT 352, or MKTG 370) (3 credits)
MGMT 399 Business Strategy and Policy (3 credits)

Required Courses for Management Program – 9 credits

MGMT 335 Human Resource Management (3 credits)
MGMT 350 Organizational Behavior in Management (3 credits)
MGMT 360 Business and Social Environment (3 credits)

Restricted Elective Courses for Management Program – 9 credits

Select three from BUSN 390 and/or any 300-level MGMT courses, not including the required courses.

Directed General Education Courses – 9 credits

These courses may be taken in fulfillment of General Education, as university electives, or as part of a minor. All must be approved General Education courses.

ECON 110 Principles of Macroeconomics (Category B) (3 credits)
ECON 120 Principles of Microeconomics (Category B) (3 credits)
MATH 140 Applied Statistical Methods (Category C2), **or** BUSN 120 Principles of Business Statistics (Category C2) (3 credits)

University Electives – 27 credits

Any other courses in the department of Business Administration or any university course that counts towards graduation.

Program Plan Code: BSBA_BSAD_MGMT
Effective Date: Fall 2022

BSBA Marketing Requirements

The marketing program at Kutztown University provides a robust foundation in marketing by exposing students to the fundamental principles, tools, and concepts of marketing and how they apply to the offering of goods and services and create value for various stakeholders. The curriculum prepares students to develop a full range of skills such as critical thinking, quantitative and qualitative analysis, communication, problem-solving and decision-making skills. The three core requirements are consumer behavior, marketing research, and marketing management. In addition, the students choose three restricted electives from a variety of areas: advertising and media planning, professional selling, retailing management, marketing ethics, digital marketing, business logistics, and new product management, among others. Our graduates are prepared to assume positions in sales, advertising, brand management, retailing, logistics, digital marketing, and various service organizations.

Student Learning Objectives
Upon completion of the marketing program, students will be able to:

1. Understand basic marketing principles and be able to apply them in a global context.
2. Utilize analytical research techniques to understand the nature of consumers.
3. Analyze environmental forces and develop plans to utilize marketing principles in order to solve problems.
4. Demonstrate the added value of social responsibility that comes about when marketing principles are implemented in an ethical manner.

Note that all students must achieve a minimum of 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for BSBA/Marketing and business core courses (as well as ECON 110, ECON 120), separately, are also 2.0.

Required Business Core Courses – 33 credits

ACCT 121 Financial Accounting (3 credits)
ACCT 122 Managerial Accounting (3 credits)
BUSN 131 Legal Environment of Business (3 credits)
MGMT 210 Principles of Management (3 credits)
MKTG 210 Principles of Marketing (3 credits)
BUSN 220 Regression Analysis and Data Analytics (3 credits)
BUSN 275 Business Data Management and Information Systems (3 credits)
FINA 350 Financial Management (3 credits)
MGMT 351 Operations Management (3 credits)
International Elective (ECON 360, FINA 365, MGMT 352, or MKTG 370) (3 credits)
MGMT 399 Business Strategy and Policy (3 credits)

Required Courses for Marketing Program – 9 credits

MKTG 312 Consumer Behavior (3 credits)
MKTG 320 Marketing Management (3 credits)
MKTG 360 Marketing Research (3 credits)

Restricted Elective Courses for Marketing Program – 9 credits

Select three from any 300-level MKTG courses, not including the required courses.

Directed General Education Courses – 9 credits

These courses may be taken in fulfillment of General Education, as university electives, or as part of a minor. All must be approved General Education courses.

ECON 110 Principles of Macroeconomics (Category B) (3 credits)
ECON 120 Principles of Microeconomics (Category B) (3 credits)
MATH 140 Applied Statistical Methods (Category C2) **or** BUSN 120 Principles of Business Statistics (Category C2) (3 credits)

University Electives – 27 credits

Any other courses in the department of Business Administration or any university course that counts towards graduation.

Program Plan Code: BSBA_BSAD_MKTG
Effective Date: Fall 2022

BSBA Personal Financial Planning Requirements

Students completing the Personal Financial Planning (PFP) program are prepared to enter the personal financial planning profession in many different areas. They might go to work for firms that offer comprehensive financial planning services. They can also specialize in an area such as insurance and risk management, retirement planning, estate planning, private banking, mutual funds, or employee benefits. The PFP program at Kutztown University of Pennsylvania is registered with the Certified Financial Planner Board of Standards Inc. (CFP® Board). The CFP® Board is a professional regulatory organization that fosters professional standards in personal financial planning. The Certified Financial Planner (CFP®) designation is recognized worldwide as a mark of distinction that sets individuals apart from others in the profession. The four requirements for initial certification are: Education, Examination, Experience, and Ethics. Kutztown University's PFP program prepares students to earn the CFP® designation via a track that emphases all four of these areas.

Student Learning Objectives

Upon completion of the personal financial planning program, students will be able to:

1. Demonstrate Understanding: Demonstrate a comprehensive understanding of the content found within the Financial Planning curriculum and effectively apply and integrate this information in the foundation of a financial plan.
2. Communicate: Effectively communicate the financial plan, both orally and in writing, including information based on research, peer, colleague or simulated client interaction and/or results emanating from synthesis of material.
3. Collect: Collect all necessary and relevant qualitative and quantitative information required to develop a financial plan.
4. Analyze and Evaluate: Analyze personal financial situations, evaluating clients' objectives, needs, and values to develop an appropriate strategy within the financial plan.
5. Logic and Reasoning: Demonstrate logic and reasoning to identify the strengths and weaknesses of various approaches to a specific problem.
6. Evaluate: Evaluate the impact of economic, political, and regulatory issues regarding the financial plan.
7. Apply: Apply the CFP Board Financial Planning Practice Standards to the financial planning process.
8. Analyze and Recommend: Analyze a client's risk propensity, attitudes, capacity, knowledge, and needs.

Note that all students must achieve a minimum of 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for BSBA/Personal Financial Planning and business core courses (as well as ECON 110, ECON 120), separately, are also 2.0.

Required Business Core Courses – 33 credits

ACCT 121 Financial Accounting (3 credits)
ACCT 122 Managerial Accounting (3 credits)
BUSN 131 Legal Environment of Business (3 credits)
MGMT 210 Principles of Management (3 credits)
MKTG 210 Principles of Marketing (3 credits)
BUSN 220 Regression Analysis and Data Analytics (3 credits)
BUSN 275 Business Data Management and Information Systems (3 credits)
FINA 350 Financial Management (3 credits)
MGMT 351 Operations Management (3 credits)
International Elective (ECON 360, FINA 365, MGMT 352, **or** MKTG 370) (3 credits)
MGMT 399 Business Strategy and Policy (3 credits)

Required Courses for Personal Financial Planning Program – 18 credits

FINA 351 Personal Financial Planning (3 credits)
ACCT 317 Tax Accounting I (3 credits)
FINA 354 Investments (3 credits)
FINA 385 Insurance Planning (3 credits)
FINA 386 Retirement and Estate Planning (3 credits)
FINA 389 Financial Planning Capstone (3 credits)

Directed General Education Courses – 9 credits

These courses may be taken in fulfillment of General Education, as university electives, or as part of a minor. All must be approved General Education courses.
ECON 110 Principles of Macroeconomics (Category B) (3 credits)
ECON 120 Principles of Microeconomics (Category B) (3 credits)
MATH 140 Applied Statistical Methods (Category C2) **or** BUSN 120 Principles of Business Statistics (Category C2) (3 credits)

University Electives – 27 credits

Any other courses in the department of Business Administration or any university course that counts towards graduation.

Program Plan Code: BSBA_BSAD_FINP
Effective Date: Fall 2022

BSBA Supply Chain Management Requirements

Business students in the supply chain management program are equipped to take on leadership positions across diverse careers in logistics, supply chain, transportation, and warehousing sectors. Apart from completing foundational business core courses, students in the supply chain program must engage in advanced studies encompassing Supply Chain Management, Business Logistics, Supply Chain Analytics, and Global Transportation Management, in addition to selecting elective courses related to supply chain dynamics.

Student Learning Objectives
As a result of the supply chain management program, student will be able to:

1. Understand the concepts and principles of supply chain management.
2. Appraise how the environmental forces (such as technological, economic, and political forces) affect the performance of a supply chain.
3. Evaluate the principles and strategy to establish efficient, effective, and sustainable supply chain.

Note that all students must achieve a minimum of 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for BSBA/Supply Chain Management and business core courses (as well as ECON 110, ECON 120), separately, are also 2.0.

Required Business Core Courses – 33 credits

ACCT 121 Financial Accounting (3 credits)
ACCT 122 Managerial Accounting (3 credits)
BUSN 131 Legal Environment of Business (3 credits)
MGMT 210 Principles of Management (3 credits)
MKTG 210 Principles of Marketing (3 credits)
BUSN 220 Regression Analysis and Data Analytics (3 credits)
BUSN 275 Business Data Management and Information Systems (3 credits)
FINA 350 Financial Management (3 credits)
MGMT 351 Operations Management (3 credits)
International Elective (ECON 360, FINA365, MGMT 352, or MKTG 370) (3 credits)
MGMT 399 Business Strategy and Policy (3 credits)

Required Courses for Supply Chain Management Program – 12 credits

SCMG 260 Principles of Supply Chain Management (3 credits)
SCMG 361 Principles of Business Logistics (3 credits)
SCMG 362 Supply Chain Analytics (3 credits)
SCMG 363 Global Transportation Management (3 credits)

Restricted Elective Courses for Supply Chain Management Program – 6 credits

Select two from MKTG 340 and/or any 300-level SCMG courses, not including the required courses.

Directed General Education Courses – 9 credits

These courses may be taken in fulfillment of General Education, as university electives, or as part of a minor. All must be approved General Education courses.

ECON 110 Principles of Macroeconomics (Category B) (3 credits)
ECON 120 Principles of Microeconomics (Category B) (3 credits)
MATH 140 Applied Statistical Methods (Category C2) **or** BUSN 120 Principles of Business Statistics (Category C2) (3 credits)

University Electives – 27 credits

Any other courses in the department of Business Administration or any university course that counts towards graduation.

Program Plan Code: BSBA_BSAD_SCMG
Effective Date: Fall 2022

Business Minor Requirements

The general business program provides students with a broad understanding of various aspects of business, including management, marketing, finance, accounting, supply chain management, economics, human resource management and personal financial planning. It covers a variety of foundational principles and skills necessary for success in diverse business environments.

Required Business Minor Core Courses – 18 credits

ECON 110 *or* ECON 111 *or* ECON 112 (3 credits)
ACCT 121 Financial Accounting (3 credits)
FINA 200 Principles of Finance (3 credits)
MKTG 210 Principles of Marketing (3 credits)
MGMT 210 Principles of Management (3 credits)
BUSN 275 Data Management and Information Systems (3 credits)

Program Plan Code: BUSN
Effective Date: Spring 2019

Business Analytics Minor Requirements

Business Analytics is a data-driven field. It is a practical application of statistical analysis that focuses on providing actionable recommendations. Combining the fields of business and computer science, students gain an understanding of the business process, while learning data, statistics and computer science. By learning from existing data, business analytics can make concrete recommendations to solve problems and improve business.

Required Business Analytics Minor Core Courses – 9 credits

CPSC 105 Introduction to Data Visualization (3 credits)
CPSC 223 Advanced Scientific Programming (3 credits)
MGMT 351 Operations Management (3 credits)

Business Applications Minor Elective Courses – 3 credits

Choose one
BUSN 310 Business Intelligence (3 credits)
ECON 345 Econometrics (3 credits)

Management Science Minor Elective Courses – 3 credits

Choose one
SCMG 362 Supply Chain Analytics (3 credits)
MATH 362 Mathematical Methods in Operations Research II (3 credits)

Advanced Analytics Minor Elective Courses – 3 credits

CPSC 458 Data Mining and Predictive Analysis (3 credits)
CPSC 459 Introduction to Big Data (3 credits)

Program Plan Code: BSAN
Effective Date: Spring 2021

Coaching and Fitness Administration Minor Requirements

The coaching and fitness administration minor will prepare students to apply basic knowledge of anatomy-physiology, nutrition, and biological science. Students will also have the ability to make sound ethical decisions, provide a safe and conducive environment for their clients, apply problem solving skills, and oral and written communication skills in their field. Furthermore, the minor will fulfill the National Council for Accreditation of Coaching Education (NCACE) requirements by continuing to offer the American Sport Education Program (ASEP- coaching principles and sport first aid) certificate of completion and other pertinent certificates in coaching and fitness to adequately prepare students for careers in the field.

Student Learning Outcomes

1. Apply basic knowledge of anatomy-physiology, nutrition, and biological science require for professional success in the coaching and fitness profession.
2. Demonstrate the ability to make sound ethical decisions and provide a safe and conducive environment for all in the coaching and fitness profession.
3. Employ practical and applied assessments to solve problems and earn certificates relevant to the coaching and fitness profession.
4. Demonstrate the ability to communicate effectively in oral and written formats in the coaching and fitness profession.
5. Develop and implement fitness and coaching strategies that meet the needs of diverse populations in a practical setting.

Required Coaching and Fitness Administration Core Courses – 12 credits

SPRT 201 Scientific Basis of Human Movement (3 credits)
SPRT 222 Fundamentals of Coaching (3 credits)
SPRT 305 Emergency Care & Risk Management (3 credits)
SPRT 340 Internship in Coaching/Fitness (3 credits)

Required Coaching and Fitness Administration Elective Courses – 12 credits

(Select Two)
SPRT 333 Principles of Strength and Conditioning (3 credits)
SPRT 335 Methods & Evaluation in Athletics (3 credits)
SPRT 120 Personal Nutrition (3 credits)
SPRT 366 Personal Fitness Trainer (3 credits)

Notes:

1. *Students interested in Coaching can take SPRT 333 and SPRT 335. Students interested in Fitness take SPRT 120 and SPRT 366.*
2. *A 2.0 GPA is required within the minor*
3. *SPRT 222 is a prerequisite for SPRT 335 and SPRT 340*
4. *SPRT 201 is a prerequisite for SPRT 333*

Program Plan Code: COFA
Effective Semester: Fall 2022

Economics Minor Requirements

The Economics minor provides students with a strong foundation in economic theory, analytical reasoning, and real-world applications. This program is designed to complement a variety of majors by equipping students with the skills necessary to understand market dynamics, government policies, and global economic trends. Students will explore key topics in microeconomics and macroeconomics, develop quantitative and critical thinking skills, and analyze how economic principles impact businesses, industries, and society. The program is ideal for students seeking to broaden their knowledge of economic systems and improve their problem-solving abilities in a rapidly evolving global economy.

Student Learning Outcomes

1. Students will demonstrate an understanding of fundamental economic principles.
2. Students will apply analytical and quantitative skills to solve business and economic problems.
3. Students will examine the roles of government, markets, and international trade in shaping economic outcomes and assess the impact of economic policies on businesses and society.

Required Economic Minor Core Courses – 12 credits

ECON 111 Principle of Macroeconomics (3 credits)
ECON 112 Principles of Mircoeconmics (3 credits)
ECON 205 Intermediate Microeconomics (3 credits)
ECON 210 Intermediate Macroeconomics (3 credits)

Economics Minor Elective Courses – 6 credits

ECON 360 International Trade and Finance (3 credits)
ECON 345 Econometrics (3 credits)

Program Plan Code: ECON
Effective Date: Spring 2021

Supply Chain Minor Requirements

Business students in the Supply Chain Management program are equipped to take on leadership positions across diverse careers in logistics, supply chain, transportation, and warehousing sectors. Apart from completing foundational Business core courses, students in the supply chain program must engage in advanced studies encompassing Supply Chain Management, Business Logistics, Supply Chain Analytics, and Global Transportation Management, in addition to selecting elective courses related to supply chain dynamics.

Supply Chain Management Core Courses – 9 credits

SCMG 260 Principles of Supply Chain Management (3 credits)
SCMG 361 Principles of Business Logistics (3 credits)
Any other 300-level SCMG course (3 credits)

Supply Chain Management Minor Elective Courses – 9 credits

(Choose Three)
Any other 300-level SCMG course not used in Required Courses (3 credits)
Any other 300-level SCMG course not used in Required Courses (3 credits)
Any other 300-level SCMG course not used in Required Courses (3 credits)
COMP 215 Small Group Communication (3 credits)
COMP 274 Organizational Communication (3 credits)
COMP 350 Leadership: A Communication Perspective (3 credits)
GEOG 223 Introduction to Transportation Geography (3 credits)
GEOG 274 Introduction to GIS (3 credits)
GEOG 333 Advance GIS (3 credits)
MATH 361 Mathematical Methods in Operations Research I (3 credits)
MATH 362 Mathematical Methods in Operations Research II (3 credits)
LEAD 232 Practical Leadership (3 credits)
SPRT 230 Leadership and Team Building in Sport (3 credits)

Program Plan Code: SCMG
Effective Date: Spring 2022

COLLEGE OF EDUCATION

The College of Education at Kutztown University of Pennsylvania is dedicated to having a positive impact on the lives of children and youth in the Commonwealth of Pennsylvania through the preparation of highly qualified professional educators. Our goal is to provide preparation programs that blend a strong knowledge base in the content area, and understanding of human development and grounding in pedagogy with frequent and continuous field experiences. The professional educators prepared in our programs will be willing and able to effect change in an increasingly diverse and technologically integrated educational environment. Our graduates will be committed to professional development throughout their careers, thus supporting the College of Education model of lifelong learning.

-Dr. Rebecca Burns, Dean

Bachelor of Science

B.S. Library Science

Bachelor of Science in Education

B.S. Ed. Elementary Education: Pre K-4

B.S. Ed. Elementary Education: 4-8 Mathematics & English/Language Arts & Reading

B.S. Ed. Elementary Education: 4-8 Mathematics and Science

B.S. Ed. Elementary Education: 4-8 Mathematics and Social Studies

B.S. Ed. Elementary Education: 4-8 Science & English/Language Arts & Reading

B.S. Ed. Elementary Education: 4-8 Science and Social Studies

B.S. Ed. Elementary Education: Education Studies (Non-Certification)

B.S. Ed. Library Science

B.S. Ed. Secondary Education: Biology

B.S. Ed. Secondary Education: Chemistry

B.S. Ed. Secondary Education: Computer Science

B.S. Ed. Secondary Education: Computer Science and Mathematics

B.S. Ed. Secondary Education: Earth and Space Science

B.S. Ed. Secondary Education/Special Education: Earth & Space Science

B.S. Ed. Secondary Education: English

B.S. Ed. Secondary Education: General Science

B.S. Ed. Secondary Education: Mathematics

B.S. Ed. Secondary Education: Physics

B.S. Ed. Secondary Education: Physics and Mathematics

B.S. Ed. Secondary Education: Social Studies

B.S. Ed. Special Education: Autism Studies (Non-Certification)

B.S. Ed. Special Education: PreK-12

B.S. Ed. Special Education: PreK-12 and Elementary Education 4-8 Language Arts & Reading

B.S. Ed. Special Education: PreK-12 and Elementary Education 4-8 Mathematics

B.S. Ed. Special Education: Teaching and Learning (Non-Certification)

B.S. Ed. Special Education: Transition Services (Non-Certification)

B.S. Ed. Special Education: Visual Impairment

B.S. Ed. Special Education: Visual Impairment: Elementary Education PreK-4

B.S. Ed. Special Education: Visual Impairment: Elementary Education 4-8 Language Arts & Reading

B.S. Ed. Special Education: Visual Impairment: Elementary Education 4-8 Mathematics

Minors

Autism Endorsement Certification

Autism Spectrum Disorders Minor

Disability Studies Minor

Elementary Education PreK-4 Minor

English as a Second Language (ESL) Minor

Library Science Minor

Secondary Education Minor

B.S. Library Science Requirements

The Bachelor of Science in Library Science program is a non-teaching / non-certification program.

Note that all students must achieve 120 undergraduate credits and a minimum 3.0 overall GPA to graduate. The final GPA requirement for Library Science is 3.0.

Required Library Science Core Courses – 18 credits

The following courses require a C or higher for a final grade.
LLTC 200 Foundations of Information Science (3 credits)
LLTC 310 Information Resources & Services (3 credits)
LLTC 320 Resources for Children & Young Adults (3 credits)
LLTC 321 Technologies for the 21st Century Educator (3 credits)
LLTC 330 Makerspaces & Technology Enhanced Programming (3 credits)
LLTC 390 Internship (3 credits)

Specialty Related Elective Courses – 15 credits

Students will select five 3-credit courses with any of the following course prefixes by subject area: ANTH, ART, HIST, EDUC, EEPK, LIST, LLTC, or SOCI. With the permission of their academic advisor, a student may select another appropriate course.

Professional Semester Courses – 15 credits

The professional semester courses are scheduled in a block for the spring semester. The following courses require a C or higher for a final grade.
LLTC 324 Librarian's Role in Reading Strategies (3 credits)
LLTC 340 Management of Information & Technology Centers (3 credits)
LLTC 350 Collecting and Curating Print & Digital Resources (3 credits)
LLTC 360 Organization of Information, Metadata, & Library Technologies (3 credits)
LLTC 370 Educational Program of The Library (3 credits)

University Elective Courses – 30 credits

These courses may be taken as university electives, or as part of a minor. Consult with your academic advisor to plan an appropriate progression of coursework.

Program Plan Code: BS_LBSC
Effective Date: Fall 2023

B.S.Ed. Elementary Education Pre-K-4 Requirements

The Elementary Education Pre-K—4 Program provides course preparation in education and includes clinical experience. The program leads to a bachelor's degree and teaching certification in Elementary Education Pre-K—4.

Note that all students must achieve 120 undergraduate credits and a minimum 3.0 overall GPA to graduate. The final GPA requirement for Elementary Education Pre-K—4 is 3.0.

Required Professional Core (Pre-Candidacy) Courses – 33 credits

ARED 236 *or* EEPK 236 The Arts and Pre-K-4 Education (3 Credits)
EDUC 101 Teaching Pre-K—8: An Exploration & Investigation
EEPK 202 Disposition Toward Advocacy Collab. & Coop. (3 Credits)
EEPK 209 Math Foundations for Pre-K-1 (3 Credits)
EEPK 215 Introduction to Early Childhood Education (3 Credits)
EEPK 225 Assessment 1: Obs. & Informal (3 Credits)
EEPK 299 Language and Literacy Acquisition in Early Child (3 Credits)
EEPK 325 Assessment II: Form., Sum., Diag., Bench. (3 Credits)
SPEE 201 Cognitive Development of Diverse Learners (3 Credits)
SPEE 314 Effective Instructional Strategies (3 Credits)
LLTC 321 Technologies for the 21st Century Educator

Literacy Block Semester – 15 credits

Note that these courses are scheduled in a block either fall or spring semesters. They are a pre-requisite for the professional seminar.
EEPK 300 Early Literacy Development & Acquisition Pre-K-4 (3 Credits)
EEPK 220 Children's Literature (3 Credits)
ELED 312 Culturally Responsive Teaching for ELL (3 Credits)
ELED 353 Language Dev., Reading Assessment & Intervention. (3 Credits)
SPEE 316 Literacy Dev. Core & Intervention (3 Credits)

Professional Semester – 18 credits

A student must have achieved teacher candidacy to take these courses. Note that these courses are scheduled in a block either fall or spring semesters. They are a pre-requisite for the clinical experience semester.
EEPK 301 Teaching Literacy in Grades 2-4 (3 Credits)
EEPK 303 Language Development & Teaching Language Arts in Pre-K-4 (3 Credits)
EEPK 304 Teaching Social Studies in Pre-K-4 (3 Credits)
EEPK 306 Integrating Principles of Learning in Pre-K-4 (3 Credits)
EEPK 309 Teaching Math in Grades 2-3 (3 Credits)
EEPK 305 Teaching Science in Early Childhood (3 Credits)

Clinical Experience – 12 credits

EEPK 390 Clinical Experience I Pre-K-4 (6 Credits)
EEPK 391 Clinical Experience II Pre-K-4 (6 Credits)

Directed General Education Courses – 24 credits

While counting toward General Education fulfillment, these courses are required for completion of the major.

BIOL 010 Intro to Biology (3 Credits)
COMP 100-Level Course (3 Credits)
COMM 010 Fundamentals of Oral Communication (3 Credits)
ENGL Literature Course (3 Credits)
MATH 103 Fundamentals of Math I (3 Credits)
MATH 104 Fundamentals of Math II (3 Credits)
PSYC 110 Child Psychology (3 Credits)
PSYC 011 General Psychology (3 Credits) *or* PSYC 140 Education Psychology (3 Credits)

University Elective Courses – 12 credits

These courses may be taken as university electives, or as part of a minor. However, they are required for completion of the major.

Program Plan Code: BSED_ELPK
Effective Date: Fall 2022

B.S.Ed. Elementary Education: 4-8 Mathematics and English/Language Arts & Reading Requirements

The 4-8 Mathematics and English/Language Arts & Reading Program provides course preparation in education and includes clinical experience. The program leads to a bachelor's degree and teaching certification in 4-8 Middle Level Mathematics and English/Language Arts & Reading.

Note that all students must achieve 120 undergraduate credits and a minimum 3.0 overall GPA to graduate. Some of the coursework in the program will require a final grade of C or better to count for the major. Please consult with your academic advisor. The final GPA requirement for 4-8 Mathematics and English/Language Arts & Reading is 3.0.

Required Professional (Pre-Candidacy) Courses – 9 credits

Note that these courses require a final grade of C or better. Refer to the Directed General Education section for additional pre-candidacy coursework.
ELED 212 Teaching Diverse Learners Mid-Level (3 credits)
ELED 312 Culturally Responsive Teach for ELL (3 credits)
ELED 226 Teach Mid-Level *or* EDUC 326 Intro Middle Level (3 credits)

Mathematics Courses – 15 credits

MATH 040 Geometry (3 credits)
MATH 105 College Algebra (3 credits)
MATH 122 Applied Calculus (3 credits)
MATH 140 Applied Stat Methods (3 credits)
MATH 106 Trigonometry *or* MATH 115 Pre-Calculus *or* MATH 123 Discrete Math (3 credits)

English Language Arts & Reading Courses – 15 credits

ENGL 105 Experiences in American Literature (3 credits)
ENGL Literature course (3 credits)
ELED 221 Literature for Upper Elementary & Middle Level Learners (3 credits)
ELED 331 Teach & Assess Literacy for Mid Lev Learners (3 credits)
ELED 353 Language Development, Reading Assessment & Intervention (3 credits)

Natural Sciences Courses – 9 credits

See also Directed General Education below.
CHEM 020 Introduction to Chemistry (Lab) (3 credits)
PHYS 020 Introduction to Physics (Lab) (3 credits)
BIOL 130 Environmental Issues Global Perspective *or* BIOL 140 Biology & Society (3 credits)

Social Sciences Course – 3 credits

GEOG 010 Elements of Physical Geography *or* GEOG 101 World Regional Geography (3 credits)

Professional Semester Courses – 15 credits

Note that these courses require a final grade of C or better.
ELED 342 Teaching Writing at the Mid-Level (3 credits)
ELED 344 Teaching & Assess. Social Studies for Middle Level Learners (3 credits)
ELED 346 Mid-Level Cognitive Development (3 credits)
ELED 347 Teaching & Assess. Math For Middle Level Learners (3 credits)
ELED 349 Teaching & Assess. Science For Middle Level Learners (3 credits)

Clinical Experience Courses – 12 credits

Note that these courses require a final grade of C or better.
ELED 392 Clinical Experience I with Mid-Level Learners (6 credits)
ELED 393 Clinical Experience II with Mid-Level Learners (6 credits)

Directed General Education Courses – 39 credits

While counting toward General Education fulfillment, these courses are required for completion of the major.

Required before candidacy:

Note that these courses require a final grade of C or better.
SPEE 201 Cognitive Devel. Of Diverse Learners – Category B (3 credits)
SPEE 314 Effective Instructional Strategies – Category B (3 credits)
SPEE 316 Literacy Development Core & Intervention – Category A4 (3 credits)
LLTC 321 Technology for the 21st Century Educator – Category D (3 credits)

Not required before candidacy:

COMP 100 Level course – Category A1 (3 credits) *Final grade of C or better is required.*
COMP 200 Research and Composition – Category A2 (3 credits)
COMM 010 Fundamentals of Oral Comm – Category A3 (3 credits) *Final grade of C or better is required.*
MATH 103 Fundamentals of Math I – Category C2 (3 credits) *Final grade of C or better is required.*
MATH 104 Fundamentals of Math II – Category C3 (3 credits) *Final grade of C or better is required.*
BIOL 010 Introduction to Biology (Lab) – Category C1 (3 credits)
HIST 014 History of Civilization A (3 credits) *or* HIST 015 History of Civilization B – Category D (3 credits)
HIST 025 US Formative Years and Fed. Rep (3 credits) *or* HIST 026 History of the United States – Category B (3 credits)
ECON 100 Introduction to Economics – Category B (3 credits)

Program Plan Code: BSED_ELED_MAEN
Effective Date: Fall 2023

B.S.Ed. Elementary Education: 4-8 Mathematics and Science Requirements

The 4-8 Mathematics and Science Program provides course preparation in education and includes clinical experience. The program leads to a bachelor's degree and teaching certification in 4-8 Middle Level Mathematics and Science.

Note that all students must achieve 120 undergraduate credits and a minimum 3.0 overall GPA to graduate. Some of the coursework in the program will require a final grade of C or better to count for the major. Please consult with your academic advisor. The final GPA requirement for 4-8 Mathematics and Science is 3.0.

Required Professional (Pre-Candidacy) Courses – 9 credits

Note that these courses require a final grade of C or better. Refer to the Directed General Education section for additional pre-candidacy coursework.
ELED 212 Teaching Diverse Learners Mid-Level (3 credits)
ELED 312 Culturally Responsive Teach for ELL (3 credits)
ELED 226 Teach Mid-Level (3 credits) or EDUC 326 Intro Middle Level (3 credits)

Mathematics Courses – 15 credits

MATH 040 Geometry (3 credits)
MATH 105 College Algebra (3 credits)
MATH 122 Applied Calculus (3 credits)
MATH 140 Applied Stat Methods (3 credits)
MATH 106 Trigonometry (3 credits) *or* MATH 115 Pre-Calculus (3 credits) *or* MATH 123 Discrete Math (3 credits)

English Language Arts & Reading Courses – 9 credits

ELED 221 Literature for Upper Elementary & Middle Level Learners (3 credits)
ELED 331 Teach & Assess Literacy for Mid Lev Learners (3 credits)
ENGL Literature Course (3 credits)

Natural Sciences Courses – 18 credits

ASTR 020 Introductory Astronomy (Lab) (3 credits)
BIOL 130 Environmental Issues Global Perspective (3 credits)
CHEM 020 Introduction to Chemistry (Lab) (3 credits)
GEOG 204 Meteorology (3 credits)
GEOL 020 Introduction to Geology (Lab) (3 credits)
PHYS 020 Introduction to Physics (Lab) (3 credits)

Social Sciences Course – 3 credits

GEOG 010 Elements of Physical Geography (3 credits) *or* GEOG 101 World Regional Geography (3 credits)

Professional Semester Courses – 15 credits

Note that these courses require a final grade of C or better.
ELED 342 Teaching Writing at the Mid-Level (3 credits)
ELED 344 Teaching & Assess. Social Studies for Middle Level Learners (3 credits)
ELED 346 Mid-Level Cognitive Development (3 credits)
ELED 347 Teaching & Assess. Math For Middle Level Learners (3 credits)
ELED 349 Teaching & Assess. Science For Middle Level Learners (3 credits)

Clinical Experience Courses – 12 credits

Note that these courses require a final grade of C or better.
ELED 392 Clinical Experience I with Mid-Level Learners (6 credits)
ELED 393 Clinical Experience II with Mid-Level Learners (6 credits)

Directed General Education Courses – 39 credits

While counting toward General Education fulfillment, these courses are required for completion of the major.

Required before candidacy:

Note that these courses require a final grade of C or better.
SPEE 201 Cognitive Devel. of Diverse Learners – Category B (3 credits)
SPEE 314 Effective Instructional Strategies – Category B (3 credits)
SPEE 316 Literacy Development Core & Intervention – Category A4 (3 credits)
LLTC 321 Technology for the 21st Century Educator – Category D (3 credits)

Not required before candidacy:

MATH 103 Fundamentals of Math I – Category C2 (3 credits) *Final grade of C or better is required.*
MATH 104 Fundamentals of Math II – Category C3 (3 credits) *Final grade of C or better is required.*
COMP 100 Level course – Category A1 (3 credits) *Final grade of C or better is required.*
COMP 200 Research and Composition – Category A2 (3 credits)
COMM 010 Fundamentals of Oral Comm – Category A3 (3 credits) *Final grade of C or better is required.*
BIOL 010 Introduction to Biology (Lab) – Category C1 (3 credits)
HIST 014 History of Civilization A (3 credits) *or* HIST 015 History of Civilization B – Category D (3 credits)
HIST 025 US Formative Years and Fed. Rep (3 credits) *or* HIST 026 History of the United States – Category B (3 credits)
ECON 100 Introduction to Economics – Category B (3 credits)

Program Plan Code: BSED_ELED_MASC
Effective Date: Fall 2023

B.S.Ed. Elementary Education: 4-8 Mathematics and Social Studies Requirements

The 4-8 Mathematics and Social Studies Program provides course preparation in education and includes clinical experience. The program leads to a bachelor's degree and teaching certification in 4-8 Middle Level Mathematics and Social Studies.

Note that all students must achieve 123 undergraduate credits and a minimum 3.0 overall GPA to graduate. Some of the coursework in the program will require a final grade of C or better to count for the major. Please consult with your academic advisor. The final GPA requirement for 4-8 Mathematics and Social Studies is 3.0.

Required Professional (Pre-Candidacy) Courses – 9 credits

Note that these courses require a final grade of C or better.
ELED 212 Teaching Diverse Learners Mid-Level (3 credits)
ELED 312 Culturally Responsive Teach for ELL (3 credits)
ELED 226 Teach Mid-Level (3 credits) *or* EDUC 326 Intro Middle Level (3 credits)

Mathematics Courses – 15 credits

MATH 040 Geometry (3 credits)
MATH 105 College Algebra (3 credits)
MATH 122 Applied Calculus (3 credits)
MATH 140 Applied Stat Methods (3 credits)
MATH 106 Trigonometry (3 credits) *or* MATH 115 Pre-Calculus (3 credits) *or* MATH 123 Discrete Math (3 credits)

English Language Arts & Reading Courses – 9 credits

ELED 221 Literature for Upper Elementary & Middle Level Learners (3 credits)
ELED 331 Teach & Assess Literacy for Mid Lev Learners (3 credits)
Choose one ENGL Literature Course (3 credits)

Natural Sciences Courses – 9 credits

CHEM 020 Introduction to Chemistry (Lab) (3 credits)
PHYS 020 Introduction to Physics (Lab) (3 credits)
BIOL 130 Environmental Issues Global Perspective (3 credits) *or* BIOL 140 Biology & Society (3 credits)

Social Science Courses – 12 credits

HIST 015 History of Civilization B (3 credits)
HIST 026 History of the United States (3 credits)
POLI 010 Introduction to American Politics (3 credits)
GEOG 010 Elements of Physical Geography (3 credits) *or* GEOG 101 World Regional Geography (3 credits)

Professional Semester Courses – 15 credits

Note that these courses require a final grade of C or better.
ELED 342 Teaching Writing at the Mid-Level (3 credits)
ELED 344 Teaching & Assess. Social Studies for Middle Level Learners (3 credits)
ELED 346 Mid-Level Cognitive Development (3 credits)
ELED 347 Teaching & Assess. Math For Middle Level Learners (3 credits)
ELED 349 Teaching & Assess. Science For Middle Level Learners (3 credits)

Clinical Experience Courses – 12 credits

Note that these courses require a final grade of C or better.
ELED 392 Clinical Experience I with Mid-Level Learners (6 credits)
ELED 393 Clinical Experience II with Mid-Level Learners (6 credits)

Directed General Education Courses – 39 credits

While counting toward General Education fulfillment, these courses are required for completion of the major. These courses are also courses that fulfill pre-candidacy requirements. Note that these courses require a final grade of C or better.
Required before candidacy:
Note that these courses require a final grade of C or better.
SPEE 201 Cognitive Devel. Of Diverse Learners – Category B (3 credits)
SPEE 314 Effective Instructional Strategies – Category B (3 credits)
SPEE 316 Literacy Development Core & Intervention – Category A4 (3 credits)
LLTC 321 Technology for the 21st Century Educator – Category D (3 credits)
Not required before candidacy:
MATH 103 Fundamentals of Math I – Category C2 (3 credits) *Final grade of C or better is required.*
MATH 104 Fundamentals of Math II – Category C3 (3 credits) *Final grade of C or better is required.*
COMP 100 Level Course – Category A1 (3 credits) *Final grade of C or better is required.*
COMP 200 Research and Composition – Category A2 (3 credits)
COMM 010 Fundamentals of Oral Comm – Category A3 (3 credits) *Final grade of C or better is required.*
BIOL 010 Introduction to Biology (Lab) – Category C1 (3 credits)
HIST 014 History of Civilization A *or* HIST 015 History of Civilization B– Category D (3 credits)
HIST 025 US Formative Years and Federal Republic *or* HIST 026 History of the United States – Category B (3 credits)
ECON 100 Introduction to Economics – Category B (3 credits)

Program Plan Code: BSED_ELED_MASS
Effective Date: Fall 2023

B.S.Ed. Elementary Education: 4-8 Science and English Language Arts & Reading Requirements

The 4-8 Science and English/Language Arts & Reading Program provides course preparation in education and includes clinical experience. The program leads to a bachelor's degree and teaching certification in 4-8 Middle Level Science and English/Language Arts & Reading.

Note that all students must achieve 120 undergraduate credits and a minimum 3.0 overall GPA to graduate. Some of the coursework in the program will require a final grade of C or better to count for the major. Please consult with your academic advisor. The final GPA requirement for 4-8 Science and English/Language Arts & Reading is 3.0.

Required Professional (Pre-Candidacy) Courses – 9 credits

Note that these courses require a final grade of C or better.
ELED 212 Teaching Diverse Learners Mid-Level (3 credits)
ELED 312 Culturally Responsive Teach for ELL (3 credits)
ELED 226 Teach Mid-Level (3 credits) *or* EDUC 326 Intro Middle Level (3 credits)

Natural Sciences Courses – 18 credits

ASTR 020 Introductory Astronomy (Lab) (3 credits)
BIOL 130 Environmental Issues Global Perspective (3 credits)
CHEM 020 Introduction to Chemistry (Lab) (3 credits)
GEOG 204 Meteorology (3 credits)
GEOL 020 Introduction to Geology (Lab) (3 credits)
PHYS 020 Introduction to Physics (Lab) (3 credits)

Mathematics Courses – 6 credits

MATH 040 Geometry (3 credits)
MATH 105 College Algebra (3 credits)

Social Sciences Course – 3 credits

GEOG 010 Elements of Physical Geography (3 credits) *or* GEOG 101 World Regional Geography (3 credits)

English Language Arts & Reading Courses – 15 credits

ELED 221 Literature for Upper Elementary & Middle Level Learners (3 credits)
ELED 331 Teach & Assess Literacy for Mid Lev Learners (3 credits)
ELED 353 Language Development, Reading Assessment & Intervention (3 credits)
ENGL 105CDCT Experiences in American Literature (3 credits)
Choose one ENGL Literature Course (3 credits)

Professional Semester Courses – 15 credits

Note that these courses require a final grade of C or better.
ELED 342 Teaching Writing at the Mid-Level (3 credits)
ELED 344 Teaching & Assess. Social Studies for Middle Level Learners (3 credits)
ELED 346 Mid-Level Cognitive Development (3 credits)
ELED 347 Teaching & Assess. Math For Middle Level Learners (3 credits)
ELED 349 Teaching & Assess. Science For Middle Level Learners (3 credits)

Clinical Experience Courses – 12 credits

Note that these courses require a final grade of C or better.
ELED 392 Clinical Experience I with Mid-Level Learners (6 credits)
ELED 393 Clinical Experience II with Mid-Level Learners (6 credits)

Directed General Education Courses – 39 credits

While counting toward General Education fulfillment, these courses are required for completion of the major.

Required before candidacy:
Note that these courses require a final grade of C or better.
SPEE 201 Cognitive Devel. Of Diverse Learners – Category B (3 credits)
SPEE 314 Effective Instructional Strategies – Category B (3 credits)
SPEE 316 Literacy Development Core & Intervention – Category A4 (3 credits)
LLTC 321 Technology for the 21st Century Educator – Category D (3 credits)

Not required before candidacy:
MATH 103 Fundamentals of Math I – Category C2 (3 credits) *Final grade of C or better is required.*
MATH 104 Fundamentals of Math II – Category C3 (3 credits) *Final grade of C or better is required.*
COMP 100 Level Course – Category A1 (3 credits) *Final grade of C or better is required.*
COMP 200 Research and Composition – Category A2 (3 credits)
COMM 010 Fundamentals of Oral Comm – Category A3 (3 credits) *Final grade of C or better is required.*
BIOL 010 Introduction to Biology (Lab) – Category C1 (3 credits)
HIST 014 History of Civilization A (3 credits) *or* HIST 015 History of Civilization B – Category D (3 credits)
HIST 025 US Formative Years and Fed. Rep (3 credits) *or* HIST 026 History of the United States – Category B (3 credits)
ECON 100 Introduction to Economics – Category B (3 credits)

Program Plan Code: BSED_ELED_SCEN
Effective Date: Fall 2023

B.S.Ed. Elementary Education: 4-8 Science and Social Studies Requirements

The 4-8 Science and Social Studies Program provides course preparation in education and includes clinical experience. The program leads to a bachelor's degree and teaching certification in 4-8 Middle Level Science and Social Studies.

Note that all students must achieve 123 undergraduate credits and a minimum 3.0 overall GPA to graduate. Some of the coursework in the program will require a final grade of C or better to count for the major. Please consult with your academic advisor. The final GPA requirement for 4-8 Mathematics and Social Studies is 3.0.

Required Professional (Pre-Candidacy) Courses – 9 credits

Note that these courses require a final grade of C or better.
ELED 212 Teaching Diverse Learners Mid-Level (3 credits)
ELED 312 Culturally Responsive Teach for ELL (3 credits)
ELED 226 Teach Mid-Level (3 credits) *or* EDUC 326 Intro Middle Level (3 credits)

Natural Sciences Courses – 18 credits

ASTR 020 Introductory Astronomy (Lab) (3 credits)
CHEM 020 Introduction to Chemistry (Lab) (3 credits)
GEOG 204 Meteorology (3 credits)
GEOL 020 Introduction to Geology (Lab) (3 credits)
PHYS 020 Introduction to Physics (Lab) (3 credits)
BIOL 130 Environmental Issues Global Perspective (3 credits) *or* BIOL 140 Biology & Society (3 credits)

Mathematics Courses – 15 credits

MATH 040 Geometry (3 credits)
MATH 103 Fundamentals of Math I (3 credits)
MATH 122 Applied Calculus (3 credits)
MATH 140 Applied Stat Methods (3 credits)
MATH 106 Trigonometry (3 credits) *or* MATH 115 Pre-Calculus (3 credits) *or* MATH 123 Discrete Math (3 credits)

English Language Arts & Reading Courses – 9 credits

ELED 221 Literature for Upper Elementary & Middle Level Learners (3 credits)
ELED 331 Teach & Assess Literacy for Mid Lev Learners (3 credits)
Choose one ENGL Literature Course (3 credits)

Social Science Courses – 12 credits

HIST 015 History of Civilization B (3 credits)
HIST 026 History of the United States (3 credits)
POLI 010 Introduction to American Politics (3 credits)
GEOG 010 Elements of Physical Geography (3 credits) *or* GEOG 101 World Regional Geography (3 credits)

Professional Semester Courses – 15 credits

Note that these courses require a final grade of C or better.
ELED 342 Teaching Writing at the Mid-Level (3 credits)
ELED 344 Teaching & Assess. Social Studies for Middle Level Learners (3 credits)
ELED 346 Mid-Level Cognitive Development (3 credits)
ELED 347 Teaching & Assess. Math For Middle Level Learners (3 credits)
ELED 349 Teaching & Assess. Science For Middle Level Learners (3 credits)

Clinical Experience Courses – 12 credits

Note that these courses require a final grade of C or better.
ELED 392 Clinical Experience I with Mid-Level Learners (6 credits)
ELED 393 Clinical Experience II with Mid-Level Learners (6 credits)

Directed General Education Courses – 39 credits

While counting toward General Education fulfillment, these courses are required for completion of the major.
Required before candidacy:
Note that these courses require a final grade of C or better.
SPEE 201 Cognitive Devel. Of Diverse Learners – Category B (3 credits)
SPEE 314 Effective Instructional Strategies – Category B (3 credits)
SPEE 316 Literacy Development Core & Intervention – Category A4 (3 credits)
LLTC 321 Technology for the 21st Century Educator – Category D (3 credits)
Not required before candidacy:
MATH 103 Fundamentals of Math I – Category C2 (3 credits) *Final grade of C or better is required.*
MATH 104 Fundamentals of Math II – Category C3 (3 credits) *Final grade of C or better is required.*
COMP 100 Level Course – Category A1 (3 credits) *Final grade of C or better is required.*
COMP 200 Research and Composition – Category A2 (3 credits)
COMM 010 Fundamentals of Oral Comm – Category A3 (3 credits) *Final grade of C or better is required.*
BIOL 010 Introduction to Biology (Lab) – Category C1 (3 credits)
HIST 014 History of Civilization A *or* HIST 015 History of Civilization B – Category D (3 credits)
HIST 025 US Formative Years and Fed. Rep *or* HIST 026 History of the United States – Category B (3 credits)
ECON 100 Introduction to Economics – Category B (3 credits)

Program Plan Code: BSED_ELED_SCSS
Effective Date: Fall 2023

Elementary Education Studies (Non-Certification) Requirements

The Elementary Education Studies Program provides course preparation in education. The program leads to a bachelor's degree in Elementary Education Studies. This is a non-certification program.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Elementary Education Studies is 2.0.

Directed Professional Courses – 33 credits

ARED 236 *or* EEPK 236 The Arts and Pre-K-4 Education (3 credits)
EDUC 101 Teaching Pre-K-8; Exploration & Investigation (3 credits)
EEPK 202 Disposition Toward Advocacy Collab. & Coop. (3 credits)
EEPK 209 Math Foundations for Pre-K-1 (3 credits)
EEPK 215 Introduction to Early Childhood Education (3 credits)
EEPK 225 Assessment 1: Obs. & Informal (3 credits)
EEPK 299 Language and Literacy Acquisition in Early Child (3 credits)
ELED 221 Lit for Upper Elementary & Middle Level (3 credits)
ELED 226 Teach Mid-Level Theory & Practice (3 credits)
ELED 338 Internship in Early Childhood Education (3 credits)
SPEE 314 Effective Instructional Strategies (3 credits)

Professional Courses – 18 credits

From the following list of courses, select 6 courses:
COST 201 Storytelling I (3 credits)
ELED 325 Differentiated Instruction: Key to Responsive Teaching (3 credits)
EDUC 150 Meeting the Instructional Needs of ELL (3 credits)
ELED 212 Teaching Diverse Learners Mid-Level (3 credits)
LLTC 317 Integrating Asst. Tech Into K-12 Curriculum (3 credits)
LLTC 320CDWI Resources for Children & Young Adults (3 credits)
PSYC 140 Educational Psychology (3 credits)
PSYC 311 Psychology of Learning, Motivation, And Emotion (3 credits)
SOCI 120CDWI Marriage and The Family (3 credits)
SOWK 100 Intro to Social Work and Social Welfare (3 credits)

Directed General Education Courses – 33 credits

While counting toward General Education fulfillment, these courses are required for completion of the major.
BIOL 010 Intro to Biology (3 credits)
COMM 010 Fundamentals of Oral Communication (3 credits)
COMP 100 Level Course (3 credits)
ENGL Lit Course (3 credits)
MATH 103 Fundamentals of Math I (3 credits)

MATH 104 Fundamentals of Math II (3 credits)
PSYC 011 General Psychology (3 credits)
PSYC 110 Child Psychology (3 credits)
LLTC 321 Technologies for the 21st Century Educator (3 credits)
SPEE 201 Cognitive Development of Diverse Learners (3 credits)
SPEE 316 Literacy Dev. Core & Intervention (3 credits)

University Elective Courses – 27 credits

These courses may be taken as university electives, or as part of a minor. However, they are required for completion of the degree.

Program Plan Code: BSED_ELED_EDST
Effective Date: Fall 2023

B.S. in Education: Library Science Requirements

The Bachelor of Science in Education: Library Science Program provides course preparation in education and includes clinical experience. The program leads to a bachelor's degree and teaching certification in Library Science.

Note that all students must achieve 120 undergraduate credits and a minimum 3.0 overall GPA to graduate. The final GPA requirement for Library Science Bachelor of Science in Education is 3.0.

Required Professional Pre-Candidacy Courses – 27 credits

In addition to the directed general education courses listed below, these courses must be taken before candidacy.

LLTC 200 Foundations of Information Science (3 credits)
LLTC 310 Information Resources & Services (3 credits)
LLTC 320 Resources for Children & Young Adults (3 credits)
LLTC 321 Technologies for the 21st Century Educator (3 credits)
LLTC 330 Makerspaces & Technology Enhanced Programming (3 credits)
PSYC 011 General Psychology (3 credits)
SPEE 316 Literacy Development & Instruction in Core Intervention Areas (3 credits) *Grade of C required.*
EDUC 100 Perspectives on American Education (3 credits) *or* EDUC 101 Teaching Pre-K-8; Exploration & Investigation (3 credits) *Grade of C required.*
PSYC 110 Child Psychology (3 credits) *or* PSYC 120 Adolescent Psychology (3 credits)

Professional Semester Courses – 15 credits

A student must have achieved teacher candidacy to register for these courses. The courses are usually scheduled in a block during the spring semester. A final grade of C or better is required in these courses.

LLTC 324 Librarian's Role in Reading Strategies (3 credits)
LLTC 340 Management of Information & Technology Centers (3 credits)
LLTC 350 Collecting and Curating Print & Digital Resources (3 credits)
LLTC 360 Organization of Information, Metadata, & Library Technologies (3 credits)
LLTC 370 Educational Program of The Library (3 credits)

Clinical Experience Courses – 12 credits

A student must have achieved teacher candidacy to register for these courses. The courses are usually scheduled in a block during the fall semester. A final grade of C or better is required in these courses.

LLTC 398 Clinical Experience & Practicum I (6 credits)
LLTC 399 Clinical Experience & Practicum II (6 credits)

University Elective Courses – 24 credits

These courses may be taken as university electives, or as part of a minor. However, they are required for completion of the degree.

Directed General Education Courses – 21 credits

While counting toward General Education fulfillment, these courses are required for completion of the major. All must be completed before candidacy. A final grade of C or better is required.

COMP 100-level course – Category A1 (3 credits)
ENGL Literature course – Category D (3 credits)
2 MATH courses at MATH 017 level or higher – Categories C2 and C3 (6 credits)
EDUC 150 Meeting the Instructional Needs of English Language Learners – Category B (3 credits)
SPEE 201 Cognitive Development of Diverse Learners – Category B (3 credits)
SPEE 314 Effective Instructional Strategies – Category B (3 credits)

Program Plan Code: BSED_LBSC
Effective Date: Fall 2023

B.S.Ed. Secondary Education: Biology Requirements

The BSED Secondary Education Biology program provides course preparation in Education and Biology and includes clinical experiences. The program leads to a bachelor's degree and teaching certification in grades 7 to 12 Secondary Biology.

Note that all students must achieve 120 undergraduate credits and a minimum 3.0 overall GPA to graduate. The final GPA requirement for Secondary Education Biology is 3.0.

Required Biology Courses – 30 credits

See also the Directed General Education section below.
BIOL 106 Intro to Zoology (4 credits)
BIOL 108 Intro to Botany (4 credits)
BIOL 222 Environmental Biology (3 credits)
BIOL 224 Applied Environmental Microbiology (3 credits)
BIOL 226 General Physiology (3 credits)
BIOL 235 Genetics (4 credits)
BIOL 218 Vertebrate Biology (3 credits) *or* BIOL 302 Entomology (3 credits) *or* BIOL 314 Animal Behavior (3 credits)
BIOL 230 Taxonomy of Vascular Plants (3 credits) *or* BIOL 232 Plant Physiology (3 credits) *or* BIOL 324 Plant Ecology (3 credits)
BIOL 346 Molecular Biology (3 credits) *or* BIOL 350 Cell Biology (3 credits)

Required Physical Science Courses – 12 credits

CHEM 100 General Chemistry (4 credits)
CHEM 102 General Chemistry II (4 credits)
CHEM 204 Fundamentals of Organic Chemistry I (4 credits)

Required Mathematics Courses – 6 or 7 credits

MATH 140 Applied Statistical Mathematics (3 credits)
MATH 106 Trigonometry *or* MATH 115 Precalculus Mathematics *or* MATH 181 Calculus I (3-4 credits)

Education Professional Courses – 15 credits

Students must achieve a B or better in professional coursework.
SEED 312 Principles of Learning (3 credits)
SEED 313 Principles of Learning Lab (3 credits)
SEED 342 Principles of Teaching (3 credits)
SEED 343 Principles of Teaching Lab (3 credits)
SEED 410 Science Methods for Middle & High School (3 credits)

Clinical Experience Courses – 12 credits

SEED 390 Clinical Experience I (6 credits)
SEED 391 Clinical Experience II (6 credits)

Directed General Education Courses – 23 credits

While counting toward General Education fulfillment, these courses are required for completion of the major.

Required before candidacy:

The following courses must be taken before a student can take their education professional coursework. Additionally, to achieve candidacy, a student must pass the state's basic skills requirement, earn a 3.0 GPA or higher and complete pre-candidacy field hours.

COMP 100-level course – Category A1 (3 credits) *Final grade of C or better is required.*
ENGL Literature course – Category D (3 credits) *Final grade of C or better is required.*
EDUC 100 Perspectives on American Education – Category B (3 credits)
SPEE 201 Cognitive Development of Diverse Learners – Category B (3 credits)
SPEE 314 Effective Instructional Strategies – Category B (3 credits)

Not required before candidacy:

BIOL 104 Principles of Biology – Category C1 (4 credits)
PHYS 040 General Physics I – Category C3 (4 credits)

University Elective Courses – 3 credits

Depending on your general education course selection, you may need 3 elective credits to meet the university 120 credit minimum. These elective courses may be selected from any department including Education.

Program Plan Code: BSED_SCED_BIOL
Effective Date: Fall 2018

B.S.Ed. Secondary Education: Chemistry Requirements

The BSED Secondary Education Chemistry Program provides course preparation in education and chemistry and includes clinical experience. The program leads to a bachelor's degree and teaching certification in 7-12 Secondary Chemistry.

Note that all students must achieve 120 undergraduate credits and a minimum 3.0 overall GPA to graduate. Most students will graduate with 120 credits in this major; however, depending on selection of coursework, you may go over the 120-credit minimum. The final GPA requirement for Secondary Education Chemistry is 3.0.

Required Chemistry Courses – 40 credits

CHEM 100 General Chemistry I (4 credits)
CHEM 102 General Chemistry II (4 credits)
CHEM 214 Organic Chemistry I (4 credits)
CHEM 216 Organic Chemistry II (4 credits)
CHEM 230 Analytical Chemistry I (4 credits)
CHEM 310 Biochemistry I (4 credits)
CHEM 314 Physical Chemistry I (4 credits)
CHEM 316 Physical Chemistry II (4 credits)
CHEM 320 Advanced Inorganic Chemistry I (4 credits)
CHEM 340 Analytical Chemistry II (4 credits)

Required Science Courses – 7 or 8 credits

PHYS 102 Physics II (4 credits)
ASTR 140 Planetary Science *or* ASTR 142 Stellar and Galactic Astronomy *or* GEOG 204 Meteorology *or* GEOL 100 Physical Geology (3-4 credits)

Required Mathematics Course – 4 credits

See also the Directed General Education section below.
MATH 182 Calculus II (4 credits) *Final grade of C or better is required.*

Education Professional Courses – 15 credits

Students must achieve a B or better in professional coursework.
SEED 312 Principles of Learning (3 credits)
SEED 313 Principles of Learning Lab (3 credits)
SEED 342 Principles of Teaching (3 credits)
SEED 343 Principles of Teaching Lab (3 credits)
SEED 410 Science Methods for Middle & High School (3 credits)

Clinical Experience Courses – 12 credits

SEED 390 Clinical Experience I (6 credits)
SEED 391 Clinical Experience II (6 credits)

Directed General Education Courses – 27 credits

While counting toward General Education fulfillment, these courses are required for completion of the major.

Required before candidacy:

The following courses must be taken before a student can take their education professional coursework. Additionally, to achieve candidacy, a student must pass the state's basic skills requirement, earn a 3.0 GPA or higher and complete pre-candidacy field hours.

COMP 100-level course – Category A1 (3 credits) *Final grade of C or better is required.*
ENGL Literature course – Category D (3 credits) *Final grade of C or better is required.*
EDUC 100 Perspectives on American Education – Category B (3 credits)
SPEE 201 Cognitive Development of Diverse Learners – Category B (3 credits)
SPEE 314 Effective Instructional Strategies – Category B (3 credits)

Not required before candidacy:

BIOL 104 Principles of Biology – Category C1 (4 credits)
MATH 181 Calculus I – Category C2 (4 credits) *Final grade of C or better is required.*
PHYS 100 Physics I – Category C3 (4 credits)

Program Plan Code: BSED_SCED_CHEM
Effective Date: Fall 2018

B.S.Ed. Secondary Education: Computer Science Requirements

The BSED Secondary Education Computer Science Program provides course preparation in education and computer science and includes clinical experience. The program leads to a bachelor's degree and teaching certification in 7-12 Secondary Computer Science.

Note that all students must achieve 120 undergraduate credits and a minimum 3.0 overall GPA to graduate. The final GPA requirement for Secondary Education Computer Science is 3.0.

Required Computer Science Courses – 36 credits

See also the Directed General Education section below.
CPSC 105 Introduction to Data Visualization (3 credits)
CPSC 123 Introduction to Scientific Programming (3 credits)
CPSC 125 Discrete Math for Computing I (3 credits)
CPSC 150 Ethics, Legal & Prof. Impacts of Digital Age (3 credits)
CPSC 223 Advanced Scientific Programming (3 credits)
CPSC 237 Data Structures (3 credits)
CPSC 243 Java Programming (3 credits)
CPSC 253 IT Systems (3 credits)
CPSC 341 Introduction to Information Security (3 credits)
CPSC 354 Software Engineering I (3 credits)
CPSC 355 Software Engineering II (3 credits)
CPSC 311 Computer Networks *or* CPSC 328 Network Programming (3 credits)

Computer Science Elective Courses – 6 credits

Select a CPSC 200-level *or* higher course (3 credits)
Select a CPSC 300-level *or* higher course (3 credits)

Required Math Course – 3 credits

See also the Directed General Education section below.
MATH 140 Applied Statistical Mathematics (3 credits)

Education Professional Courses – 15 credits

Students must achieve a B or better in professional coursework.
SEED 312 Principles of Learning (3 credits)
SEED 313 Principles of Learning Lab (3 credits)
SEED 342 Principles of Teaching (3 credits)
SEED 343 Principles of Teaching Lab (3 credits)
SEED 414 Computer Science Methods for Middle & High School *or* SEED 430 Math Methods for Middle & High School (3 credits)

Clinical Experience Courses – 12 credits

SEED 390 Clinical Experience I (6 credits)
SEED 391 Clinical Experience II (6 credits)

Directed General Education Courses – 22 credits

While counting toward General Education fulfillment, these courses are required for completion of the major.

Required before candidacy:

The following courses must be taken before a student can take their education professional coursework. Additionally, to achieve candidacy, a student must pass the state's basic skills requirement, earn a 3.0 GPA or higher and complete pre-candidacy field hours.

COMP 100-level course – Category A1 (3 credits) *Final grade of C or better is required.*
ENGL Literature course – Category D (3 credits) *Final grade of C or better is required.*
EDUC 100 Perspectives on American Education – Category B (3 credits)
SPEE 201 Cognitive Development of Diverse Learners – Category B (3 credits)
SPEE 314 Effective Instructional Strategies – Category B (3 credits)

Not required before candidacy:

CPSC 135 Computer Science I – Category C2 (3 credits)
MATH 181 Calculus I – Category C3 (4 credits) *Final grade of C or better is required.*

University Elective Courses – 6 credits

Students must choose two additional courses. These courses may be selected from any department including CPSC or EDUC.

Program Plan Code: BSED_SCED_CSCC
Effective Date: Fall 2022

B.S.Ed. Secondary Education: Computer Science and Mathematics Requirements

The BSED Secondary Education Computer Science & Mathematics Program provides course preparation in education, computer science, and mathematics and includes clinical experience. The program leads to a bachelor's degree and teaching certification in 7-12 Secondary Computer Science and Mathematics.

Note that all students must achieve 120 undergraduate credits and a minimum 3.0 overall GPA to graduate. Most students will graduate with 125 credits in this major. The final GPA requirement for Secondary Education Computer Science & Mathematics is 3.0.

Required Computer Science Courses – 30 credits

CPSC 105 Introduction to Data Visualization (3 credits)
CPSC 150 Ethics, Legal & Prof. Impacts of Digital Age (3 credits)
CPSC 223 Advanced Scientific Programming (3 credits)
CPSC 243 Java Programming (3 credits)
CPSC 253 IT Systems (3 credits)
CPSC 341 Introduction to Information Security (3 credits)
CPSC 354 Software Engineering I (3 credits)
CPSC 355 Software Engineering II (3 credits)
CPSC 123 Introduction to Scientific Programming *or* CPSC 135 Computer Science I (3 credits)
CPSC 311 Computer Networks (3 credits) *or* CPSC 328 Network Programming (3 credits)

Required Mathematics Courses – 26 credits

MATH 182 Calculus II (4 credits) *Final grade of C or better is required.*
MATH 283 Calculus III (4 credits)
MATH 224 Foundations of Higher Mathematics (3 credits)
MATH 240 Synthetic Geometry (3 credits)
MATH 260 Linear Algebra (3 credits)
MATH 301 Probability and Statistics I (3 credits)
MATH 311 Abstract Algebra I (3 credits)
MATH 340 Differential Equations (3 credits)

Education Professional Courses – 15 credits

Students must achieve a B or better in professional coursework.
SEED 312 Principles of Learning (3 credits)
SEED 313 Principles of Learning Lab (3 credits)
SEED 342 Principles of Teaching (3 credits)
SEED 343 Principles of Teaching Lab (3 credits)
SEED 414 Computer Science Methods for Middle & High School *or* SEED 430 Math Methods for Middle & High School (3 credits)

Clinical Experience Courses – 12 credits

SEED 390 Clinical Experience I (6 credits)
SEED 391 Clinical Experience II (6 credits)

Directed General Education Courses – 19 credits

While counting toward General Education fulfillment, these courses are required for completion of the major.

Required before candidacy:

The following courses must be taken before a student can take their education professional coursework. Additionally, to achieve candidacy, a student must pass the state's basic skills requirement, earn a 3.0 GPA or higher and complete pre-candidacy field hours.

COMP 100 level course – Category A1 (3 credits) *Final grade of C or better is required.*
ENGL Literature course – Category D (3 credits) *Final grade of C or better is required.*
EDUC 100 Perspectives on American Education – Category B (3 credits)
SPEE 201 Cognitive Development of Diverse Learners – Category B (3 credits)
SPEE 314 Effective Instructional Strategies – Category B (3 credits)

Not required before candidacy:

MATH 181 Calculus I – Category C2 (4 credits) *Final grade of C or better is required.*

Program Plan Code: BSED_SCED_CSMA
Effective Date: Fall 2022

B.S. Ed. Secondary Education: Earth and Space Science Requirements

The BSED Secondary Education Earth & Space Science Program provides course preparation in education and Earth and space science and includes clinical experience. The program leads to a bachelor's degree and teaching certification in 7-12 Secondary Earth and Space Science.

Note that all students must achieve 120 undergraduate credits and a minimum 3.0 overall GPA to graduate. The final GPA requirement for Secondary Education Earth & Space Science is 3.0.

Required Science Courses – 38 credits

See also Directed General Education below.
ASTR 140 Planetary Science (3 credits)
ASTR 142 Stellar and Galactic Astronomy (3 credits)
CHEM 102 General Chemistry II (4 credits)
EVSC 100 Intro to Environmental Science (3 credits)
EVSC 210 Environmental Geology (3 credits)
GEOG 204 Meteorology (3 credits)
GEOL 100 Physical Geology (4 credits)
GEOL 102 Elements of Historical Geography (4 credits)
GEOL 110 Introduction to Oceanography (3 credits)
PHYS 040 General Physics I *or* PHYS 100 Physics I (4 credits)
PHYS 042 General Physics II *or* PHYS 102 Physics II (4 credits)

Science Course Electives – 6 to 8 credits

Select two courses from ASTR, GEOL, MRSC, or EVSC with lab above the 100 level (6-8 credits)

Required Mathematics Courses – 6 credits

See also Directed General Education below.
MATH 140 Applied Statistical Mathematics (3 credits)
MATH 106 Trigonometry (3 credits) *or* MATH 115 Precalculus Mathematics (3 credits)

Education Professional Courses – 15 credits

Students must achieve a B or better in professional coursework.
SEED 312 Principles of Learning (3 credits)
SEED 313 Principles of Learning Lab (3 credits)
SEED 342 Principles of Teaching (3 credits)
SEED 343 Principles of Teaching Lab (3 credits)
SEED 410 Science Methods for Middle & High School (3 credits)

Clinical Experience Courses – 12 credits

SEED 390 Clinical Experience I (6 credits)
SEED 391 Clinical Experience II (6 credits)

Directed General Education Courses – 27 credits

While counting toward General Education fulfillment, these courses are required for completion of the major.

Required before candidacy:

The following courses must be taken before a student can take their education professional coursework. Additionally, to achieve candidacy, a student must pass the state's basic skills requirement, earn a 3.0 GPA or higher and complete pre-candidacy field hours.

COMP 100 level course – Category A1 (3 credits) *Final grade of C or better is required.*
ENGL Literature course – Category D (3 credits) *Final grade of C or better is required.*
EDUC 100 Perspectives on American Education – Category B (3 credits)
SPEE 201 Cognitive Development of Diverse Learners – Category B (3 credits)
SPEE 314 Effective Instructional Strategies – Category B (3 credits)

Not required before candidacy:

MATH 181 Calculus I – Category C2 (4 credits)
CHEM 100 General Chemistry I – Category C1 (4 credits)
BIOL 104 Principles of Biology – Category C3 (4 credits)

University Elective Course – 0 to 3 credits

Depending upon course selections in General education and the major, students may require an additional elective course to reach 120 credit hours.
Select a course from any department

Program Plan Code: BSED_SCED_ESPC
Effective Date: Fall 2018

B.S.Ed. Secondary Education: English Requirements

The BSED Secondary Education English program provides course preparation in Education and English and includes clinical experiences. The program leads to a bachelor's degree and teaching certification in grades 7 to 12 Secondary English.

Note that all students must achieve 120 undergraduate credits and a minimum 3.0 overall GPA to graduate. The final GPA requirement for Secondary Education English is 3.0.

Required English Courses – 30 credits

See also the Directed General Education section below.
ENGL Media Course (3 credits) from the approved list of courses that fulfill the media requirement.
ENGL 100 Critical Reading and Writing in the Professional World (3 credits)
ENGL 101 World Literature I *or* ENGL102 World Literature II (3 credits)
ENGL 105 Experiences in American Literature (3 credits)
ENGL 107 Conventions of English Grammar (3 credits)
ENGL 200 level course (3 credits)
ENGL 349 Teaching Adolescent Literature (3 credits)
ENED 405 Teaching Writing (3 credits)
COMP 200 Research and Composition *or* ENGL 248 Living Literacy *or* ENGL 265 Real Life Research (3 credits)
ENGL 331 Shakespeare's Earlier Plays *or* ENGL 332 Shakespeare's Later Plays (3 credits)

English Elective Courses – 18 credits

Note: Three of the selected courses must focus on literature prior to the twentieth century.
Three ENGL courses at 200 level or higher (9 credits)
Three ENGL courses at 300 level or higher (9 credits)

Education Professional Courses – 15 credits

Students must achieve a B or better in professional coursework. These courses require teacher candidacy.
SEED 312 Principles of Learning (3 credits)
SEED 313 Principles of Learning Lab (3 credits)
SEED 342 Principles of Teaching (3 credits)
SEED 343 Principles of Teaching Lab (3 credits)
SEED 425 English Methods for Middle & High School (3 credits)

Clinical Experience Courses – 12 credits

SEED 390 Clinical Experience I (6 credits)
SEED 391 Clinical Experience II (6 credits)

Directed General Education Courses – 21 to 23 credits

While counting toward General Education fulfillment, these courses are required for completion of the major.

Required before candidacy:

The following courses must be taken before a student can take their education professional coursework.

COMP 100 level course – Category A1 (3 credits) *Final grade of C or better is required.*
2 MATH courses (Math 17 or higher) – Category C2 and C3 (3 or 4 credits) *Final grade of C or better is required.*
EDUC 100 Perspectives on American Education – Category B (3 credits)
SPEE 201 Cognitive Development of Diverse Learners – Category B (3 credits)
SPEE 314 Effective Instructional Strategies – Category B (3 credits)

Not required before candidacy:

ENGL 106 Experiences in British Literature – Category D (3 credits)

University Elective Courses – 3 credits

Depending on your general education course selection, you may need 3 elective credits to meet the university 120 credit minimum. These elective courses may be selected from any department including Education.

Program Plan Code: BSED_SCED_ENGL
Effective Date: Fall 2023

B.S.Ed. Secondary Education: General Science Requirements

The BSED Secondary Education General Science Program provides course preparation in education and general science and includes clinical experience. The program leads to a bachelor's degree and teaching certification in 7-12 Secondary General Science.

Note that all students must achieve 120 undergraduate credits and a minimum 3.0 overall GPA to graduate. The final GPA requirement for Secondary Education General Science is 3.0.

Required Science Courses – 43 credits

See also Directed General Education below.
BIOL 106 Introduction to Zoology (4 credits)
BIOL 108 Introduction to Botany (4 credits)
CHEM 102 General Chemistry II (4 credits)
EVSC 100 Intro to Environmental Science (3 credits)
EVSC 222 Environmental Biology (3 credits)
GEOG 204 Meteorology (3 credits)
GEOL 100 Physical Geology (4 credits)
GEOL 102 Elements of Historical Geography (4 credits)
GEOL 110 Introduction to Oceanography (3 credits)
PHYS 040 General Physics I (4 credits)
PHYS 042 General Physics II (4 credits)
ASTR 140 Planetary Science *or* ASTR 142 Stellar and Galactic Astronomy (3 credits)

Required Mathematics Courses – 6 credits

See also Directed General Education below.
MATH 140 Applied Statistical Mathematics (3 credits)
MATH 106 Trigonometry (3 credits) *or* MATH 115 Precalculus Mathematics (3 credits)

Education Professional Courses – 15 credits

Students must achieve a B or better in professional coursework. These courses require teacher candidacy.
SEED 312 Principles of Learning (3 credits)
SEED 313 Principles of Learning Lab (3 credits)
SEED 342 Principles of Teaching (3 credits)
SEED 343 Principles of Teaching Lab (3 credits)
SEED 410 Science Methods for Middle & High School (3 credits)

Clinical Experience Courses – 12 credits

SEED 390 Clinical Experience I (6 credits)
SEED 391 Clinical Experience II (6 credits)

Directed General Education Courses – 27 credits

While counting toward General Education fulfillment, these courses are required for completion of the major.

Required before candidacy:

The following courses must be taken before a student can take their education professional coursework. Additionally, to achieve candidacy, a student must earn a 3.0 GPA or higher and complete pre-candidacy field hours.

COMP 100 level course – Category A1 (3 credits) *Final grade of C or better is required.*
ENGL Literature course – Category D (3 credits) *Final grade of C or better is required.*
EDUC 100 Perspectives on American Education – Category B (3 credits)
SPEE 201 Cognitive Development of Diverse Learners – Category B (3 credits)
SPEE 314 Effective Instructional Strategies – Category B (3 credits)

Not required before candidacy:

MATH 181 Calculus I – Category C2 (4 credits)
CHEM 100 General Chemistry I – Category C1 (4 credits)
BIOL 104 Principles of Biology – Category C3 (4 credits)

Program Plan Code: BSED_SCED_GSCI
Effective Date: Fall 2018

B.S.Ed. Secondary Education: Mathematics Requirements

The BSED Secondary Education Mathematics Program provides course preparation in education and mathematics and includes clinical experience. The program leads to a bachelor's degree and teaching certification in 7-12 Secondary Mathematics.

Note that all students must achieve 120 undergraduate credits and a minimum 3.0 overall GPA to graduate. The final GPA requirement for Secondary Education Mathematics is 3.0.

Required Mathematics Courses – 29 credits

MATH 182 Calculus II (4 credits) *Final grade of C or better is required.*
MATH 283 Calculus III (3 credits)
MATH 220 History of Mathematics (4 credits)
MATH 224 Foundations of Higher Mathematics (3 credits)
MATH 240 Synthetic Geometry (3 credits)
MATH 260 Linear Algebra (3 credits)
MATH 301 Probability and Statistics I (3 credits)
MATH 311 Abstract Algebra I (3 credits)
MATH 351 Real Analysis I (3 credits)

Mathematics Elective Courses – 12-16 credits

Select any two MATH courses from 105 or higher (6-8 credits)
Select any two MATH courses from 200 or higher or one MATH course 200 or higher and one CPSC course from 123 or higher (6-8 credits)

Education Professional Courses – 15 credits

Students must achieve a B or better in professional coursework. These courses require teacher candidacy.
SEED 312 Principles of Learning (3 credits)
SEED 313 Principles of Learning Lab (3 credits)
SEED 342 Principles of Teaching (3 credits)
SEED 343 Principles of Teaching Lab (3 credits)
SEED 430 Math Methods for Middle & High School (3 credits)

Clinical Experience Courses – 12 credits

SEED 390 Clinical Experience I (6 credits)
SEED 391 Clinical Experience II (6 credits)

Directed General Education Courses – 22 credits

While counting toward General Education fulfillment, these courses are required for completion of the major.

Required before candidacy:

The following courses must be taken before a student can take their education professional coursework. Additionally, to achieve candidacy, a student must pass the state's basic skills requirement, earn a 3.0 GPA or higher and complete pre-candidacy field hours.

COMP 100-level course – Category A1 (3 credits) *Final grade of C or better is required.*
ENGL Literature course – Category D (3 credits) *Final grade of C or better is required.*
EDUC 100 Perspectives on American Education – Category B (3 credits)
SPEE 201 Cognitive Development of Diverse Learners – Category B (3 credits)
SPEE 314 Effective Instructional Strategies – Category B (3 credits)

Not required before candidacy:

MATH 181 Calculus I – Category C2 (4 credits) *Final grade of C or better is required.*
CPSC 123 Computer Science I *or* CPSC 135 Intro to Scientific Programming – Category C3 (3 credits)

University Elective Course – 3 to 9 credits

Select courses from any department to reach required credits for graduation.

Program Plan Code: BSED_SCED_MATH
Effective Date: Fall 2018

B.S.Ed. Secondary Education: Physics Requirements

The BSED Secondary Education Physics Program provides course preparation in education and physics and includes clinical experience. The program leads to a bachelor's degree and teaching certification in 7-12 Secondary Physics.

Note that all students must achieve 120 undergraduate credits and a minimum 3.0 overall GPA to graduate. The final GPA requirement for Secondary Education Physics is 3.0. Most students will graduate from this program with 123 credits.

Required Physics Courses – 36 credits

PHYS 100 Physics I (4 credits)
PHYS 102 Physics II (4 credits)
PHYS 212 Modern Physics I (3 credits)
PHYS 214 Modern Physics II (3 credits)
PHYS 230 Optics (3 credits)
PHYS 245 Mathematical Physics I (3 credits)
PHYS 312 Classical Mechanics I (4 credits)
PHYS 315 Advanced Physics Laboratory (3 credits)
PHYS 316 Electricity and Magnetism I (3 credits)
Choose two courses from the following three courses:
PHYS 220 Electronics (3 credits)
PHYS 327 Thermodynamics & Statistical Mechanics (3 credits)
MATH 340 Differential Equations (3 credits)

Additional Science Courses – 7 credits

CHEM 102 General Chemistry II (4 credits)
ASTR 140 Planetary Science (3 credits) *or* ASTR 142 Stellar and Galactic Astronomy (3 credits)

Required Mathematics Courses – 8 credits

MATH 182 Calculus II (4 credits)
MATH 283 Calculus III (4 credits)

Education Professional Courses – 15 credits

Students must achieve a B or better in professional coursework.
SEED 312 Principles of Learning (3 credits)
SEED 313 Principles of Learning Lab (3 credits)
SEED 342 Principles of Teaching (3 credits)
SEED 343 Principles of Teaching Lab (3 credits)
SEED 430 Math Methods for Middle & High School (3 credits)

Clinical Experience Courses – 12 credits

SEED 390 Clinical Experience I (6 credits)
SEED 391 Clinical Experience II (6 credits)

Directed General Education Courses – 27 credits

The student must achieve a C or better in the following classes.
COMP 100-level course – Category A1 (3 credits)
ENGL Literature course – Category D (3 credits)
EDUC 100 Perspectives on American Education – Category B (3 credits)
SPEE 201 Cognitive Development of Diverse Learners – Category B (3 credits)
SPEE 314 Effective Instructional Strategies – Category B (3 credits)
While counting toward General Education fulfillment, these courses are required for completion of the major.
BIOL 104 Principles of Biology – Category C1 (4 credits)
MATH 181 Calculus I – Category C2 (4 credits)
CHEM 100 General Chemistry I – Category C3 (4 credits)

Program Plan Code: BSED_SCED_PHYS
Effective Date: Fall 2018

B.S.Ed. Secondary Education: Physics and Mathematics Requirements

The BSED Secondary Education Physics & Mathematics Program provides course preparation in education, physics, and mathematics and includes clinical experience. The program leads to a bachelor's degree and teaching certification in 7-12 Secondary Physics and Mathematics.

Note that all students must achieve 120 undergraduate credits and a minimum 3.0 overall GPA to graduate. The final GPA requirement for Secondary Education Physics & Mathematics is 3.0. Most students will graduate from this program with 126 credits.

Required Physics Courses – 28 credits

PHYS 100 Physics I (4 credits)
PHYS 102 Physics II (4 credits)
PHYS 212 Modern Physics I (3 credits)
PHYS 230 Optics (3 credits)
PHYS 312 Classical Mechanics I (4 credits)
PHYS 315 Advanced Physics Laboratory (3 credits)
PHYS 316 Electricity and Magnetism I (3 credits)
Additional Science Course:
See also Directed General Education below.
CHEM 102 General Chemistry II (4 credits)

Required Mathematics Courses – 26 credits

MATH 182 Calculus II (4 credits)
MATH 283 Calculus III (4 credits)
MATH 224 Foundations of Higher Mathematics (3 credits)
MATH 240 Synthetic Geometry (3 credits)
MATH 260 Linear Algebra (3 credits)
MATH 301 Probability and Statistics I (3 credits)
MATH 311 Abstract Algebra I (3 credits)
MATH 340 Differential Equations (3 credits)

Education Professional Courses – 15 credits

Students must achieve a B or better in professional coursework. The courses require teacher candidacy.
SEED 312 Principles of Learning (3 credits)
SEED 313 Principles of Learning Lab (3 credits)
SEED 342 Principles of Teaching (3 credits)
SEED 343 Principles of Teaching Lab (3 credits)
SEED 430 Math Methods for Middle & High School (3 credits)

Clinical Experience Courses – 12 credits

SEED 390 Clinical Experience I (6 credits)
SEED 391 Clinical Experience II (6 credits)

Directed General Education Courses – 27 credits

While counting toward General Education fulfillment, these courses are required for completion of the major.

Required before candidacy:

The following courses must be taken before a student can take their education professional coursework. Additionally, to achieve candidacy, a student must pass the state's basic skills requirement, earn a 3.0 GPA or higher and complete pre-candidacy field hours.

COMP 100-level course – Category A1 (3 credits) *Final grade of C or better is required.*
ENGL Literature course – Category D (3 credits) *Final grade of C or better is required.*
EDUC 100 Perspectives on American Education – Category B (3 credits)
SPEE 201 Cognitive Development of Diverse Learners – Category B (3 credits)
SPEE 314 Effective Instructional Strategies – Category B (3 credits)

Not required before candidacy:

BIOL 104 Principles of Biology – Category C1 (4 credits)
MATH 181 Calculus I – Category C2 (4 credits)
CHEM 100 General Chemistry I – Category C3 (4 credits)

Program Plan Code: BSED_SCED_PHMA
Effective Date: Fall 2018

B.S.Ed. Secondary Education: Social Studies Requirements

The BSED Secondary Education Social Studies Program provides course preparation in education and social studies and includes clinical experience. The program leads to a bachelor's degree and teaching certification in 7-12 Secondary Social Studies.

Note that all students must achieve 120 undergraduate credits and a minimum 3.0 overall GPA to graduate. The final GPA requirement for Secondary Education Social Studies is 3.0.

Required Social Studies Courses – 30 credits

HIST 025 US Formative Years & the Federal Republic (3 credits)
HIST 026 History of the United States (3 credits)
Select 1 History (HIST) 100-level or higher course (3 credits)
GEOG 20 Cultural Geography (3 credits)
POLI 10 American Government (3 credits)
Select 1 Anthropology (ANTH) course (3 credits)
Select 1 Economics (ECON) course (3 credits)
Select 1 Psychology (PSYCH) course (3 credits)
Select 1 Sociology (SOCI) course (3 credits)
POLI 020 International Relations *or* POLI 030 Comparative Politics (3 credits)

Specialized Elective Course Sequence – 9 credits

Select three courses from the 200-level or higher in one area from GEOG, HIST, or POLI (9 credits)

Methodology Course – 3 credits

Selected area methodology course - GEOG 375 Research Methods in Geography *or* HIST 378 Seminar in Historical Methods *or* POLI 101 Social Research Design & Writing (3 credits)
Note: the course prefix must match the 3 courses that you chose for the required specialized course. For example, if you selected HIST, then the method class must be HIST.

Education Professional Courses – 15 credits

Students must achieve a B or better in professional coursework. These courses require teacher candidacy.
SEED 312 Principles of Learning (3 credits)
SEED 313 Principles of Learning Lab (3 credits)
SEED 342 Principles of Teaching (3 credits)
SEED 343 Principles of Teaching Lab (3 credits)
SEED 426 Social Studies Methods for Middle & High School (3 credits)

Clinical Experience Courses – 12 credits

SEED 390 Clinical Experience I (6 credits)
SEED 391 Clinical Experience II (6 credits)

University Elective Courses – 9 credits

Depending on your general education course selection, you may need up to 9 elective credits to meet the university 120 credit minimum. These elective courses may be selected from any department including Education.

Directed General Education Courses – 30 to 32 credits

While counting toward General Education fulfillment, these courses are required for completion of the major.

Required before candidacy:

The following courses must be taken before a student can take their education professional coursework. Additionally, to achieve candidacy, a student must pass the state's basic skills requirement, earn a 3.0 GPA or higher and complete pre-candidacy field hours.

COMP 100-level course – Category A1 (3 credits) *Final grade of C or better is required.*
ENGL Literature course – Category D (3 credits) *Final grade of C or better is required.*
2 MATH general education courses – Category C2 and C3 (3 or 4 credits) *Final grade of C or better is required.*
EDUC 100 Perspectives on American Education – Category B (3 credits)
SPEE 201 Cognitive Development of Diverse Learners – Category B (3 credits)
SPEE 314 Effective Instructional Strategies – Category B (3 credits)

Not required before candidacy:

GEOG 10 Physical Geography – Category C1 (3 credits)
HIST 14 History of Civilization A – Category D (3 credits)
HIST 15 History of Civilization B – Category D (3 credits)

Program Plan Code: BSED_SCED_SOST
Effective Date: Fall 2018

B.S.Ed. Special Education: Autism Studies (Non-Certification) Requirements

The BSED Special Education/Education Studies – Autism Studies Program provides course preparation in Special Education and includes an internship. The program leads to a bachelor's degree in Special Education. It is a non-certification program and does not lead to PK-12 teacher certification.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Education Studies is 2.0.

Required Autism Studies Core Courses – 33 to 36 credits

SPEE 201 Cognitive Development of Diverse Learners (3 credits)
SPEE 101 Early Intervention and Transition for Students with Disabilities (3 credits)
SPEE 223 Augmentative and Alternative Communication to Support Students with Disabilities (3 credits)
SPEE 327 Transition, Self-Determination and Self-Advocacy for Adolescents and Adults with Disabilities (3 credits)
SPEE 328 Positive Behavioral Interventions and Supports (3 credits)
SPEE 330 Teaching Students with Low-Incidence Disabilities (3 credits)
SPEE 433 Characteristics and Etiology of Autism Spectrum Disorders (3 credits)
SPEE 434 Applied Behavior Analysis (3 credits)
SPEE 435 Assessment and Instructional Intervention for Individual with Autism Spectrum Disorders (3 credits)
SPEE 436 Working with Individuals with ASD and Collaborating with Families, Agencies, and the Community (3 credits)
SPEE 381 Internship in Special Education (3 *or* 6 credits)

Directed General Education Courses – 27 credits

COMP 100 Effective Composition – Category A1 (3 credits)
COMM 10 Fundamentals of Oral Communication – Category A3 (3 credits)
PSYC 11 General Psychology – Category B (3 credits)
PSYC 110 Child Psychology – Category B (3 credits)
ENGL 110 Introduction to Literature – Category D (3 credits)
1 GE Science with Lab –Category C1 (3 credits)
2 GE MATH courses – Category C2 & C3 (6 credits)
LLTC 321 Technologies for the 21st Century Educator – Category D (3 credits)

Program Plan Code: BSED_SPED_AUTI
Effective Date: Fall 2024

B.S.Ed. Special Education: PK-12 Requirements

The BSED Special Education PK-12 Program provides course preparation in Special Education and includes clinical experiences. The program leads to a bachelor's degree and teaching certification in PK-12 Special Education.

Note that all students must achieve 120 undergraduate credits and a minimum 3.0 overall GPA to graduate. The final GPA requirement for Special Education PK-12 is 3.0.

Special Education Professional Courses – 33 credits

Students must earn a final course grade of C or better to count for certification and the major. All courses must be completed before a student can take their Trio Semester courses.

SPEE 101 Early Intervention and Transition for Students with Disabilities (3 credits)
SPEE 201 Cognitive Development of Diverse Learners (3 credits)
SPEE 216 Evidence-Based Practices in Mathematics for Students with Disabilities (3 credits)
SPEE 313 Making Content Area Instruction Accessible for Students with Disabilities (3 credits)
SPEE 318 Assessment and Instructional Methods for Students with Disabilities (3 credits)
SPEE 223 Augmentative and Alternative Communication to Support Students with Disabilities (3 credits)
SPEE 327 Transition, Self-Determination & Self-Advocacy for Adolescents & Adults with Disabilities (3 credits)
EEPK 215 Introduction to Early Childhood Education (3 credits)
SPEE 322 Teaching Students with High-Incidence Disabilities (3 credits) – *Candidacy Required*
SPEE 330 Teaching Students with Low-Incidence Disabilities (3 credits) – *Candidacy Required*
EEPK 300 Early Literacy Development & Acquisition PREK-1(3 credits) – *Candidacy Required*

Trio Semester Courses – 9 credits

Teacher Candidacy is required to take these courses and students must earn a final course grade of C or better. They are scheduled in a block format. These courses must be completed before you can take your clinical experience courses.

SPEE 317 Intensive Reading, Writing and Mathematics Intervention Approaches (3 credits)
SPEE 320 Special Education Processes and IEP Development (3 credits)
SPEE 328 Positive Behavioral Interventions and Supports (3 credits)

Clinical Experience Courses – 12 credits

Teacher Candidacy is required to take these courses and are completed after the Trio Semester. Students must earn a final course grade of C or better.

SPEE 392 Clinical Experience and Practicum Special Education (6 credits)
SPEE 393 Clinical Experience and Practicum Special Education (6 credits)

Directed General Education Courses - 36 credits

While counting toward General Education fulfillment, these courses are required for completion of the major.

COMP 100 Effective Composition – Category A1 (3 credits) – *Grade of C or better required.*
COMP 200 Research and Composition – Category A2 (3 credits)
MATH 103 Fundamentals of Math I – Category C2 (3 credits) – *Grade of C or better required.*
MATH 104 Fundamentals of Math II – Category C3 (3 credits) – *Grade of C or better required.*
1 English Literature Course – Category D (3 credits) – *Grade of C or better required*.
EDUC 150 Meeting the Instructional Needs of the English Language Learners – Category B (3 credits) – *Grade of C or better required.*
LLTC 321 Technologies for the 21st Century Educator – Category D (3 credits) – *Grade of C or better required.*
SPEE 316 Literacy Development and Instruction in Core and Intervention Areas – Category A4 (3 credits) – *Grade of C or better required.*
BIOL 10 Intro to Biology – Category C1 (3 credits)
COMM 10 Fundamentals of Oral Communication – Category A3 (3 credits)
PSYC 11 General Psychology – Category B (3 credits)
PSYC 110 Child Psychology – Category B (3 credits)

University Elective Courses – 24 credits

These courses may be taken as university electives, or as part of a minor.

Program Plan Code: BSED_SPED
Effective Date: Fall 2020

B.S.Ed. Special Education: PK-12 and Elementary 4-8 Language Arts & Reading Requirements

The BSED Special Education PK-12/Elementary Education 4-8 Language Arts and Reading Program provides course preparation in Special Education and Elementary Education and includes clinical experience. The program leads to a bachelor's degree and teaching certification in PK-12 Special Education and 4-8 English Language Arts/Reading Elementary Education.

Note that all KU students must achieve a minimum of 120 undergraduate credits and a minimum 3.0 overall GPA to graduate. Most students in this program will graduate with 135 credits. The final GPA requirement for Special Education PK-12/Elementary Education 4-8 English Language Arts and Reading is 3.0.

Required Special Education Core Courses – 33 credits

The following courses require a final grade of C or better.
SPEE 101 Early Intervention and Transition for Students with Disabilities (3 credits)
SPEE 201 Cognitive Development of Diverse Learners (3 credits) *Pre-candidacy course*.
SPEE 216 Evidence-Based Practices in Mathematics for Students with Disabilities (3 credits)
SPEE 223 Augmentative and Alternative Communication to Support Students with Disabilities (3 credits)
SPEE 313 Making Content Area Instruction Accessible for Students with Disabilities (3 credits)
SPEE 327 Transition, Self-Determination and Self-Advocacy for Adolescents and Adults with Disabilities (3 credits)
ELED 212 Teaching Diverse Learners Middle Level (3 credits) *Pre-candidacy course*.
ELED 312 Culturally Responsive Teaching for ELL (3 credits) *Pre-candidacy course*.
ELED 226 Teach Middle Level *or* EDUC 326 Introduction to Middle Level Ed (3 credits) *Pre-candidacy course*.

Teacher Candidacy is required for the following courses:
SPEE 322 Teaching Students with High-Incidence Disabilities (3 credits)
SPEE 330 Teaching Students with Low-Incidence Disabilities (3 credits)

Natural Sciences Courses – 6 credits

CHEM 20 Intro to Chemistry (Lab) (3 credits)
BIOL 130 Environmental Issues Global Perspective *or* BIOL 140 Biology and Society (3 credits)

Mathematics Courses – 6 credits

MATH 40 Geometry (3 credits)
MATH 105 College Algebra (3 credits)

English Language Arts and Reading Courses – 12 credits

ENGL105 Experiences in American Literature (3 credits)
ELED 221 Lit for Upper Elementary and Middle Level Learners (3 credits)
ELED 331 Teaching and Assessing Literacy for Middle Level Learners Across Academic Disciplines (3 credits)
ELED 353 Language Development, Reading Assessment, and Intervention (3 credits) – *Teacher Candidacy is required to take this course.*

Trio Semester Courses – 9 credits

Teacher candidacy is required to take these courses. The courses will be scheduled in a block format.
SPEE 317 Intensive Reading, Writing and Mathematics Intervention Approaches (3 credits)
SPEE 320 Special Education Processes and IEP Development (3 credits)
SPEE 328 Positive Behavioral Interventions and Supports (3 credits)

Professional Semester Courses – 15 credits

Teacher candidacy is required to take these courses. The courses will be scheduled in a block format in the fall semester only. These courses are a pre-requisite for the clinical experience semester. A final grade of C or better is required.
ELED 342 Teaching Writing at the Middle Level (3 credits)
ELED 344 Teaching Social Studies at the Middle Level (3 credits)
ELED 346 Middle Level Cognitive Development (3 credits)
ELED 347 Teaching and Assessing Math for Middle Level Learners (3 credits)
ELED 349 Teaching Science at the Middle Level (3 credits)

Clinical Experience Courses – 12 credits

ELED 392 or ELED 393 Clinical Experience and Practicum with Middle Level Learners Elementary Education (6 credits)
SPEE 392 *or* SPEE 393 Clinical Experience and Practicum Special Education (6 credits)

Directed General Education Courses – 39 credits

While counting toward General Education fulfillment, these courses are required for completion of the major. A student must earn a final grade of C or better in the following courses.
COMP 100 Effective Composition – Category A1 (3 credits)
COMM 10 Fundamentals of Oral Communication – Category A3 (3 credits)
SPEE 316 Literacy Development and Instruction in Core and Intervention Areas – Category A4 (3 credits) *Pre-candidacy course.*
LLTC 321 Technologies for the 21st Century Educator – Category D (3 credits) *Pre-candidacy course.*
MATH 103 Fundamentals of Math I – Category C2 (3 credits)
MATH 104 Fundamentals of Math II – Category C3 (3 credits)
ENGL Literature course – Category D (3 credits)
The following courses do not have the C or better requirement:
COMP 200 Research and Composition – Category A2 (3 credits)
BIOL 10 Intro to Biology – Category C1 (3 credits)
HIST 25 American History I *or* HIST 26 American History II – Category B (3 credits)
HIST 14 World History I *or* HIST 15 World History II – Category D (3 credits)
ECON 100 Economics – Category B (3 credits)
GEOG 20 *or* GEOG 101 Geography – Category B (3 credits)

Program Plan Code: BSED_SPED_SPUE
Effective Date: Spring 2021

B.S.Ed. Special Education: PK-12 and Elementary 4-8 Mathematics Requirements

The BSED Special Education PK-12/Elementary Education 4-8 Mathematics Program provides course preparation in Special Education and Elementary Education and includes clinical experience. The program leads to a bachelor's degree and teaching certification in PK-12 Special Education and 4-8 Mathematics Elementary Education.

Note that all KU students must achieve a minimum of 120 undergraduate credits and a minimum 3.0 overall GPA to graduate. Most students in this program will graduate with 132 credits. The final GPA requirement for Special Education PK-12/Elementary Education 4-8 Mathematics is 3.0.

Required Special Education Core Courses – 33 credits

Note: the following courses require a final grade of C or better.
SPEE 101 Early Intervention and Transition for Students with Disabilities (3 credits)
SPEE 201 Cognitive Development of Diverse Learners (3 credits) *Pre-candidacy course*.
SPEE 216 Evidence-Based Practices in Mathematics for Students with Disabilities (3 credits)
SPEE 223 Augmentative and Alternative Communication to Support Students with Disabilities (3 credits)
SPEE 313 Making Content Area Instruction Accessible for Students with Disabilities (3 credits)
SPEE 327 Transition, Self-Determination and Self-Advocacy for Adolescents and Adults with Disabilities (3 credits)
ELED 212 Teaching Diverse Learners Middle Level (3 credits) *Pre-candidacy course*.
ELED 312 Culturally Responsive Teaching for ELL (3 credits) *Pre-candidacy course*.
ELED 226 Teach Middle Level *or* EDUC 326 Introduction to Middle Level Ed (3 credits) *Pre-candidacy course*

Teacher Candidacy is required for the following courses:
SPEE 322 Teaching Students with High-Incidence Disabilities (3 credits)
SPEE 330 Teaching Students with Low-Incidence Disabilities (3 credits)

Natural Sciences Courses – 9 credits

CHEM 020 Intro to Chemistry (Lab) (3 credits)
BIOL 130 Environmental Issues Global Perspective *or* BIOL 140 Biology and Society (3 credits)
PHYS 20 Intro to Physics (Lab) (3 credits)

Mathematics Courses – 15 credits

MATH 40 Geometry (3 credits)
MATH 105 College Algebra (3 credits)
MATH 122 Applied Calculus (3 credits)
MATH 140 Applied Statistical Methods (3 credits)
MATH 106 Trigonometry (3 credits) *or* MATH 115 Pre-Calculus (3 credits) *or* MATH 123 Discrete Math (3 credits)

Trio Semester Courses – 9 credits

Teacher candidacy is required to take these courses. The courses will be scheduled in a block format.
SPEE 317 Intensive Reading, Writing and Mathematics Intervention Approaches (3 credits)
SPEE 320 Special Education Processes and IEP Development (3 credits)
SPEE 328 Positive Behavioral Interventions and Supports (3 credits)

Professional Semester Courses – 15 credits

Teacher candidacy is required to take these courses. The courses will be scheduled in a block format in the fall semester only. These courses are a pre-requisite for the clinical experience semester. A final grade of C or better is required.

ELED 342 Teaching Writing at the Middle Level (3 credits)
ELED 344 Teaching Social Studies at the Middle Level (3 credits)
ELED 346 Middle Level Cognitive Development (3 credits)
ELED 347 Teaching and Assessing Math for Middle Level Learners (3 credits)
ELED 349 Teaching Science at the Middle Level (3 credits)

Clinical Experience Courses – 12 credits

ELED 392 *or* ELED 393 Clinical Experience and Practicum with Middle Level Learners Elementary Education (6 credits)
SPEE 392 *or* SPEE 393 Clinical Experience and Practicum Special Education (6 credits)

Directed General Education Courses – 39 credits

While counting toward General Education fulfillment, these courses are required for completion of the major. A student must earn a final grade of C or better in the following courses.

COMP 100 Effective Composition – Category A1 (3 credits)
COMM 10 Fundamentals of Oral Communication – Category A3 (3 credits)
SPEE 316 Literacy Development and Instruction in Core and Intervention Areas – Category A4 (3 credits) *Pre-candidacy course*.
LLTC 321 Technologies for the 21st Century Educator – Category D (3 credits) *Pre-candidacy course*.
MATH 103 Fundamentals of Math I – Category C2 (3 credits)
MATH 104 Fundamentals of Math II – Category C3 (3 credits)
ENGL Literature course – Category D (3 credits)

The following courses do not have the C or better requirement:

COMP 200 Research and Composition – Category A2 (3 credits)
BIOL 10 Intro to Biology – Category C1 (3 credits)
HIST 25 American History I *or* HIST 26 American History II – Category B (3 credits)
HIST 14 World History I *or* HIST 15 World History II – Category D (3 credits)
ECON 100 Economics – Category B (3 credits)
GEOG 20 *or* GEOG 101 Geography – Category B (3 credits)

Program Plan Code: BSED_SPED_SPUP
Effective Date: Spring 2021

B.S.Ed. Special Education: Teaching and Learning (Non-Certification) Requirements

The BSED Special Education/Education Studies – Teaching and Learning Program provides course preparation in Special Education and includes an internship. The program leads to a bachelor's degree in Special Education. It is a non-certification program and does not lead to PK-12 teacher certification.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Education Studies is 2.0.

Required Teaching and Learning Core Courses – 33 to 36 credits

SPEE 201 Cognitive Development of Diverse Learners (3 credits)
SPEE 101 Early Intervention and Transition for Students with Disabilities (3 credits)
SPEE 216 Evidence-Based Practices in Mathematics for Students with Disabilities (3 credits)
SPEE 223 Augmentative and Alternative Communication to Support Students with Disabilities (3 credits)
SPEE 316 Literacy Development and Instruction in Core and Intervention Areas (3 credits)
SPEE 318 Assessment and Instructional Methods for Students with Disabilities (3 credits)
SPEE 322 Teaching Students with High-Incidence Disabilities (3 credits)
SPEE 327 Transition, Self-Determination and Self-Advocacy for Adolescents and Adults with Disabilities (3 credits)
SPEE 328 Positive Behavioral Interventions and Supports (3 credits)
SPEE 330 Teaching Students with Low-Incidence Disabilities (3 credits)
SPEE 381 Internship in Special Education (3 or 6 credits)

Directed General Education Courses – 27 credits

COMP 100 Effective Composition – Category A1 (3 credits)
COMM 10 Fundamentals of Oral Communication – Category A3 (3 credits)
PSYC 11 General Psychology – Category B (3 credits)
PSYC 110 Child Psychology – Category B (3 credits)
ENGL 110 Introduction to Literature – Category D (3 credits)
General Education Science with Lab – Category C1 (3 credits)
2 General Education MATH courses – Category C2 & C3 (6 credits)
LLTC 321 Technologies for the 21st Century Educator – Category D (3 credits)

Program Plan Code: BSED_SPED_TELE
Effective Date: Fall 2024

B.S.Ed. Special Education: Transition Services (Non-Certification) Requirements

The BSED Special Education/Education Studies – Transition Services Program provides course preparation in Special Education and includes an internship. The program leads to a bachelor's degree in special education. It is a non-certification program and does not lead to PK-12 teacher certification.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Education Studies is 2.0.

Required Core Courses – 33 to 36 credits

SPEE 201 Cognitive Development of Diverse Learners (3 credits)
SPEE 101 Early Intervention and Transition for Students with Disabilities (3 credits)
SPEE 223 Augmentative and Alternative Communication to Support Students with Disabilities (3 credits)
SPEE 327 Transition, Self-Determination and Self-Advocacy for Adolescents and Adults with Disabilities (3 credits)
SPEE 328 Positive Behavioral Interventions and Supports (3 credits)
SPEE 330 Teaching Students with Low-Incidence Disabilities (3 credits)
SPEE 381 Internship in Special Education (3 *or* 6 credits)
SOWK 100 Introduction to Social Work and Social Welfare (3 credits)
SOWK 130 Poverty and Social Welfare (3 credits)
SOWK 160 Human Behavior and Social Environment (3 credits)
SOWK 320 Case Management: An Interdisciplinary Approach (3 credits)

Directed General Education Courses – 27 credits

COMP 100 Effective Composition – Category A1 (3 credits)
COMM 10 Fundamentals of Oral Communication – Category A3 (3 credits)
PSYC 11 General Psychology – Category B (3 credits)
PSYC 110 Child Psychology – Category B (3 credits)
ENGL 110 Introduction to Literature – Category D (3 credits)
GE Science with Lab – Category C1 (3 credits)
2 GE MATH courses – Category C2 & C3 (6 credits)
LLTC 321 Technologies for the 21st Century Educator – Category D (3 credits)

Program Plan Code: BSED_SPED_TRSE
Effective Date: Fall 2024

B.S.Ed. Special Education: Visual Impairment Birth – 21 Requirements

The BSED Special Education: Visual Impairment Birth - 21 Program provides course preparation in Special Education: Visual Impairment and includes clinical experience. The program leads to a bachelor's degree and teaching certification in Birth – 21 Special Education: Visual Impairment.

Note that all students must achieve 120 undergraduate credits and a minimum 3.0 overall GPA to graduate. The final GPA requirement for Special Education: Visual Impairment Birth - 21 is 3.0.

Required Visual Impairment Core Courses – 33 credits

SPEE 201 Cognitive Development of Diverse Learners (3 credits)
SPEE 101 Early Intervention and Transition for Students with Disabilities (3 credits)
SPEE 200 Reading, Writing, and Teaching Unified English Braille (3 credits)
SPEE 202 Orientation and Mobility for Teachers of Students with Visual Impairments, including Deafblindness (3 credits)
SPEE 333 Assistive Technology for Individuals with Visual Impairments (3 credits)
EEPK 215 Introduction to Early Childhood Education (3 credits)
SPEE 204 Anatomy of the Eye and Related Assessment of Students with VI (3 credits)
SPEE 221 Assessment of Students with Visual Impairments (3 credits)
SPEE 300 Reading, Writing, and Teaching Literary Braille, Nemeth Mathematics Code, and Other Braille Codes (3 credits)
SPEE 302 Adapting Materials and Methods of Instruction and Evaluation for Teaching Students with Visual Impairments (3 credits) – *Teacher Candidacy is required.*
SPEE 330 Teaching Students with Low-Incidence Disabilities (3 credits)

Visual Impairment Certification Courses – 15 credits

SPEE 216 Evidence-Based Practices in Mathematics for Students with Disabilities (3 credits)
SPEE 327 Transition, Self-Determination, and Self-Advocacy for Adolescents and Adults with Disabilities (3 credits)
SOWK 100 Introduction to Social Work (3 credits)
SOWK 130 Poverty and Social Welfare (3 credits)
SOCI 010 Principles of Sociology (3 credits)

Clinical Experience Courses – 12 credits

Completion of all coursework and teacher candidacy for certification is required before the clinical semester. A student must earn a final grade of C or better in both courses.
SPEE 390 Clinical Experience VI B-21(6 credits)
SPEE 391 Clinical Experience VI B-21(6 credits)

Directed General Education Courses – 36 credits

While counting toward General Education fulfillment, these courses are required for completion of the major.
COMP 100 Effective Composition – Category A1 (3 credits)
COMP 200 Research and Composition – Category A2 (3 credits)
COMM 10 Fundamentals of Oral Communication – Category A3 (3 credits)
SPEE 316 Literacy Development and Instruction in Core and Intervention Areas – Category A4 (3 credits)
GE BIOL course with a lab requirement – Category C1 (3 credits)
2 GE MATH courses – Category C2 and C3 (6 credits)

PSYC 11 General Psychology – Category B (3 credits)
PSYC 110 Child Psychology – Category B (3 credits)
EDUC 150 Meeting the Instructional Needs of the English Language Learners – Category B (3 credits)
ENGL (English Literature) Course – Category D (3 credits)
LLTC 321 Technologies for the 21st Century Educator – Category D (3 credits)

University Elective Courses – 18 credits

These courses may be taken as university electives, or as part of a minor. Students should check to ensure that they reach the 120 minimum credit total for graduation.

Program Plan Code: BSED_SPED_VISI
Effective Date: Fall 2022

B.S.Ed. Special Education: Visual Impairment B-21 Elementary Education PK-4 Requirements

The BSED Special Education: Visual Impairment Birth – 21/Elementary Education PK-4 Program provides course preparation in Special Education: Visual Impairment and Elementary Education and includes clinical experience. The program leads to a bachelor's degree and teaching certification in Birth – 21 Special Education: Visual Impairment and Elementary Education PK-4.

Note that all students must achieve 120 undergraduate credits and a minimum 3.0 overall GPA to graduate. The final GPA requirement for Special Education: Visual Impairment Birth – 21/Elementary Education PK-4 is 3.0.

Required Professional Core Courses – 36 credits

Students must earn a final grade of C or better in all coursework. The following courses must be taken before a student can take their education professional coursework.

SPEE 201 Cognitive Development of Diverse Learners (3 credits)
SPEE 101 Early Intervention and Transition for Students with Disabilities (3 credits)
SPEE 200 Reading, Writing, and Teaching Unified English Braille (3 credits)
SPEE 202 Orientation and Mobility for Teachers of Students with Visual Impairments, including Deafblindness (3 credits)
SPEE 333 Assistive Technology for Individuals with Visual Impairments (3 credits)
EEPK 209 Math Foundations for PK-1 (3 credits)
EEPK 215 Introduction to Early Childhood Education (3 credits)
EEPK 305 Teaching Science in Early Childhood (3 credits)
ARED 236 The Arts and PreK-4 Education (3 credits)
SPEE 302 Adapting Materials and Methods of Instruction and Evaluation for Teaching Students with Visual Impairments (3 credits) – *Teacher candidacy is required.*
SPEE 330 Teaching Students with Low-Incidence Disabilities (3 credits) – *Teacher candidacy is required.*
EEPK 300 Early Literacy Development and Acquisition PK-1 (3 credits) – *Teacher candidacy is required.*

TRIO Semester – 9 credits

Teacher candidacy is required to register for Trio Semester courses. The courses are scheduled in a block format. A final grade of C or better is required.

SPEE 204 Anatomy of the Eye and Related Assessment of Students with VI (3 credits)
SPEE 221 Assessment of Students with Visual Impairments (3 credits)
SPEE 300 Reading, Writing, and Teaching Literary Braille, Nemeth Mathematics Code, and Other Braille Codes (3 credits)

Professional Semester – 15 credits

Teacher candidacy is required. The courses are scheduled in a block format. A final grade of C or better is required.

EEKP 301 Teaching Literacy in Grades 2-4 (3 credits)
EEPK 303 Language Development and Teaching Language Arts in PreK-4 (3 credits)
EEPK 304 Teaching Social Studies in PreK-4 (3 credits)
EEPK 306 Integrating Principles of Learning in PreK-4 (3 credits)
EEPK 309 Teaching Math in Grades 2-3 (3 credits)

Clinical Experience Courses – 12 credits

Teacher candidacy is required. A final grade of C or better is required.
SPEE 390/391 Clinical Experience VI B-21(6 credits)
EEPK 390/391 Clinical Experience PK-4 (6 credits)

Directed General Education Courses – 36 credits

While counting toward General Education fulfillment, these courses are required for completion of the major. A final grade of C or better is required for these courses.
COMP 100 Effective Composition – Category A1 (3 credits)
MATH 103 Fundamentals of Math I – Category C2 (3 credits)
MATH 104 Fundamentals of Math II – Category C3 (3 credits)
English Literature Course – Category D (3 credits)
EDUC 150 Meeting the Instructional Needs of the English Language Learners – Category B (3 credits)
LLTC 321 Technologies for the 21st Century Educator – Category D (3 credits)
SPEE 316 Literacy Development and Instruction in Core and Intervention Areas – Category A4 (3 credits)
BIOL 10 Intro to Biology with lab – Category C1 (3 credits)
COMP 200 Research and Composition – Category A2 (3 credits)
COMM 10 Fundamentals of Oral Communication – Category A3 (3 credits)
PSYC 11 General Psychology – Category B (3 credits)
PSYC 110 Child Psychology – Category B (3 credits)

Program Plan Code: BSED_SPED_VIE4
Effective Date: Fall 2020

B.S.Ed. Special Education: Visual Impairment Birth –21/Elementary Education 4-8 Language Arts/Reading Requirements

The BSED Special Education: Visual Impairment Birth – 21/Elementary Education 4-8 Language Arts/Reading Program provides course preparation in Special Education: Visual Impairment and Elementary Education and includes clinical experience. The program leads to a bachelor's degree and teaching certification in Birth – 21 Special Education: Visual Impairment and Elementary Education 4-8 Language Arts/Reading.

Most students will graduate with 132 undergraduate credits and a minimum 3.0 overall GPA in this major. The final GPA requirement for Special Education: Visual Impairment Birth – 21/Elementary Education 4-8 Language Arts/Reading is 3.0.

Professional Core Courses – 33 credits

A student must earn a final grade of C or better in all courses.
SPEE 201 Cognitive Development of Diverse Learners (3 credits) *Pre-Candidacy Course.*
SPEE 101 Early Intervention and Transition for Students with Disabilities (3 credits)
SPEE 327 Transition, Self-Determination, and Self-Advocacy for Adolescents and Adults with Disabilities (3 credits)
SPEE 200 Reading, Writing, and Teaching Unified English Braille (3 credits)
SPEE 202 Orientation and Mobility for Teachers of Students with Visual Impairments, Including Deafblindness (3 credits)
SPEE 333 Assistive Technology for Individuals with Visual Impairments (3 credits)
ELED 212 Teaching Diverse Learners Middle Level (3 credits) *Pre-Candidacy Course*.
ELED 312 Culturally Responsive Teaching for ELL (3 credits) *Pre-Candidacy Course*.
ELED 226 Teach Middle Level *or* EDUC 326 (3 credits) *Pre-Candidacy Course*.
SPEE 302 Adapting Materials and Methods of Instruction and Evaluation for Teaching Students with Visual Impairments (3 credits) – *Teacher candidacy is required*.
SPEE 330 Teaching Students with Low-Incidence Disabilities (3 credits) – *Teacher candidacy is required*.

Natural Science Courses – 6 credits

See the Directed General Education section for additional courses in this category.
CHEM 20 Intro to Chemistry (*Lab*) (3 credits)
BIOL 130 Environmental Issues Global Perspective *or* BIOL140 Biology and Society (3 credits)

Mathematics Courses – 6 credits

See the Directed General Education section for additional courses in this category.
MATH 40 Geometry (3 credits)
MATH 105 College Algebra (3 credits)

English Language Arts and Reading Courses – 12 credits

See the Directed General Education section for additional courses in this category.
ENGL 105 Experiences in American Literature (3 credits)
ELED 221 Literature for Upper Elementary and Middle Level Learners (3 credits)
ELED 331 Teaching and Assessing Literacy for Middle Level Learners Across Disciplines (3 credits)
ELED 335 Language Development, Reading Assessment, and Intervention (3 credits) – *Teacher candidacy is required*.

Social Science Courses

See the Directed General Education section for courses in this category.

Trio Semester Courses – 9 credits

Teacher candidacy is required to take these courses. They will be scheduled in a block format.
SPEE 204 Anatomy of the Eye and Related Assessment of Students with VI (3 credits)
SPEE 221 Assessment of Students with Visual Impairments (3 credits)
SPEE 300 Reading, Writing, and Teaching Literary Braille, Nemeth Mathematics Code, and Other Braille Codes (3 credits)

Professional Semester Courses – 15 credits

Teacher candidacy is required to take these courses. They are scheduled in a block format during the Fall Semester. These courses must be completed before your clinical experience courses at the end of the program. A final grade of C or better is required.
ELED 342 Teaching Writing at the Middle Level (3 credits)
ELED 344 Teaching Social Studies at the Middle Level (3 credits)
ELED 346 Middle Level Cognitive Development Candidacy (3 credits)
ELED 347 Teaching and Assessing Math for Middle Level Learners (3 credits)
ELED 349 Teaching Science at the Middle Level (3 credits)

Clinical Experience Courses – 12 credits

Students will take these courses during their semester in the program. A final grade of C or better is required.
SPEE 390/391 Clinical Experience and Practicum VI B-21(6 credits)
ELED 392/393 Clinical Experience and Practicum with Middle Level Learners (6 credits)

Directed General Education Courses – 39 credits

While counting toward General Education fulfillment, these courses are required for completion of the major.
Final grade of C or above is required for the following courses:
COMP 100 Effective Composition – Category A1 (3 credits)
ENGL (English Literature) course – Category D (3 credits)
MATH 103 Fundamentals of Math I – Category C2 (3 credits)
MATH 104 Fundamentals of Math II – Category C3 (3 credits)
SPEE 316 Literacy Development and Instruction in Core and Intervention Areas – Category A4 (3 credits) *Pre-Candidacy Course*.
LLTC 321 Technologies for the 21st Century – Category D (3 credits) *Pre-Candidacy Course*.
A final grade of C or above is not required for the following courses:
BIOL 10 Intro to Biology – Category C1 (3 credits)
COMM 10 Fundamentals of Oral Communication – Category A3 (3 credits)
COMP 200 Research and Composition – Category A2 (3 credits)
HIST 25 *or* HIST 26 American History – Category B (3 credits)
HIST 14 *or* HIST 15 World History – Category D (3 credits)
ECON 100 Economics – Category B (3 credits)
GEOG 20 *or* GEOG 101 Geography – Category B (3 credits)

Program Plan Code: BSED_SPED_SPER
Effective Date: Fall 2018

B.S.Ed. Special Education: Visual Impairment Birth – 21/Elementary Education 4-8 Mathematics Requirements

The BSED Special Education: Visual Impairment Birth – 21/Elementary Education 4-8 Mathematics Program provides course preparation in Special Education: Visual Impairment and Elementary Education and includes clinical experience. The program leads to a bachelor's degree and teaching certification in Birth – 21 Special Education: Visual Impairment and Elementary Education 4-8 Mathematics.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. Most students will graduate with 132 undergraduate credits and a minimum 3.0 overall GPA in this major. The final GPA requirement for Special Education: Visual Impairment Birth – 21/Elementary Education 4-8 Mathematics is 3.0.

Professional Core Courses – 33 credits

A student must earn a final grade of C or better in all courses.
SPEE 101 Early Intervention and Transition for Students with Disabilities (3 credits)
SPEE 200 Reading, Writing, and Teaching Unified English Braille (3 credits)
SPEE 201 Cognitive Development of Diverse Learners (3 credits)
SPEE 202 Orientation and Mobility for Teachers of Students with Visual Impairments, Including Deafblindness (3 credits)
SPEE 327 Transition, Self-Determination and Self-Advocacy for Adolescents and Adults with Disabilities (3 credits)
SPEE 333 Assistive Technology for Individuals with Visual Impairments (3 credits)
ELED 212 Teaching Diverse Learners Middle Level (3 credits)
ELED 312 Culturally Responsive Teaching for ELL (3 credits)
ELED 226 Teach Middle Level *or* EDUC 326 Introduction to Middle Level Ed (3 credits)
SPEE 330 Teaching Students with Low-Incidence Disabilities (3 credits) – *Teacher candidacy is required*
SPEE 302 Adapting Materials and Methods of Instruction and Evaluation for Teaching Students with Visual Impairments (3 credits) – *Teacher candidacy is required*

Natural Sciences Courses – 9 credits

CHEM 20 Intro to Chemistry (Lab) (3 credits)
PHYS 20 Intro to Physics (Lab) (3 credits)
BIOL 130 Environmental Issues Global Perspective *or* BIOL140 Biology and Society (3 credits)

Mathematics Courses – 15 credits

MATH 40 Geometry (3 credits)
MATH 105 College Algebra (3 credits)
MATH 122 Applied Calculus (3 credits)
MATH 140 Applied Statistical Methods (3 credits)
MATH 106 Trigonometry *or* MATH 115 Pre-Calculus *or* MATH 123 Discrete Math (3 credits)

Trio Semester Courses – 9 credits

Teacher candidacy is required to take these courses. They are scheduled in a block format. A final grade of C or better is required.

SPEE 204 Anatomy of the Eye and Related Assessment of Students with VI (3 credits)
SPEE 221 Assessment of Students with Visual Impairments (3 credits)
SPEE 300 Reading, Writing, and Teaching Literary Braille, Nemeth Mathematics Code, and Other Braille Codes (3 credits)

Professional Semester Courses – 15 credits

Teacher candidacy is required to take these courses. They are scheduled in a block format during the Fall Semesters. A final grade of C or better is required. These courses must be completed before the clinical experience courses.

ELED 342 Teaching Writing at the Middle Level (3 credits)
ELED 344 Teaching Social Studies at the Middle Level (3 credits)
ELED 346 Middle Level Cognitive Development (3 credits)
ELED 347 Teaching and Assessing Math for Middle Level Learners (3 credits)
ELED 349 Teaching Science at the Middle Level (3 credits)

Clinical Experience Courses – 12 credits

A final grade of C or better is required.

SPEE 390/391 Clinical Experience and Practicum VI B-21(6 credits)
ELED 392/393 Clinical Experience and Practicum with Middle Level Learners (6 credits)

Directed General Education Courses – 39 credits

While counting toward General Education fulfillment, these courses are required for completion of the major.

Final grade of C or above is required for the following courses:

COMP 100 Effective Composition – Category A1 (3 credits)
COMM 10 Fundamentals of Oral Communication – Category A3 (3 credits)
ENGL (English Literature) course – Category D (3 credits)
MATH 103 Fundamentals of Math I – Category C2 (3 credits)
MATH 104 Fundamentals of Math II – Category C3 (3 credits)
SPEE 316 Literacy Development and Instruction in Core and Intervention Areas – Category A4 (3 credits)
LLTC 321 Technologies for the 21st Century – Category D (3 credits)

A final grade of C or above is not required for the following courses:

COMP 200 Research and Composition – Category A2 (3 credits)
BIOL 10 Intro to Biology – Category C1 (3 credits)
HIST 25 American History I *or* HIST 26 American History II – Category B (3 credits)
HIST 14 World History I *or* HIST 15 World History II – Category D (3 credits)
ECON 100 Economics – Category B (3 credits)
GEOG 20 *or* GEOG 101 Geography – Category B (3 credits)

Program Plan Code: BSED_SPED_VI4M
Effective Date: Spring 2021

Autism Endorsement Requirements

The following program leads to an endorsement in Autism Spectrum Disorders PK-12 from the Pennsylvania Department of Education. A student must be enrolled in a program leading to instructional certification or hold Pennsylvania level one or higher certification in an instructional area. The following instructional areas will be considered: Art Education, Elementary Education (PreK-4), Middle Level (4-8), Library Science, Music Education, Secondary Education, Special Education, or Special Education: Vision Impairment.

Note that all students much achieve 12 credits and a minimum 3.0 overall GPA to be recommended to Pennsylvania Department of Education for the endorsement.

Required Autism Endorsement Courses – 12 credits

Courses are sequential and must be taken in numerical order.
SPEE 433 Characteristics and Etiology of Autism Spectrum Disorders (3 credits)
SPEE 434 Applied Behavioral Analysis (3 credits)
SPEE 435 Assessment and Instructional Interventions for Individuals with Autism Spectrum Disorders (3 credits)
SPEE 436 Working with Individuals with Autism Spectrum Disorders and Collaborating with Family (3 credits)

Program Plan Code: TCU_AUTS
Effective Semester: Spring 2015

Autism Spectrum Disorders Minor Requirements

Student Learning Outcomes (SLOs) for the minor are the following:

1. All students will demonstrate content knowledge about individuals with disabilities.
2. All students will collaborate with all team members, including family members.
3. All students will assist in the administration of the organization.
4. All students will utilize culturally responsive strategies that promote effective communication and collaboration with students with disabilities, families, school, agency personnel, and community members.
5. All students will develop work competencies and professional attitudes for a specific profession or occupation.

Program requirements: 18 credits. The final GPA requirement for autism spectrum disorders is 3.0.

Required Autism Spectrum Disorders Core Courses – 12 credits

Courses are sequential and must be taken in numerical order.
SPEE 433 Characteristics and Etiology of Autism Spectrum Disorders (3 credits)
SPEE 434 Applied Behavioral Analysis (3 credits)
SPEE 435 Assessment and Instructional Interventions for Individuals with Autism Spectrum Disorders (3 credits)
SPEE 436 Working with Individuals with Autism Spectrum Disorders and Collaborating with Family (3 credits)

Elective Courses – 6 credits

Choose 2 courses from the following courses
SPEE 201 Cognitive Development of Diverse Learners in a Standards Aligned System (3 credits)
SPEE 328 Positive Behavioral Interventions and Supports (3 credits)
SPEE 330 Teaching Students with Low Incidence Disabilities (3 credits)

Program Plan Code: AUTS
Effective Semester: Spring 2016

Disability Studies Minor Requirements

Student Learning Outcomes (SLOs) for the minor are the following:

1. All students will demonstrate content knowledge about individuals with disabilities.
2. All students will collaborate with all team members, including family members.
3. All students will assist in the administration of the organization.
4. All students will utilize culturally responsive strategies that promote effective communication and collaboration with students with disabilities, families, school, agency personnel, and community members.
5. All students will develop work competencies and professional attitudes for a specific profession or occupation.

Program requirements: 18 credits. The final GPA requirement for Disability Studies is 2.0. The Disability Studies minor is not available to Special Education and Vision Impairment major students.

Required Disability Studies Core Courses – 9 credits

SPEE 201 Cognitive Development of Diverse Learners in a Standards Aligned System (3 credits)
SPEE 327 Transition, Self-Determination, and Self Advocacy for Adolescents and Adults with Disabilities (3 credits)
SPEE 381 Internship in Special Education (3 credits)

Elective Courses – 9 credits

Special Education Elective – 3 credits

Choose one course from the following:

SPEE 101 Early Intervention and Transition for Students with Disabilities (3 credits)
or SPEE 330 Teaching Students with Low Incidence Disabilities (3 credits)

Other Elective Courses – 6 credits

Choose two courses from the following courses:

PSYC 125 Life Span Development (3 credits)
PSYC 110 Child Psychology (3 credits)
PSYC 250 Abnormal Psychology (3 credits)
PSYC 140 Educational Psychology (3 credits)
PSYC 201 Psychology of Personality (3 credits)
SOWK 100 Intro to Social Work (3 credits)
SOWK 130 Poverty and Social Welfare (3 credits)
SOWK 160 Human Behavior and Social Environment (3 credits)
PSYC 336 Diversity in Organizations (3 credits)
CRJU 010 Introduction to Social Work (3 credits)
CRJU 220 Juvenile Delinquency (3 credits)
CRJU 221 Juvenile Justice System (3 credits)
SOCI 275 Social Foundation of Human Behavior (3 credits)
SOWK 200 The Professional Context of Social Work Practice (3 credits)
SOWK 255 Social Welfare Policy (3 credits)

Program Plan Code: DISD
Effective Semester: Fall 2016

Elementary Education PK-4 Minor Requirements

The Elementary Education PK—4 Minor program provides course preparation in elementary education. Pre-K to 4 and Special Education/Pre-K to 4 majors are permitted in this minor.

Note that all students must achieve 18 undergraduate credits and a minimum GPA of 2.5 for the minor. A grade of C or better is required in all classes.

Required Elementary Education PK-4 Minor Courses – 15 credits

EDUC 101 CTWI Teaching Pre-K-8: An Exploration and Investigation (3 Credits)
PSYC 110 Child Psychology (3 Credits)
EEPK 202 Dispositions Toward Advocacy, Collaboration, & Cooperation (3 Credits)
EEPK 215 Introduction to Early Childhood Education (3 Credits)
EEPK 220VL Children's Literature for Pre-K-4 (3 Credits)

Elective Course for the Minor – 3 credits

Choose from one of the following courses:
EEPK 211CD Family Collaboration & Diversity (3 Credits)
EEPK 225 Assessment I: Observation & Informal (3 Credits)
ELED 218 Multicultural Perspectives of Urban Education (3 Credits)
ELED 325 Differentiated Instruction: Key to Responsive Teaching (3 Credits)
SPEE 201CD Cognitive Development of Diverse Learners (3 Credits)

Program Plan Code: ELPK
Effective Date: Fall 2022

Minor in English as a Second Language (ESL) Requirements

The Minor in English as a Second Language (ESL) was developed for students who are interested in teaching English as a Second Language. The Pennsylvania Department of Education lists ESL as the number one teacher shortage area in PA. Candidates who successfully complete this program are also eligible to receive the K-12 ESL Education Endorsement Certification from the Pennsylvania Department of Education, after receiving their Level I Instructional Certificate.

Candidates who successfully complete this minor will be able to:

- apply knowledge of linguistics and the process of language acquisition to the planning, implementation, and management of ESL and content-area instruction.
- understand culture as it affects student learning.
- develop and use classroom-based and language proficiency assessment.
- cultivate professional relationships with colleagues, students, and families.

Note that all students much achieve 18 credit hours of coursework. Further, a grade of "C" or better must be achieved in required core courses.

Required Minor in English as a Second Language (ESL) Core Courses – 15 credits

EDUC/MLST 428 Culture and Diversity of English Learners (3 credits)
EDUC/MLST 434 Instructional Methodology for English Learners (3 credits)
EDUC/MLST 435 Language Acquisition and English Linguistics (3 credits)
EDUC/MLST 436 Assessment of English Learners (3 credits)
EDUC/MLST 437 Protocols and Practices for PA ESL Programs (3 credits)

Elective Courses– 3 credits

Choose 3 credits from the following courses
EDUC 411 Methods for Teaching Foreign Languages to Early Second Language Learners (3 credits)
or SPAN 110 Spanish for Educators (3 credits)

Program Plan Code: ENSL
Effective Semester: Fall 2016

Library Science Minor Requirements

The Library Science Minor provides course preparation in library science.

Note that all students must achieve 18 undergraduate credits and a minimum 2.0 GPA to receive minor.

Required Library Science Course – 3 credits

LLTC 200 Foundations of Information Science (3 Credits)

Library Science Elective Courses – 15 credits

Electives are primarily limited to courses with an LLTC subject. Please see advising guidelines for a complete list. Students are encouraged to select an area of specialization through listed electives, ex. School Librarianship, Public Librarianship, or Special Collections & Cultural Heritage.

Program Plan Code: LBSC
Effective Date: Fall 2023

Minor in Secondary Education Requirements

The Minor in Secondary Education was developed for students who are interested in the education of grades 7-12, but who are not seeking a teaching certificate. This 18-credit program has an emphasis on social justice, which applies to many other areas of study and will give students an insight into the challenges that underserved schools face.

Note that all students much achieve 18 credit hours of coursework. The final GPA requirement for the Minor in Secondary Education is 3.0. Additionally, this program is for non-Secondary Education majors and does not lead to a teaching certificate. Further, a grade of "C" or better must be achieved in required core courses.

Required Secondary Education Core Courses – 12 credits

EDUC 100 Perspectives on American Education (3 credits)
EDUC 120 Hip Hop and Multicultural Education (3 credits)
EDUC 150 Meeting Instructional Needs of English Language Learners (3 credits)
EDUC 326 Introduction to Middle-Level Education (3 credits)

Elective Courses – 6 credits

Choose 6 credits from the following courses
SPAN 110 Spanish for Educators (3 credits)
SPEE 201 Cognitive Development of Diverse Learners in a Standards Aligned System (3 credits)
ELED 221 Literature for Upper Elementary and Middle-Level Learners (3 credits)
LLTC 321 Instructional Technology in Education (3 credits)

Program Plan Code: SCED
Effective Semester: Spring 2016

COLLEGE OF LIBERAL ARTS & SCIENCES

The mission of the College of Liberal Arts and Sciences is to prepare students to achieve their academic goals, to access and critically examine increasingly complex sources of information, to take an active role in their society and world, and to commit themselves to lifelong learning. This mission is accomplished through both curricular and co-curricular elements. The general education curriculum provides students with a foundation in the liberal arts and sciences that emphasizes the development of communication, computational, and analytical skills; of an understanding of the methods used in the natural and social sciences; and of an appreciation of the arts and humanities. The major program curriculum provides students with a depth of knowledge in a particular discipline that prepares them for their chosen careers or graduate or professional studies. Co-curricular opportunities such as internships, service learning, and international travel provide students with individualized growth experiences.

- Dr. Laurie McMillan, Dean

Bachelor of Arts

B.A. Anthropology

B.A. English

B.A. English: Paralegal Studies

B.A. General Studies

B.A. Geography: Environmental and Planning Track

B.A. Geography: General Track

B.A. Geography: Global and Regional Studies Track

B.A. History

B.A. History: Paralegal Studies

B.A. Political Science

B.A. Political Science: Paralegal Studies

B.A. Professional Writing

B.A. Sociology

Bachelor of Science

B.S. Biochemistry

B.S. Biochemistry: Pharmacy

B.S. Biology: Allied Health

B.S. Biology: Molecular/Micro/Cell

B.S. Biology: Organismal/Ecology

B.S. Biology: Pre-Med & Other Health Careers

B.S. Chemistry

B.S. Chemistry: Applied

B.S. Computer Science

B.S. Criminal Justice

B.S. Criminal Justice: Paralegal Studies

B.S. Data Science: Bioinformatics

B.S. Data Science: Geospatial Information

B.S. Data Science: Mathematics

B.S. Environmental Science: Biology

B.S. Environmental Science: Chemistry

B.S. Environmental Science: Geography

B.S. Environmental Science: Geology

B.S. Environmental Science: Regenerative Organic Agriculture

B.S. Game Development

B.S. General Studies

B.S. General Studies: Professional Studies

B.S. Geology

B.S. Information Technology

B.S. Marine Science: Biology

B.S. Marine Science: Oceanography

B.S. Mathematics

B.S. Physics

B.S. Physics: Astronomy

B.S. Physics: Engineering Physics

B.S. Physics: Engineering Technology

B.S. Psychology

B.S. Psychology: Paralegal Studies

B.S. Public Relations

Bachelor of Social Work

B.S.W. Social Work

Minors and Certificates

Actuarial Science Minor

Anthropology Minor

Applied Engineering Minor

Astronomy Minor

Biochemistry Minor

Bioethics Minor

Biology Minor

Case Management Minor

Chemistry Minor

Computer Science Minor

Creative Writing Minor

Criminal Justice Minor

Cultural Geography Minor

Cybersecurity Certificate

Database Design and Implementation Certificate

Data Science Minor

Diversity, Equity, Inclusion, and Community Certificate

Environmental Geography Minor

Forensic Studies Minor

Game Development Minor

Geography Minor

Geology Minor

Geospatial Information Technology Certificate

German Minor

Global Studies Minor

History Minor

Information Technology Minor

Literature Minor

Marine Science Minor

Mathematics Minor

Multicultural Studies in the United States Minor

Pennsylvania German Studies Minor

Philosophy Minor

Physics Minor

Planning Geography Minor

Political Science Minor

Professional Writing Minor

Psychology Minor

Public Administration Minor

Public History, Archives, and Museums Minor

Public Relations Minor

Scripting for Data Manipulation Certificate

Social Work Minor

Sociology Minor

Spanish Minor

Technical Communication Minor

Technical Writing Certificate

Web Development Minor

Women's, Gender, and Sexuality Studies Minor

B.A. Anthropology Requirements

By focusing on the complex linkages among four subfields – physical anthropology, archaeology, linguistic anthropology, and cultural anthropology – and emphasizing the importance of interdisciplinary teamwork, students are prepared for graduate study and for careers in social services, international affairs, cultural events, museums, public service, and private business.

Note that all students much achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Anthropology is 2.0.

Required Anthropology Core Courses – 18 credits

ANTH 10 Cultural Anthropology (3 credits)
ANTH 20 Physical Anthropology *or* ANTH 30 Intro to Archaeology
or ANTH 40 Language and Culture (3 credits)
ANTH 201 Archaeology Theory & Technique *or* ANTH 202 Research Methods in Physical Anthropology (3 credits) *or* ANTH 258 Forensic Anthropology (3 credits)
ANTH 236 Ethnographic Research Methods *or* ANTH 263 Archeological Field Methods
or ANTH 390 Internship (3 credits)
ANTH 360 History and Theory of Anthropology (3 credits)
ANTH 380 Senior Seminar (3 credits)

Anthropology Major Electives – 21 credits

9 credits must be at the 200-level.

Skills – 3 credits

Second semester beginning level MLST 102 *or* SOCI 201 *or* ANTH 390 *or* GEOG 274 *or other option to be determined in consultation with advisor* (3 credits).

Notes:
MLST 102 courses include SPAN 102, GERM 102, FREN 102, CHIN 102; there are prerequisites for all these courses.
Anthropology courses may not be used for Gen Ed requirements.
ANTH 201, 202, 236, 258, 263, and 390 cannot be used for elective courses if used in required courses.
PGST 010 and SOCI 201 count as anthropology electives; if used they cannot be counted in general education.

Portfolio Requirement

All students must complete a portfolio in order to receive a BA in Anthropology. Anthropology majors should begin thinking about the portfolio as soon as they declare the major. A well-constructed portfolio will exemplify the student's accomplishments within the Anthropology Program and serve as core materials for future employment or further education.

1. *An overview that synthesizes and integrates the portfolio's materials, including the three examples listed in #2. (3-5 pages)*
2. *Three examples of academic/ professional experience from three different Anthropology courses. These may include term papers from anthropology classes (not less than five pages each) or other academic/professional experiences (e.g., documentation of a museum exhibit or special project that the student worked on as part of an independent study or internship).*

3. *A current resume.*
4. *A statement describing the student's experiences as an Anthropology Major (i.e., why the student became a major and the most important learning experiences). (3-5 pages)*
5. *A statement of the student's future plans and how anthropological training will contribute to achievement of those plans. (3-5 pages)*

University Electives – 36 credits

Choose any university courses.

Program Plan Code: BA_ANTH
Effective Date: Spring 2024

B.A. English Requirements

The BA in English focuses on critical reading and analysis, effective writing for numerous audience and purposes, cultural and media studies, and rhetoric and linguistics. The major fosters skills in reading and interpretation; professionalization, including a required capstone internship; understanding diverse cultures and discursive contexts; and working with numerous traditional and multi-modal writing technologies. The major prepares students for any career involving strong communication skills, but especially law, publishing and editing, higher education, and academics, lobbying and publicist work, and writing in numerous professional applications.

Note that all students much achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for English is 2.0

Required English Core Courses – 9 credits

ENGL 100 Critical Reading and Writing in the Professions (3 credits)
ENGL/PRWR 380 Professionalization Seminar (3 credits)
ENGL/PRWR 390 Internship (3 credits)

English Major Electives – 33 credits

Select 11 ENGL courses at the levels identified in the list below.
History requirement: English majors must take three 3-credit courses that focus on texts that illustrate social change over time because they are written in a historically inflected form of English. See the English Department office, the chair, or your English faculty advisor for a list of approved courses.
ENGL 100-level courses – 9 credits
ENGL 200-level courses – 9 credits
ENGL 300-level courses with the option to substitute one ENGL 300 course for one ENED 400 level course – 15 credits

Diversity statement: The English department is committed to including texts and perspectives in our classes that represent diversity.

University Electives – 36 credits

Choose any university course.

Program Plan Code: BA_ENGL
Effective Date: Fall 2022

B.A. English Paralegal Studies Requirements

The English major with Paralegal Studies offers students a chance to simultaneously obtain a B.A. degree in English and to complete Lehigh Carbon Community College's (LCCC) American Bar Association-approved Paralegal Studies Certificate which focuses on the paralegal profession and the limitations imposed by the unauthorized practice of law.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for English Paralegal Studies is 2.0

Required English Core Courses – 9 credits

ENGL 100 Critical Reading and Writing in the Professions (3 credits)
ENGL/PRWR 380 Professionalization Seminar (3 credits)
ENGL/PRWR 390 Internship (3 credits)

English Major Electives – 33 credits

Select 11 ENGL courses at the levels identified in the following list:
ENGL 100-level courses – 9 credits
ENGL 200-level courses – 9 credits
ENGL 300-level courses with the option to substitute one ENGL 300 course for one ENED 400 level course – 15 credits

Required Paralegal Studies Core Courses – 18 credits

PLGL 120 Intro to Paralegal Studies (3 credits)
PLGL 150 Torts and Personal Injury (3 credits)
PLGL 200 Civil Litigation and Procedure (3 credits)
PLGL 215 Law Office Management (3 credits)
PLGL 220 Contract Law & Bus Organizations (3 credits)
PLGL 245 Legal Research and Writing (3 credits)

Required Paralegal Studies Elective Courses – 3 credits

Choose a course or a combination of courses from the following list to be taken in a single semester to total 3 credits:
PLGL 125 Workers' Comp Practice (2 credits)
PLGL 130 Social Security Disability Practice (2 credits)
PLGL 135 Interviewing for Paralegals (1 credit)
PLGL 228 Immigration Law for Paralegals (3 credits)
PLGL 230 Estates and Trusts (3 credits)
PLGL 235 Family Law (3 credits)
PLGL 240 Bankruptcy Law (3 credits)
PLGL 250 Legal Internship (3 credits)
PLGL 255 Legal Writing (3 credits)

University Electives – 12 to15 credits

Choose any university course.

Program Plan Code: BA_ENGL_PLST
Effective Date: Spring 2019

B.A. General Studies Requirements

General Studies is an interdisciplinary program designed to optimize student creativity and flexibility. Instead of focusing intensely on one area in a pre-defined curriculum, students can custom tailor their plan of study to their individual interests and career goals. By combining coursework from multiple disciplines, the BA in General Studies is ideal for students seeking a well-rounded education that fosters critical thinking and problem-solving skills as well as knowledge and foci in one or more disciplines.

Student Learning Objectives

1. Critically analyze complex issues and evaluate diverse perspectives.
2. Integrate knowledge from multiple disciplines to answer questions and solve problems.
3. Demonstrate effective written and oral communication skills across different contexts and audiences.

Note that all students much achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for General Studies is 2.0.

Required BA General Studies Concentration Courses – 21 credits

Concentration courses must be in a single discipline. At least 12 of the 21 credits must be 200-level or above. At least 3 credits must be a culminating experience consisting of an internship, independent study, or senior seminar in lieu of a comprehensive exam.

Concentration courses (9 credits)
Concentration courses at the 200-level or above (9 credits)
Internship or Independent Study or Senior Seminar (3 credits)

Program Courses – 21 credits

Program courses may be from multiple disciplines including the concentration discipline. Program courses are defined by the prospectus, which is developed by the student and General Studies advisor. The prospectus must be approved by the General Studies committee prior to acceptance into the General Studies program.

Program courses (21 credits total)

Program Plan Code: BA_GENS
Effective Date: FALL 2018

B.A. Geography: Environment and Planning Track Requirements

This track is designed for students seeking careers in environmental analysis and conservation, or in planning. Courses in this track focus on the functioning and analysis of the Earth-Atmosphere System, on human stewardship of the planet, and on concepts and techniques vital to modern planning. An internship is required.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Geography: Environment and Planning Track is 2.0.

Environment and Planning Track Core Courses – 12 credits

GEOG 10 Planet Earth Users' Guide: Introduction to Physical Geography (3 credits)
GEOG 20 Our Human Earth: Intro to Cultural Geography (3 credits)
GEOG 274 Introduction to Geographic Information Systems and Lab (3 credits)
GEOG 330 Cartography (3 credits)

Environment and Planning Track

GEOG 394 Internship in Geography is required and may count under Environment or Planning, but not both. The course requires a 2.5 or higher in-major GPA in at least 24 GEOG credits.

Environment Courses – 12 credits

Select four:

GEOG 204 Meteorology and Lab (3 credits)
GEOG 210 Environmental Conservation (3 credits)
GEOG 220 Economic Geography (3 credits)
GEOG 304 Weather Analysis and Lab (3 credits)
GEOG 322 Climatology (3 credits)
GEOG 323 Global Warming and the Science of Climate Change (3 credits)
GEOG 338 The Geography of Population (3 credits)
GEOG 347 Remote Sensing of the Environment and Lab (3 credits)
GEOG 394 Internship in Geography (3 credits)

Planning Courses – 12 credits

Select three and GEOG 343:

GEOG 210 Environmental Conservation (3 credits)
GEOG 212 The Geography of Natural Hazards (3 credits)
GEOG 220 Economic Geography (3 credits)
GEOG 223 Introduction to Transportation Geography (3 credits)
GEOG 310 Urban Geography (3 credits)
GEOG 333 Advanced Geographic Information Systems (3 credits)
GEOG 338 The Geography of Population (3 credits)
GEOG 343 Land Use Planning – required (3 credits)
GEOG 394 Internship in Geography (3 credits)

Capstone Courses – 6 credits

**A statistics course is a prerequisite to GEOG 375 Research Methods in Geography. Take as MATH 140 or 150, or PSYC 200. MATH 105 is a prerequisite to MATH 140. PSYC 200 requires MATH 17 or higher (excluding MATH 40 and 45) and PSYC 11 as prerequisites. Prerequisites may be taken in General Education or as electives.*

GEOG 380 Senior Seminar in Geography requires the completion of the preceding core courses as prerequisites.

GEOG 375 Research Methods in Geography* (3 credits)
GEOG 380 Senior Seminar in Geography (3 credits)

University Electives – 36 credits

Choose any university course.

Program Plan Code: BA_GEOG_ENPL
Effective Date: Spring 2025

B.A. Geography: General Track Requirements

This track offers the broadest possible training in Geography for students considering graduate school or who are interested in teaching careers in the social sciences. An internship is highly recommended.

Note that all students much achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Geography: General Track is 2.0.

Required Geography General Track Core Courses – 18 credits

GEOG 10 Planet Earth Users' Guide: Intro to Physical Geography (3 credits)
GEOG 20 Our Human Earth: Intro to Cultural Geography (3 credits)
GEOG 274 Introduction to Geographic Information Systems and Lab (3 credits)
GEOG 330 Cartography (3 credits)
GEOG 375 Research Methods in Geography – Note 1 (3 credits)
GEOG 380 Senior Seminar in Geography – Note 2 (3 credits)

Note 1: A statistics course is a prerequisite to GEOG 375 Research Methods in Geography. Take as MATH 140 or 150, or PSYC 200. MATH 105 is a prerequisite to MATH 140. PSYC 200 requires MATH 17 or higher (excluding MATH 40 and 45) and PSYC 11 as prerequisites. Prerequisites may be taken in General Education or as electives.

Note 2: GEOG 380 Senior Seminar in Geography requires the completion of the preceding core courses as prerequisites.

General Track Courses – 24 credits

Choose eight GEOG courses. At least four must be at the 200 level or higher. GEOG 394 Internship in Geography is highly recommended. The course requires an in-major GPA of 2.5 or higher in at least 24 GEOG credits.

University Electives – 36 credits

Choose any university course.

Program Plan Code: BA_GEOG
Effective Date: Spring 2024

B.A. Geography: Global and Regional Studies Requirements

This track focuses on the spatial aspects of the social, economic, and environmental forces reshaping cultures at the global, regional, and local levels. This track is intended for students seeking employment with international business firms, governmental or non-governmental agencies, and in private industry. An internship is highly recommended.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Geography: Global and Regional Studies Track is 2.0.

Required Geography: Global and Regional Studies Core Courses – 18 credits

GEOG 10 Planet Earth Users' Guide: Intro to Physical Geography (3 credits)
GEOG 20 Our Human Earth: Intro to Cultural Geography (3 credits)
GEOG 101 World Regional Geography (3 credits)
GEOG 225 Spaces of Globalization (3 credits)
GEOG 274 Introduction to Geographic Information System and Lab (3 credits)
GEOG 330 Cartography (3 credits)

Global and Regional Studies Track Courses – 24 credits

Cultural Courses – 6 credits

Select two:

GEOG 210 Environmental Conservation (3 credits)
GEOG 335 Political Geography (3 credits)
GEOG 338 Geography of Population (3 credits)

Economic Courses – 6 credits

Select two:

GEOG 220 Economic Geography (3 credits)
GEOG 223 Introduction to Transportation Geography (3 credits)
GEOG 310 Urban Geography (3 credits)

Regional Courses – 6 credits

GEOG 110 Geography of the United States and Canada (3 credits) or GEOG 112 Geography of Pennsylvania (3 credits)
GEOG 120 Geography of Sub-Saharan Africa (3 credits) or GEOG 140 Geography of Europe (3 credits)

Capstone Courses – 6 credits

Note 1: A statistics course is a prerequisite to GEOG 375 Research Methods in Geography. Take a MATH 140 or 150, or PSYC 200. MATH 105 is a prerequisite to MATH 140. PSYC 200 requires MATH 17 or higher (excluding MATH 40 and 45) and PSYC 11 as prerequisites. Prerequisites may be taken in General Education or as electives.

Note 2: The core courses and GEG 375 Research Methods in Geography must be completed prior to enrolling in GEG 380 Senior Seminar in Geography.

GEOG 375 Research Methods in Geography (Note 1) (3 credits)
GEOG 380 Senior Seminar in Geography (*Note 2*) (3 credits)

University Electives – 36 credits

Choose any university course. GEOG 394 Internship in Geography may be taken as a university elective and is highly recommended. The course requires a 2.5 or higher in-major GPA in at least 24 GEOG credits.

Program Plan Code: BA_GEOG_GLRE
Effective Date: Spring 2024

B.A. History Requirements

The History major focuses on the study of past human experiences. The major broadens students' knowledge of historic content and develops their researching, writing, and critical thinking skills. This major provides a foundation for post-secondary study and for careers related to history such as archive management, government, museum studies, and historical preservation.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for History is 2.0. Students must successfully pass a comprehensive examination.

Required History Core Courses – 18 credits

HIST 14 History of Civilization A (3 credits)
HIST 15 History of Civilization B (3 credits)
HIST 25 US Formative Years and Fed. Rep (3 credits)
HIST 26 Emergence of Modern America (3 credits)
HIST 378 Seminar in Historical Methods (3 credits)
HIST 380 Senior Seminar in History (3 credits)

Depth of Knowledge Courses – 24 credits

Select eight HIST courses, at least five courses at 200-level or above; at least two courses from each region of geographic distribution listed below.
United States – 6 credits
Europe – 6 credits
Asia/Middle East/Africa/Latin America – 6 credits
Any region – 6 credits

University Electives – 36 credits

Choose any university course.

Program Plan Code: BA_HIST
Effective Date: Fall 2018

B.A. History Paralegal Studies Requirements

The History major focuses on the study of past human experiences. The major broadens students' knowledge of historic content and develops their researching, writing, and critical thinking skills. This major provides a foundation for post-secondary study and for careers related to history such as archive management, government, museum studies, and historical preservation.

The History major with Paralegal Studies offers students a chance to simultaneously obtain a BA degree in History and to complete Lehigh Carbon Community College's (LCCC) American Bar Association-approved Paralegal Studies Certificate which focuses on the paralegal profession and the limitations imposed by the unauthorized practice of law.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for History Paralegal Studies is 2.0. Students must successfully pass a comprehensive examination.

Required History Core Courses – 15 credits

HIST 15 History of Civilization B (3 credits)
HIST 25 US Formative Years and Fed. Rep (3 credits)
HIST 26 Emergence of Modern America (3 credits)
HIST 378 Seminar in Historical Methods (3 credits)
HIST 380 Senior Seminar in History (3 credits)

Depth of Knowledge Courses – 24 credits

Select eight HIST courses, at least five courses at 200-level or above; at least two courses from each region of geographic distribution listed below.
United States – 6 credits
Europe – 6 credits
Asia/Middle East/Africa/Latin America – 6 credits
Any region – 6 credits

Required Paralegal Studies Core Courses – 18 credits

PLGL 120 Intro to Paralegal Studies (3 credits)
PLGL 150 Torts and Personal Injury (3 credits)
PLGL 200 Civil Litigation and Procedure (3 credits)
PLGL 215 Law Office Management (3 credits)
PLGL 220 Contract Law & Bus Organizations (3 credits)
PLGL 245 Legal Research and Writing (3 credits)

Required Paralegal Studies Elective Course – 3 credits

Choose a course or a combination of courses from the following list to be taken in a single semester to total 3 credits:

PLGL 125 Workers' Comp Practice (2 credits)
PLGL 130 Social Security Disability Practice (2 credits)
PLGL 135 Interviewing for Paralegals (1 credit)
PLGL 228 Immigration Law for Paralegals (3 credits)
PLGL 230 Estates and Trusts (3 credits)
PLGL 235 Family Law (3 credits)
PLGL 240 Bankruptcy Law (3 credits)
PLGL 250 Legal Internship (3 credits)
PLGL 255 Legal Writing (3 credits)

Directed General Education Course – 3 credits

The following course is required for the major and contributes to the general education requirement "Understanding and Creating Ideas."

HIST 14 History of Civilization A (3 credits)

University Electives – 15 to 18 credits

Choose any university course.

Program Plan Code: BA_HIST_PLST
Effective Date: Fall 2018

B.A. Political Science Requirements

The major in Political Science emphasizes analytical and writing skills together with developing knowledge of the U.S. government, global political systems, and the means of inquiry in the social sciences. The major prepares students for graduate work and for a broad range of careers including administrative positions in government, community organizations, electoral politics, or organizations working on behalf of specific policies. Graduates often pursue careers in business, law, consulting, state, local, and federal government, journalism and communications, international organization, finance, polling and campaign management, community service, and non-governmental organizations (NGOs).

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Political Science is 2.0.

Required Political Science Core Courses – 18 credits

POLI 10 American Government (3 credits)
POLI 20 International Relations (3 credits)
POLI 30 Introduction to World Politics (3 credits)
POLI 40 Introduction to Political Theory (3 credits)
POLI 201 Empirical Political Analysis (3 credits)
POLI 380 Senior Seminar in Political Science (3 credits)

Depth of Knowledge Courses – 18 credits

6 POLI courses, at least 3 courses at 200-level or above; at least 1 course from each of the subfields listed below. Department permission required for POLI 370 and/or POLI 390. POLI 370 may be taken twice for a total of 6 credit hours. Selected topics (POLI 371) may be taken more than once as long as the same topic is not repeated. Graduate courses at the 400-level are open to juniors and seniors who have a 2.9 GPA and above with the permission of the department.
Students should consult their major advisor for appropriate courses for each subfield.
American Politics Course (3 credits) – *Select one:* POLI 211, 213, 214, 228, 312, 313, 314, 316, 341
International Politics Course (3 credits) – *Select one:* POLI 133, 134, 227, 228, 231, 322, 332
Political Theory Course (3 credits) – *Select one:* POLI 140, 141, 314, 322, 341

University Electives – 42 credits

Program Plan Code: BA_POLI
Effective Date: Fall 2023

B.A. Political Science Paralegal Studies Requirements

The major in Political Science emphasizes analytical and writing skills together with developing knowledge of the U.S. government, global political systems, and the means of inquiry in the social sciences. The major prepares students for graduate work and for a broad range of careers including administrative positions in government, community organizations, electoral politics, or organizations working on behalf of specific policies. Graduates often pursue careers in business, law, consulting, state, local, and federal government, journalism and communications, international organization, finance, polling and campaign management, community service, and non-governmental organizations (NGOs).

The Political Science major with Paralegal Studies offers students a chance to simultaneously obtain a BA degree in Political Science and to complete Lehigh Carbon Community College's (LCCC) American Bar Association-approved Paralegal Studies Certificate which focuses on the paralegal profession and the limitations imposed by the unauthorized practice of law.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Political Science Paralegal Studies is 2.0.

Required Political Science Core Courses – 18 credits

POLI 10 American Government (3 credits)
POLI 20 International Relations (3 credits)
POLI 30 Introduction to World Politics (3 credits)
POLI 40 Introduction to Political Theory (3 credits)
POLI 201 Empirical Political Analysis (3 credits)
POLI 380 Senior Seminar in Political Science (3 credits)

Depth of Knowledge Courses – 18 credits

6 POLI courses, at least 3 courses at 200-level or above; at least 1 course from each of the subfields listed below. Department permission required for POLI 370 and/or POLI 390. POLI 370 may be taken twice for a total of 6 credit hours. Selected topics (POLI 371) may be taken more than once as long as the same topic is not repeated. Graduate courses at the 400-level are open to juniors and seniors who have a 2.9 GPA and above with the permission of the department.
Students should consult their major advisor for appropriate courses for each subfield.
American Politics Course – *Select one:*
POLI 211, 213, 214, 228, 312, 313, 314, 316, 341(3 credits)
International Politics Course – *Select one:*
POLI 133, 134, 227, 228, 231, 322, 332 (3 credits)
Political Theory Course – *Select one:*
POLI 140, 141, 314, 322, 341 (3 credits)

Required Paralegal Studies Courses – 21 credits

Paralegal Studies Core Courses

PLGL 120 Intro to Paralegal Studies (3 credits)
PLGL 150 Torts and Personal Injury (3 credits)
PLGL 200 Civil Litigation and Procedure (3 credits)
PLGL 215 Law Office Management (3 credits)
PLGL 220 Contract Law & Bus Organizations (3 credits)
PLGL 245 Legal Research and Writing (3 credits)

Paralegal Studies Elective Course

Choose a course or a combination of courses from the following list to be taken in a single semester to total 3 credits:

PLGL 125 Workers' Comp Practice (2 credits)
PLGL 130 Social Security Disability Practice (2 credits)
PLGL 135 Interviewing for Paralegals (1 credit)
PLGL 228 Immigration Law for Paralegals (3 credits)
PLGL 230 Estates and Trusts (3 credits)
PLGL 235 Family Law (3 credits)
PLGL 240 Bankruptcy Law (3 credits)
PLGL 250 Legal Internship (3 credits)
PLGL 255 Legal Writing (3 credits)

University Electives – 21 credits

Elective Courses may be selected from any department with approval from major advisor.

Program Plan Code: BA_POLI_PLST
Effective Date: Fall 2023

B.A. Professional Writing Requirements

The Professional Writing major emphasizes effective writing and design, critical reading and analysis, and professionalization in the workplace. Students majoring in Professional Writing may choose from an array of classes in creative writing, technical writing, arts and entertainment writing, or journalism. The major prepares students for graduate work or careers in professions such as author, editor, social media analyst, reporter, technical content writer, or web developer.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Professional Writing is 2.0. Professional Writing majors must have a 3.0 or higher in Core and Foundation sections and must take at least three 300-level courses.

Required Professional Writing Core Courses – 6 credits

ENGL/PRWR 100 Reading and Writing in the Professions (3 credits)
PRWR 213 Copy Editing: Revision and Style (3 credits)

Required Professional Writing Foundation Courses – 9 credits

PRWR 108 Intro to Creative Writing (3 credits)
PRWR 111 Journalism (3 credits)
PRWR 120 Technical Writing and Communication (3 credits)

Required Professionalization Courses – 6 credits

Up to 6 additional credits for the PRWR 390 internship may be applied as university electives with permission of the department chair.
PRWR 380 Professional Seminar (3 credits)
PRWR 390 Internship (3 credits)

Visual Communication – 6 credits

Choose two courses:
ENGL 144 Comic Studies (3 credits)
ENGL/GERM 217 German Comics in English (3 credits)
ENGL 244 Documentary Film and Theories of Representation (3 credits)
PRWR 216 Writing for Public Relations (3 credits)
PRWR 223 Games and Literature (3 credits)
PRWR 226 Newsletter Writing and Design (3 credits)
PRWR 251 Flash Fiction, Prose Poetry, and Other Short-Short Stories (3 credits)
PRWR 316 Public Relations and the Corporate Environment (3 credits)
PRWR 321 Information Design: Data Visualization in Technical Writing (3 credits)
PRWR 326 ADV Desktop Publishing: Writing and Designing Documents (3 credits)
PRWR 333 Digital Rhetoric and Writing (3 credits)
PRWR 339 New Media, Story, Change (3 credits)
PRWR 347 Activists Writing Media: Composing Democratic Futures (3 credits)

Critical Reading and Analysis – 6 credits

Choose two courses:

Any ENGL course 200-level or above (3 credits)
PRWR 214 Magazine Writing (3 credits)
PRWR 215 Pop Music Journalism (3 credits)
PRWR 235 Lyric Writing (3 credits)
PRWR 244 Story Analysis and Screenplay Development (3 credits)
PRWR 304 American Literary Journalism (3 credits)
PRWR 306 Adv. Magazine Writing: Covering a Specialty (3 credits)
PRWR 311 Creative Wring: Short Fiction (3 credits)
PRWR 312 Creative Writing: Poetry (3 credits)
PRWR 330 Writing the Novel (3 credits)

PRWR Electives – 9 credits

Any elective with a PRWR prefix.

University Electives – 36 credits

Choose any university course.

Program Plan Code: BA_ENPW
Effective Date: Spring 2024

B.A. Sociology Requirements

Sociology is the study of how society is organized, as well as how social groups, organizations, and institutions shape people's lives throughout the world. This program provides training in scientific, evidence-based methods for studying the social world, teaches respect and appreciation for others, and identifies opportunities and strategies for change that can improve society. Sociology helps us scientifically examine our society and other societies. It emphasizes how the parts of society fit together and change, and the consequences of that social change.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Sociology is 2.0.

Required General Sociology Core Courses – 21 credits

SOCI 10 Principles of Sociology (3 credits)
SOCI 160 Sociological Imagination (3 credits)
SOCI 165 Social Inequality (3 credits)
SOCI 200 Statistics/Social and Behavioral Science *or* SOCI 201 Quantitative Analysis in Sociology (3 credits)
SOCI 310 Foundations of Sociological Theory (3 credits)
SOCI 350 Methods of Social Research (3 credits)
SOCI 380 Senior Seminar in Sociology (3 credits)

Sociology Major Electives – 21 credits

Offered at KU or transferred from another institution, and not previously used for above requirements.

University Electives – 36 credits

Choose any university courses. 9 credits must be taken from courses with any of the following prefixes: ANTH, CRJU, ECON, GEOG, HIST, INTL, POLI, PSYC, SOWK, WGST.

Program Plan Code: BA_SOCI
Effective Date: Fall 2020

B.S. Biochemistry Requirements

The Biochemistry major focuses on understanding life at the level of how molecules interact and react, explaining such things as how oxygen is transported in the blood, how food is converted into metabolic energy, and how medicines work within our bodies. The major combines critical thinking and quantitative analysis skills with hands-on laboratory experience using state-of-the-art instrumentation. Students are prepared for graduate programs in Biochemistry and related fields as well as health professional schools including pharmacy, medical, and physician's assistant programs. Students are also prepared for entering directly into the pharmaceutical or biotechnology workforces. Students majoring in Biochemistry choose from one of two tracks: Traditional or Pharmacy, which are differentiated by the math and biology requirements.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Biochemistry is 2.0.

Required Biochemistry Core Courses – 52 credits

Chemistry – 34 credits

CHEM 100 General Chemistry I (4 credits)
CHEM 102 General Chemistry II (4 credits)
CHEM 214 Organic Chemistry I (4 credits)
CHEM 216 Organic Chemistry II (4 credits)
CHEM 230 Analytical Chemistry I (4 credits)
CHEM 310 Biochemistry I (4 credits)
CHEM 312 Biochemistry II (4 credits)
CHEM 314 Physical Chemistry I (4 credits)
CHEM 380 Senior Seminar in Chemistry (2 credits)

Introductory Biology – 8 credits

BIOL 104 Principles of Biology (4 credits)
BIOL 106 Intro to Zoology *or* BIOL 108 Intro to Botany (4 credits)

Genetics/Molecular/Cellular Biology – 6 credits

BIOL 216 Genetics *or* BIOL 346 Molecular Biology (3 credits)
BIOL 350 Cell Biology *or* BIOL 354 Developmental Biology *or* BIOL 356 Immunology (3 credits)

Physics – 4 credits

Note that PHYS 100 Physics I is included as part of Directed General Education requirements listed below.
PHYS 102 Physics II (4 credits)

Biochemistry Major Electives – 7 credits

Note: The combined credits between Chemistry Electives and Biology Electives should total 7 credits with 4-7 from CHEM and 0-3 from BIOL. The combined credit total toward the major program for CHEM 37X & BIOL 370 may not exceed 4 credits.

Chemistry – 4-7 credits

CHEM 300-level (3-4 credits)
CHEM 300-level (3-4 credits)
CHEM 37X Research in Chemistry (1-4 credits)
CHEM 39X Chemistry Elective (1-4 credits)

Biology – 0-3 credits

Any course from Genetics/Molecular/Cell Biology if not used to satisfy those requirements (3 credits)
BIOL 224 Appl. Env. Microbiology (3 credits)

BIOL 232 Plant Physiology (3 credits)
BIOL 235 General Physiology (3 credits)
BIOL 306 Food Microbiology (3 credits)
BIOL 330 Histology (3 credits)
BIOL 334 Medical Parasitology (3 credits)
BIOL 336 Medical Microbiology (3 credits)
BIOL 357 Virology (3 credits)
BIOL 370 Research in Biology (1-3 credits)
BIOL 390 Internship in Biology (3-6 credits)
BIOL 460 Cancer Biology (3 credits)

Directed General Education Courses – 12 credits

These courses are required for the major and satisfy the general education requirement "Understanding Science and Technology."
PHYS 100 Physics I – Category C1 (4 credits)
MATH 181 Calculus I – Category C2 (4 credits)
MATH 182 Calculus II – Category C3 (4 credits)

University Electives – 4 to 16 credits

Program Plan Code: BS_BIOC
Effective Date: Spring 2020

B.S. Biochemistry: Pharmacy Track Requirements

The Biochemistry major focuses on understanding life at the level of how molecules interact and react, explaining such things as how oxygen is transported in the blood, how food is converted into metabolic energy, and how medicines work within our bodies. The major combines critical thinking and quantitative analysis skills with hands-on laboratory experience using state-of-the-art instrumentation. Students are prepared for graduate programs in Biochemistry and related fields as well as health professional schools including pharmacy, medical, and physician's assistant programs. Students are also prepared for entering directly into the pharmaceutical or biotechnology workforces. Students majoring in Biochemistry choose from one of two tracks: Traditional or Pharmacy, which are differentiated by the math and biology requirements.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Biochemistry: Pharmacy Track is 2.0.

Required Biochemistry: Pharmacy Track Core Courses – 56 credits

Chemistry – 34 credits

CHEM 100 General Chemistry I (4 credits)
CHEM 102 General Chemistry II (4 credits)
CHEM 214 Organic Chemistry I (4 credits)
CHEM 216 Organic Chemistry II (4 credits)
CHEM 230 Analytical Chemistry I (4 credits)
CHEM 310 Biochemistry I (4 credits)
CHEM 312 Biochemistry II (4 credits)
CHEM 314 Physical Chemistry I (4 credits)
CHEM 380 Senior Seminar in Chemistry (2 credits)

Biology – 19 credits

BIOL 104 Principles of Biology (4 credits)
BIOL 106 Intro to Zoology *or* BIOL 108 Intro to Botany (4 credits)
BIOL 120 Anatomy and Physiology I (4 credits)
BIOL 122 Anatomy and Physiology II (4 credits)
BIOL 224 Applied Environmental Microbiology (3 credits)

Mathematics – 3 credits

MATH 140 Applied Statistical Methods *or* MATH 150 Intro to Biostatistics (3 credits)

Biochemistry: Pharmacy Track Major Electives – 4 credits

**Note: The combined credit total toward the major program for CHEM 37X & CHEM 39X may not exceed 2 credits.*

CHEM 300-level (3-4 credits)
CHEM 37X Research in Chemistry (1-2 credits) *
CHEM 39X Chemistry Elective (1-2 credits) *
BIOL 346 Molecular Biology (3 credits)
BIOL 350 Cellular Biology (3 credits)
BIOL 356 Immunology (3 credits)

Directed General Education Courses – 12 credits

These courses are required for the major and may satisfy the general education requirement "Understanding Science and Technology."
PHYS 100 Physics I – Category C1 (4 credits)
PHYS 102 Physics II (4 credits)
MATH 181 Calculus I or higher – Category C2 (4 credits)

University Electives – 3 to 15 credits

Program Plan Code: BS_BIOC_PHRM
Effective Date: Fall 2020

B.S. Biology: Allied Health Requirements

The Allied Health Track at Kutztown University is designed to help students prepare for further education in a variety of health-related fields including, but not limited to, the following: physical therapy, physician assistant, pharmacy, laboratory technology, occupational therapy, optometry, and chiropractic.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Biology: Allied Health is 2.0. At least three courses in the major program must be at the 300- or 400-level, and students must earn a C or better in BIOL 104.

Required Biology Core Courses – 23 credits

BIOL 104 Principles of Biology (4 credits)
BIOL 106 Introduction to Zoology (4 credits)
BIOL 108 Introduction to Botany (4 credits)
BIOL 216 Genetics (3 credits)
BIOL 224 Applied Environmental Microbiology (3 credits)
BIOL 270 Research Methods (3 credits)
BIOL 380 Senior Seminar (2 credits)

Required Allied Health Core Courses – 8 credits

BIOL 120 Anatomy & Physiology I (4 credits)
BIOL 122 Anatomy & Physiology II (4 credits)

Biology: Allied Health Electives – 18 to 20 credits

Select five elective courses and one Biology Field Elective:
BIOL 252 Cellular Physiology & Metabolism (3 credits)
BIOL 264 Comparative Anatomy (4 credits)
BIOL 306 Food Microbiology (3 credits)
BIOL 330 Histology (3 credits)
BIOL 334 Medical Parasitology (3 credits)
BIOL 336 Medical Microbiology (3 credits)
BIOL 354 Developmental Biology (3 credits)
BIOL 356 Immunology (3 credits)
BIOL 357 Virology (3 credits)
BIOL 370 Research (3 credits) *or* BIOL 390 Internship (3 credits)
CHEM 216 Organic Chemistry II (4 credits)
BIOL 460 Cancer Biology (3 credits)

Biology Field Elective

Select one course:
BIOL 218 Vertebrate Biology (3 credits)
BIOL/EVSC 222 Environmental Biology (3 credits)
BIOL/MRSC 226 Marine Biology (3 credits)
BIOL 230 Taxonomy of Vascular Plants (3 credits)
BIOL 244 Ecology (4 credits)
BIOL 302 Entomology (3 credits)
BIOL 308 Ornithology (3 credits)
BIOL 314 Animal Behavior (3 credits)

BIOL 322 Population and Community Ecology (3 credits)
BIOL 324 Plant Ecology (3 credits)
BIOL 342 Herpetology (3 credits)
BIOL 332 Aquatic Ecology (3 credits)
BIOL 358 Conservation Biology (3 credits)
Biology courses offered at Chincoteague Field Station (200-level or above)

Other Required Courses – 10 to 11 credits

Note that CHEM 100 General Chemistry I and CHEM 102 General Chemistry II are included as part of Directed General Education requirements listed below.
CHEM 204 Fundamentals of Organic Chemistry (4 credits) *or* CHEM 214 Organic Chemistry (4 credits)
PSYC 100-, 200-, *or* 300-level course, excluding PSYC 200 (3 credits)
MATH 106 Trigonometry (3 credits) *or* MATH 115 Precalculus (3 credits) *or* MATH 181 Calculus (4 credits)

Directed General Education Courses – 12 credits

These courses are required for the major and satisfy the general education requirement "Understanding Science and Technology."
CHEM 100 General Chemistry I – Category C1 (4 credits)
CHEM 102 General Chemistry II – Category C2 (4 credits)
PHYS 40 General Physics I (4 credits) *or* PHYS 100 Physics I – Category C3 (4 credits)

University Electives – 12 to 16 credits

Program Plan Code: BS_BIOL_HEAL
Effective Date: Fall 2018

B.S. Biology: Molecular/Micro/Cell Requirements

The Molecular Biology/Microbiology/Cell Biology Track at Kutztown University is designed to help students prepare for research and laboratory work in a variety of fields. In addition to seeking employment following graduation, many of our students who have completed this track have also gone on to earn master's and/or doctoral degrees in Microbiology, Molecular and Cell biology and related fields.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Biology: Molecular/Micro/Cell is 2.0. At least four courses in the major program must be at the 300- or 400-level. Students must earn a C or better in BIOL 104.

Required Biology Core Courses – 23 credits

BIOL 104 Principles of Biology (4 credits)
BIOL 106 Introduction to Zoology (4 credits)
BIOL 108 Introduction to Botany (4 credits)
BIOL 216 Genetics (3 credits)
BIOL 224 Applied Environmental Microbiology (3 credits)
BIOL 270 Research Methods (3 credits)
BIOL 380 Senior Seminar (2 credits)

Required Molecular/Micro/Cell Core Courses – 9 to 10 credits

BIOL 252 Cell Physiology & Metabolism (3 credits) *or* CHEM 312 Biochemistry II (4 credits)
BIOL 346 Molecular Biology (3 credits)
BIOL 350 Cell Biology (3 credits)

Biology: Molecular/Micro/Cell Major Electives – 12 to 13 credits

Select three elective courses and one Biology Field Elective:
BIOL 122 Anatomy & Physiology II (3 credits) *or* BIOL 235 General Physiology (4 credits)
BIOL 232 Plant Physiology (3 credits)
BIOL 236 Introduction to Plant Pathology (3 credits)
BIOL 306 Food Microbiology (3 credits)
BIOL 330 Histology (3 credits)
BIOL 334 Medical Parasitology (3 credits)
BIOL 336 Medical Microbiology (3 credits)
BIOL 354 Developmental Biology (3 credits)
BIOL 356 Immunology (3 credits)
BIOL 357 Virology (3 credits)
BIOL 370 Research (3 credits) *or* BIOL 390 Internship (3 credits)
BIOL 460 Cancer Biology (3 credits)

Biology Field Elective

Select one course:
BIOL 218 Vertebrate Biology (3 credits)
BIOL/EVSC 222 Environmental Biology (3 credits)
BIOL/MRSC 226 Marine Biology (3 credits)
BIOL 230 Taxonomy of Vascular Plants (3 credits)
BIOL 244 Ecology (4 credits)
BIOL 302 Entomology (3 credits)

BIOL 308 Ornithology (3 credits)
BIOL 314 Animal Behavior (3 credits)
BIOL 322 Population and Community Ecology (3 credits)
BIOL 324 Plant Ecology (3 credits)
BIOL 342 Herpetology (3 credits)
BIOL 332 Aquatic Ecology (3 credits)
BIOL 358 Conservation Biology (3 credits)
Biology courses offered at Chincoteague Field Station (200-level or above)

Other Required Courses – 15 to 16 credits

Note that CHEM 100 General Chemistry I and CHEM 102 General Chemistry II are included as part of Directed General Education requirements listed below.
CHEM 214 Organic Chemistry (4 credits)
CHEM 216 Organic Chemistry II (4 credits)
CHEM 310 Biochemistry I (4 credits)
MATH 106 Trigonometry (3 credits) *or* MATH 115 Precalculus (3 credits) *or* MATH 181 Calculus (4 credits)

Directed General Education Courses – 12 credits

These courses are required for the major and satisfy the general education requirement "Understanding Science and Technology."
CHEM 100 General Chemistry I – Category C1 (4 credits)
CHEM 102 General Chemistry II – Category C2 (4 credits).
PHYS 40 General Physics I (4 credits) *or* PHYS 100 Physics I – Category C3 (4 credits)

University Electives – 13 to 16 credits

Program Plan Code: BS_BIOL_MOLM
Effective Date: Spring 2020

B.S. Biology: Organismal/Ecology Requirements

The curriculum in each of our tracks provide students with a sound academic foundation in all Formal and Natural Sciences, including Mathematics, Physics, Chemistry and, of course, Biology. Students in our program learn about fundamental biological concepts and principles, scientific thinking and experiment design. Students in our program will also become familiar with how Biology is learned – from molecules, to cells, to whole organisms – as well as their ecology and that of their ecosystems.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Biology: Molecular/Micro/Cell is 2.0. At least four courses in the major program must be at the 300- or 400-level. Students must earn a C or better in BIOL 104.

Required Biology Core Courses – 23 credits

BIOL 104 Principles of Biology (4 credits)
BIOL 106 Introduction to Zoology (4 credits)
BIOL 108 Introduction to Botany (4 credits)
BIOL 216 Genetics (3 credits)
BIOL 224 Applied Environmental Microbiology (3 credits)
BIOL 270 Research Methods (3 credits)
BIOL 380 Senior Seminar (2 credits)

Required Organismal/Ecology Core Courses – 13 to 14 credits

BIOL 244 Ecology (4 credits)

Physiology Course

Choose one course:
BIOL 122 Anatomy & Physiology II (3 credits)
BIOL 232 Plant Physiology (3 credits)
BIOL 235 General Physiology (4 credits)
BIOL 320 Physiological Ecology of Animals (3 credits)

Animal Course

Choose one course:
BIOL 218 Vertebrate Biology (3 credits)
BIOL 302 Entomology (3 credits)
BIOL 308 Ornithology (3 credits)
BIOL 316 Invertebrate Biology (3 credits)
BIOL 342 Herpetology (3 credits)

Plant Course

Choose one course:
BIOL 230 Taxonomy Vascular Plants (3 credits)
BIOL 232 Plant Physiology (3 credits)
BIOL 236 Plant Pathology (3 credits)
BIOL 324 Plant Ecology (3 credits)

Biology: Organismal/Ecology Major Electives – 12 to 13 credits

Select three courses from the following:
BIOL 218 Vertebrate Biology (3 credits)
BIOL 222 Environmental Biology (3 credits)
BIOL 226 Marine Biology (3 credits)
BIOL 230 Taxonomy Vascular Plants (3 credits)
BIOL 232 Plant Physiology (3 credits)
BIOL 236 Plant Pathology (3 credits)
BIOL 235 General Physiology (4 credits)
BIOL 302 Entomology (3 credits)
BIOL 308 Ornithology (3 credits)
BIOL 314 Animal Behavior (3 credits)
BIOL 316 Invertebrate Biology (3 credits)
BIOL 320 Physiological Ecology Animals (3 credits)
BIOL 322 Population and Community Ecology (3 credits)
BIOL 324 Plant Ecology (3 credits)
BIOL 326 Marine Ecology (3 credits)
BIOL 332 Aquatic Ecology (3 credits)
BIOL 334 Medical Parasitology (3 credits)
BIOL 342 Herpetology (3 credits)
BIOL 358 Conservation Biology (3 credits)
BIOL 370 Research (3 credits) *or* BIOL 390 Internship (3 credits)

Select one from the following:
BIOL, MRSC, *or* EVSC 200-, 300-, *or* 400-level (3-4 credits)

Other Required Courses – 11 to 12 credits

Note that CHEM 100 General Chemistry I and CHEM 102 General Chemistry II are included as part of Directed General Education requirements listed below.
CHEM 214 Organic Chemistry I (4 credits)
CHEM 216 Organic Chemistry II (4 credits)
MATH 106 Trigonometry (3 credits) *or* MATH 115 Precalculus (3 credits) *or* MATH 181 Calculus (4 credits)

Directed General Education Courses – 12 credits

These courses are required for the major and satisfy the general education requirement "Understanding Science and Technology."
CHEM 100 General Chemistry I – Category C1 (4 credits)
CHEM 102 General Chemistry II – Category C2 (4 credits)
PHYS 40 General Physics I (4 credits) *or* PHYS 100 Physics I – Category C3 (4 credits)

University Electives – 13 to 16 credits

Program Plan Code: BS_BIOL_ORGE
Effective Date: Spring 2020

B.S. Biology: Pre-Medical & Other Health Careers Requirements

Students in our program learn about fundamental biological concepts and principles, scientific thinking and experiment design. KU students have been preparing for and successfully entering medical, veterinary, or dental schools for years, thanks to strong academics and a supportive faculty.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Biology: Molecular/Micro/Cell is 2.0. At least four courses in the major program must be at the 300- or 400-level. Students must earn a C or better in BIOL 104.

Required Biology Core Courses – 23 credits

BIOL 104 Principles of Biology (4 credits)
BIOL 106 Introduction to Zoology (4 credits)
BIOL 108 Introduction to Botany (4 credits)
BIOL 216 Genetics (3 credits)
BIOL 224 Applied Environmental Microbiology (3 credits)
BIOL 270 Research Methods (3 credits)
BIOL 380 Senior Seminar (2 credits)

Required Pre-Medical Core Courses – 10 to 11 credits

BIOL 264 Comparative Anatomy (4 credits)
BIOL 346 Molecular Biology (3 credits) *or* BIOL 350 Cell Biology (3 credits)
BIOL 122 Anatomy & Physiology II (3 credits) *or* BIOL 235 General Physiology (4 credits)

Biology: Pre-Medical Major Electives – 15 to 18 credits

Select four courses from the following and one Biology Field Elective:
BIOL 252 Cell Physiology & Metabolism (3 credits) *or* CHEM 312 Biochemistry II (4 credits)
BIOL 306 Food Microbiology (3 credits)
BIOL 330 Histology (3 credits)
BIOL 334 Medical Parasitology (3 credits)
BIOL 336 Medical Microbiology (3 credits)
BIOL 354 Developmental Biology (3 credits)
BIOL 356 Immunology (3 credits)
BIOL 370 Research (3 credits) *or* BIOL 390 Internship (3 credits)
CHEM 310 Biochemistry I (4 credits)
BIOL 460 Cancer Biology (3 credits)

Biology Field Elective

Select one course:
BIOL 218 Vertebrate Biology (3 credits)
BIOL/EVSC 222 Environmental Biology (3 credits)
BIOL/MRSC 226 Marine Biology (3 credits)
BIOL 230 Taxonomy of Vascular Plants (3 credits)
BIOL 244 Ecology (4 credits)
BIOL 302 Entomology (3 credits)
BIOL 308 Ornithology (3 credits)
BIOL 314 Animal Behavior (3 credits)
BIOL 322 Population and Community Ecology (3 credits)
BIOL 324 Plant Ecology (3 credits)

BIOL 342 Herpetology (3 credits)
BIOL 332 Aquatic Ecology (3 credits)
BIOL 358 Conservation Biology (3 credits)
Biology courses offered at Chincoteague Field Station (200-level or above)

Other Required Courses – 11 to 12 credits

Note that CHEM 100 General Chemistry I and CHEM 102 General Chemistry II are included as part of Directed General Education requirements listed below.
CHEM 214 Organic Chemistry I (4 credits)
CHEM 216 Organic Chemistry II (4 credits)
MATH 106 Trigonometry (3 credits) *or* MATH 115 Precalculus (3 credits) *or* MATH 181 Calculus (4 credits)

Directed General Education Courses – 12 credits

These courses are required for the major and satisfy the general education requirement "Understanding Science and Technology."
CHEM 100 General Chemistry I – Category C1 (4 credits)
CHEM 102 General Chemistry II – Category C2 (4 credits)
PHYS 40 General Physics I (4 credits) *or* PHYS 100 Physics I – Category C3 (4 credits)

University Electives – 11 to 16 credits

Program Plan Code: BS_BIOL_PRMD
Effective Date: Spring 2020

B.S. Chemistry Requirements

The Chemistry major focuses on developing an understanding of our world from atomic to macroscopic perspectives. It couples theoretical foundations in organic, inorganic, physical, analytical and biochemistry with hands-on laboratory experience involving state-of-the-art instrumentation. This major prepares students for graduate study in chemistry and related disciplines, and for careers in pharmaceutical industries, environmental testing, manufacturing, food science, etc. The track in Applied Chemistry provides the flexibility to pursue courses in areas such as business, supply chain management, criminal justice, computer science, and math to suit individualized career trajectories.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final major GPA requirement for Chemistry is 2.0.

Required Chemistry Core Courses – 42 credits

CHEM 100 General Chemistry I (4 credits)
CHEM 102 General Chemistry II (4 credits)
CHEM 214 Organic Chemistry I (4 credits)
CHEM 216 Organic Chemistry II (4 credits)
CHEM 230 Analytical Chemistry I (4 credits)
CHEM 310 Biochemistry I (4 credits)
CHEM 314 Physical Chemistry I (4 credits)
CHEM 316 Physical Chemistry II (4 credits)
CHEM 320 Advanced Inorganic Chemistry (4 credits)
CHEM 340 Analytical Chemistry II (4 credits)
CHEM 380 Senior Seminar in Chemistry (2 credits)

Chemistry Major Electives – 7 credits

Chemistry Electives – 3-7 credits

At least 3 credits must be from the CHEM prefix courses listed. The combined credit total toward the major program for CHEM 370, CHEM 371, CHEM 372, and CHEM 373 may not exceed 4 credits. Any additional credit hours count toward University Electives. Some electives are not offered every year.

CHEM 312 Biochemistry II (4 credits)
CHEM 318 Advanced Biochemistry (3 credits)
CHEM 326 Advanced Organic Chemistry (3 credits)
CHEM 336 Advanced Physical Chemistry (3 credits)
CHEM 351 Selected Topics (1-6 credits)
CHEM 370 Research in Chemistry I (1-3 credits)
CHEM 371 Research in Chemistry II (1-3 credits)
CHEM 372 Research in Chemistry III (1-3 credits)
CHEM 373 Research in Chemistry IV (1-3 credits)
CHEM 390 Internship in Chemistry (1-4 credits)

Additional Electives – 0-4 credits
CPSC 123 Introduction to Scientific Programming *or* CPSC 135 Computer Science I (3 credits)
CPSC 223 Advanced Scientific Programming *or* CPSC 136 Computer Science II (3 credits)
MATH 140 Applied Statistical Methods *or* MAT 150 Introduction to Biostatistics (3 credits)
MATH 224 Foundations of Higher Math (3 credits)
MATH 283 Calculus III (4 credits)
SCED 220 Practical Scanning Electron Microscopy (3 credits)
PHYS 220 Electronics (3 credits)
PHYS 230 Optics (3 credits)
PHYS 250 Programming for Experimental Research and Industry (3 credits)

Other Required Courses – 8 credits

Note that MATH 181 Calculus I and PHYS 100 Physics I are included as part of the Directed General Education requirements listed below.
PHYS 102 Physics II (4 credits)
MATH 182 Calculus II (4 credits)

Directed General Education Courses – 12 credits

These courses are required for the major and satisfy the general education requirement "Understanding Science and Technology."
PHYS 100 Physics I – Category C1 (4 credits)
MATH 181 Calculus I – Category C2 (4 credits)
BIOL 104 Principles of Biology – Category C3 (4 credits)

University Electives – 6 to 18 credits

Program Plan Code: BS_CHEM
Effective Date: Fall 2024

B.S. Chemistry: Applied Requirements

The Chemistry major focuses on developing an understanding of our world from atomic to macroscopic perspectives. It couples theoretical foundations in organic, inorganic, physical, analytical and biochemistry with hands-on laboratory experience involving state-of-the-art instrumentation. This major prepares students for graduate study in chemistry and related disciplines, and for careers in pharmaceutical industries, environmental testing, manufacturing, food science, etc. The track in Applied Chemistry provides the flexibility to pursue courses in areas such as business, supply chain management, criminal justice, computer science, and math to suit individualized career trajectories.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final major GPA requirement for Chemistry is 2.0.

Required Chemistry Core Courses – 36 credits

CHEM 100 General Chemistry I (4 credits)
CHEM 102 General Chemistry II (4 credits)
CHEM 214 Organic Chemistry I (4 credits)
CHEM 216 Organic Chemistry II (4 credits)
CHEM 230 Analytical Chemistry I (4 credits)
CHEM 310 Biochemistry I (4 credits) *or* CHEM 320 Advanced Inorganic Chemistry (4 credits)
CHEM 314 Physical Chemistry I (4 credits)
CHEM 340 Analytical Chemistry II (4 credits)
CHEM 380 Senior Seminar in Chemistry (2 credits)
CHEM 37X Research in Chemistry (2 credits) *or* CHEM 390 Internship in Chemistry (2 credits)

Chemistry Applied Track Major Electives – 18 to 20 credits

At least 3 courses must be taken in a single subject area. The combined credit total toward the major program for CHEM 370, CHEM 371, CHEM 372, CHEM 373, and CHEM 390 may not exceed 4 credits. Any additional credit hours count toward University Electives. Some electives are not offered every year.

Business and Supply Chain Management

ACCT 121 Financial Accounting (3 credits)
MKTG 210 Principles of Marketing (3 credits)
MGMT 210 Principles of Management (3 credits)
BUSN 275 Business Data Management and Information Systems (3 credits)
SCMG 260 Principles of Supply Chain Management (3 credits)
SCMG 361 Principles of Business Logistics (3 credits)
SCMG Any course above 300 (3 credits)

Computer Science

CPSC 123 Introduction to Scientific Programming (3 credits) *or* CSC 135 Computer Science I (3 credits)
CPSC 223 Advanced Scientific programming (3 credits) *or* CPSC 136 Computer Science II (3 credits)
CPSC 125 Discrete Math for Computing I (3 credits)
CPSC 256 SQL Programming (3 credits)
CPSC 458 Data Mining and Predictive Analytics I (3 credits) *or* CPSC 459 Introduction to Big Data (3 credits)

Mathematics
MATH 140 Applied Statistical Methods (3 credits) *or* MATH 150 Introduction to Biostatistics (3 credits)
MATH 182 Calculus II (4 credits)
MATH 224 Foundations of Higher Mathematics (3 credits)
MATH 283 Calculus III (4 credits)
Criminal Justice and Forensic Studies
CRJU 101 Introduction to Policing (3 credits)
CRJU 181 Criminal Law (3 credits)
CRJU 182 Criminal Procedure (3 credits)
CRJU 301 Investigation and Intelligence (3 credits)
Astronomy, Geology, Physics and Chemistry
ASTR 140 Planetary Science (3 credits) *or* ASTR 142 Stellar & Galactic Astronomy (3 credits)
ASTR Any course above 200 (3 credits)
GEOL Any course at 100-level (3-4 credits)
GEOL Any course above 200 (3-4 credits)
PHYS 212 Modern Physics (3 credits)
PHYS Any course above 200 (3 credits)
SCED 220 Practical Scanning Electron Microscopy (3 credits)
CHEM Any course above 300 (3-4 credits)
CHEM Any course above 300 (3-4 credits)
CHEM Any course above 300 (3-4 credits)

Other Required Courses – 4 credits

Note that PHYS 100 Physics I is included as part of the Directed General Education requirements listed below.
PHYS 102 Physics II (4 credits)

Directed General Education Courses – 12 credits

These courses are required for the major and satisfy the general education requirement "Understanding Science and Technology."
MATH 181 Calculus I – Category C2 (4 credits)
PHYS 100 Physics I – Category C1 (4 credits)
BIOL 104 Principles of Biology – Category C3 (4 credits)

University Electives – 15 to 17 credits

Program Plan Code: BS_CHEM_APPL
Effective Date: Fall 2024

B.S. Computer Science Requirements

The major in Computer Science focuses on the core concepts in computer science and software engineering, allowing students to build a foundation, thus having the capability to learn any new technology. The classes are varied and exciting, utilizing a wide array of programming languages: Network Programming, Data Mining, Big Data, Game Development, Human Computer Interaction, Robotics, Artificial Intelligence, and Software Engineering.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final major GPA requirement for Computer Science is 2.25.

Required Computer Science Core Courses – 36 credits

CPSC 125 Discrete Math for CS I (3 credits)
CPSC 135 Comp Sci I (3 credits)
CPSC 136 Comp Sci II (3 credits)
CPSC 150 Ethical, Legal, and Professional Impacts of the Digital Age (3 credits)
CPSC 225 Discrete Math for CS II (3 credits)
CPSC 235 Computer Organization and Assembly Language (3 credits)
CPSC 237 Data Structures (3 credits)
CPSC 310 Programming Languages (3 credits)
CPSC 328 Network and Secure Programming (3 credits)
CPSC 343 Operating Systems (3 credits)
CPSC 354 Software Engineering I (3 credits)
CPSC 355 Software Engineering II (3 credits)

Computer Science Electives – 18 credits

0 to 9 credits of additional 200-level CPSC courses, not previously used for above requirements, excluding CPSC 280.
At least 9 credits of additional CPSC courses, number 300 or above and not previously used for above requirements, excluding any course numbered CPSC 87x and CPSC 380.

Other Required Courses – 6 credits

Note: Students minoring in Math should take MATH 260 and MATH 301, not MATH 140.
MATH 140 Applied Statistics *or* MATH 301 Probability and Statistics I (3 credits)
MATH 250 Applied Regression Analysis *or* MATH 260 Linear Algebra *or* MATH 330 Theory of Numbers *or* MATH 337 Introduction to Cryptography (3 credits)

Directed General Education Courses – 10 to 12 credits

These courses are required for the major and satisfy the general education requirement "Understanding Science and Technology."
Note: Students must take two sciences courses intended for a science major. At least one of these courses must include a lab.
MATH 181 Calculus I – Category C2 (4 credits)
Natural Science Course for a Science Major – Category C1 (3-4 credits)
Natural Science Course for a Science major – Category C3 (3-4 credits)

University Electives – 15 to 18 credits

Note 1: CPSC course with a prefix below 125, CPSC 130, CPSC 280, CPSC 380 and CPSC 87x do not count toward the major requirements for a BS in Computer Science; they count as university electives only.
Note 2: Internships are optional for program requirements, but highly recommended. These courses, CPSC 280 and CPSC 380, count as university electives.

Program Plan Code: BS_CPSC
Effective Date: Spring 2024

B.S. Criminal Justice Requirements

The Criminal Justice major prepares students for careers in law enforcement, court administration, corrections, juvenile justice, and graduate degrees in social science fields. Graduates go on to work in a wide range of federal, state, and local agencies.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Criminal Justice is 2.0. A grade of C or higher is required for all required courses.

Required Criminal Justice Core Courses – 24 credits

CRJU 10 Intro to Criminal Justice (3 credits)
CRJU 101 Intro to Policing (3 credits)
CRJU 181 Criminal Law (3 credits)
CRJU 182 Criminal Procedure (3 credits)
CRJU 250 Criminology (3 credits)
CRJU 270 Management of Offenders (3 credits)
CRJU 362 Research Methods (3 credits)
CRJU 380 Senior Seminar (3 credits)

Criminal Justice Major Electives – 18 credits

Choose 18 credits. Students who want to have an internship experience may take four CRJU electives in addition to CRJU 390.

CRJU 121 Introduction to Law (3 credits)
CRJU 170 Intro to Security Management (3 credits)
CRJU 171 Loss Prevention/Asset Protection (3 credits)
CRJU 175 Criminal Justice Organization & Systems (3 credits)
CRJU 190 Federal Law Enforcement (3 credits)
CRJU 200 Comp Criminal Justice System (3 credits)
CRJU 210 Development of Criminal Justice System (3 credits)
CRJU 215 Intro to Crime Mapping/Analysis (3 credits)
CRJU 221 Juvenile Justice (3 credits)
CRJU 232 Diversity in Criminal Justice (3 credits)
CRJU 271 Substance Abuse & Crime (3 credits)
CRJU 272 Community Corrections (3 credits)
CRJU 273 Career Criminals/Criminal Careers (3 credits)
CRJU 274 Policy, Punishment & Society (3 credits)
CRJU 280 Ethics in Criminal Justice (3 credits)
CRJU 281 Crime Prevention (3 credits)
CRJU 301 Investigation/Intelligence (3 credits)
CRJU 320 Evidence (3 credits)
CRJU 321 Contemporary Legal Issues (3 credits)
CRJU 322 National Security Law (3 credits)
CRJU 370 Selected Topics (3 credits)
CRJU 379 Independent Study (3 credits)
CRJU 390 Internship in Criminal Justice I (6 credits)

Other Required Courses – 18 credits

Consult with major advisor before selecting six courses carrying the following prefixes: ACCT, ANTH, BIOL, BUSN, CPSC, ECON, ENGL, GEOG, HIST, HOSE, MATH, PHIL, PHYS, PSYC, SOCI, SOWK, PRWR, and courses offered by the Department of Modern Language Studies.

University Electives – 18 credits

Choose any university course.

Program Plan Code: BS_CRJU
Effective Date: Fall 2023

B.S. Criminal Justice Paralegal Requirements

The Criminal Justice major with Paralegal Studies offers students a chance to simultaneously obtain a BS degree in Criminal Justice and to complete Lehigh Carbon Community College's (LCCC) American Bar Association-approved Paralegal Studies Certificate which focuses on the paralegal profession and the limitations imposed by the unauthorized practice of law.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Criminal Justice Paralegal Studies is 2.0. A grade of C or higher is required for all required courses.

Required Criminal Justice Core Courses – 24 credits

CRJU 10 Intro to Criminal Justice (3 credits)
CRJU 101 Introduction to Policing (3 credits)
CRJU 181 Criminal Law (3 credits)
CRJU 182 Criminal Procedure (3 credits)
CRJU 250 Criminology (3 credits)
CRJU 270 Management of Offenders (3 credits)
CRJU 362 Research Methods (3 credits)
CRJU 380 Senior Seminar (3 credits)

Criminal Justice Electives – 18 credits

CRJU 121 Introduction to Law (3 credits)
CRJU 170 Intro to Security Management (3 credits)
CRJU 171 Loss Prevention/Asset Protection (3 credits)
CRJU 175 CRJU Organizations & Systems (3 credits)
CRJU 190 Federal Law Enforcement (3 credits)
CRJU 200 Comp Criminal Justice System (3 credits)
CRJU 210 Development of CJ System (3 credits)
CRJU 215 Intro to Crime Mapping/Analysis (3 credits)
CRJU 221 Juvenile Justice (3 credits)
CRJU 232 Diversity in Criminal Justice (3 credits)
CRJU 271 Substance Abuse & Crime (3 credits)
CRJU 272 Community Corrections (3 credits)
CRJU 273 Career Criminals/Criminal Careers (3 credits)
CRJU 274 Policy, Punishment & Society (3 credits)
CRJU 280 Ethics in Criminal Justice (3 credits)
CRJU 281 Crime Prevention (3 credits)
CRJU 301 Investigation/Intelligence (3 credits)
CRJU 320 Evidence (3 credits)
CRJU 321 Contemporary Legal Issues (3 credits)
CRJU 322 National Security Law (3 credits)
CRJU 370 Selected Topics (3 credits)
CRJU 379 Independent Study (3 credits)
CRJU 390 Internship in CRJU I (6 credits)

Required Paralegal Studies Core Courses – 18 credits

PLGL 120 Intro to Paralegal Studies (3 credits)
PLGL 150 Torts and Personal Injury (3 credits)

PLGL 200 Civil Litigation and Procedure (3 credits)
PLGL 215 Law Office Management (3 credits)
PLGL 220 Contract Law & Bus Organizations (3 credits)
PLGL 245 Legal Research and Writing (3 credits)

Required Paralegal Studies Elective Course – 3 credits

Choose a course or a combination of courses from the following list to be taken in a single semester to total 3 credits:
PLGL 125 Workers' Comp Practice (2 credits)
PLGL 130 Social Security Disability Practice (2 credits)
PLGL 135 Interviewing for Paralegals (1 credit)
PLGL 228 Immigration Law for Paralegals (3 credits)
PLGL 230 Estates and Trusts (3 credits)
PLGL 235 Family Law (3 credits)
PLGL 240 Bankruptcy Law (3 credits)
PLGL 250 Legal Internship (3 credits)
PLGL 255 Legal Writing (3 credits)

University Electives – 15 to 18 credits

Choose any university course.

Program Plan Code: BS_CRJU_PLST
Effective Date: Spring 2024

BS Data Science: Bioinformatics Requirements

The major in Data Science focuses on the core concepts in computer science and mathematics, allowing students to build a foundation. Students will gain an understanding of basic programming, database, data analytics, and mathematics concepts to create a foundation in data science. They will also learn how to apply these concepts to a concentration area for a more general focus on data science. The concentration areas are bioinformatics, geospatial information, and mathematics.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final major GPA requirement for Data Science with a concentration in Bioinformatics is 2.25.

Required Computer Science Core Courses – 27 credits

CPSC 105 Introduction to Data Visualization (3 credits)
CPSC 123 Introduction to Scientific Programming *or* CPSC 135 Computer Science I (3 credits)
CPSC 125 Discrete Math for Computer Science I (3 credits)
CPSC 150 Ethical, Legal, and Professional Impacts of the Digital Age (3 credits)
CPSC 223 Advanced Scientific Programming (3 credits)
CPSC 256 SQL Programming (3 credits)
CPSC 356 Introduction to Database Management Systems (3 credits)
CPSC 458 Data Mining and Predictive Analytics I (3 credits)
CPSC 459 Introduction to Data Mining (3 credits)

Required Mathematics Courses – 6 credits

MATH 250 Applied Regression Analysis (3 credits)
MATH 304 Statistical Programming *or* MATH 325 Applied Time Series Analysis (3 credits)

Computer Science Electives – 6 credits

6 additional credits of CPSC courses numbered 125 or higher, not previously used for above requirements, excluding CPSC 280 and CPSC 380.

Bioinformatics Concentration – 19 to 21 credits

BIOL 106 Introduction to Zoology *or* BIOL 108 Introduction to Botany (4 credits)
BIOL 120 Anatomy and Physiology I *or* BIOL 2xx/3xx (3 or 4 credits)
BIOL 122 Anatomy and Physiology II *or* BIOL 2xx/3xx (3 or 4 credits)
BIOL 216 Genetics (3 credits)
BIOL 255 Introduction to Bioinformatics (3 credits)
BIOL 270 Research Methods *or* BIOL 370 Research in Biology *or* BIOL 395 Honors Independent Study / Thesis (3 credits)

Directed General Education Courses – 10 to 11 credits

The following courses are required to fulfill the major requirements and are suggested to satisfy general education.
BIOL 104 Principles of Biology – Category C1 (4 credits)
MATH 105 or higher – Category C2 (3 or 4 credits)
MATH 140 Applied Statistics *or* MATH 150 Introduction to Biostatistics – Category C3 (3 credits)

Program Plan Code: BS_DASC_BIIN
Effective Semester: Fall 2024

BS Data Science: Geospatial Requirements

The major in Data Science focuses on the core concepts in computer science and mathematics, allowing students to build a foundation. Students will gain an understanding of basic programming, database, data analytics, and mathematics concepts to create a foundation in data science. They will also learn how to apply these concepts to a concentration area for a more general focus on data science. The concentration areas are bioinformatics, geospatial information, and mathematics.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final major GPA requirement for Data Science with a concentration in Geospatial Information is 2.25.

Required Computer Science Core Courses – 27 credits

CPSC 105 Introduction to Data Visualization (3 credits)
CPSC 123 Introduction to Scientific Programming *or* CPSC 135 Computer Science I (3 credits)
CPSC 125 Discrete Math for Computer Science I (3 credits)
CPSC 150 Ethical, Legal, and Professional Impacts of the Digital Age (3 credits)
CPSC 223 Advanced Scientific Programming (3 credits)
CPSC 256 SQL Programming (3 credits)
CPSC 356 Introduction to Database Management Systems (3 credits)
CPSC 458 Data Mining and Predictive Analytics I (3 credits)
CPSC 459 Introduction to Data Mining (3 credits)

Required Mathematics Courses – 6 credits

MATH 250 Applied Regression Analysis (3 credits)
MATH 304 Statistical Programming *or* MATH 325 Applied Time Series Analysis (3 credits)

Computer Science Electives – 6 credits

6 additional credits of CPSC courses numbered 125 or higher, not previously used for above requirements, excluding CPSC 280 and CPSC 380.

Geospatial Information Concentration – 21 credits

GEOG 274 Introduction to Geospatial Information Systems (GIS) (3 credits)
GEOG 330 Cartography (3 credits)
GEOG 333 Advanced GIS (3 credits)
GEOG 347 Remote Sensing of the Environment (3 credits)
GEOG 375 Research Methods in Geography (3 credits)
GEOG 371 Independent Research *or* GEOG 394 Internship (3 credits)
GEOG 380 Senior Seminar (requires senior thesis) (3 credits)

Directed General Education Courses – 6 to 7 credits

The following courses are required to fulfill the major requirements and are suggested to satisfy general education.
MATH 105 or higher – Category C2 (3-4 credits)
MATH 140 Applied Statistics *or* MATH 150 Introduction to Biostatistics – Category C3 (3 credits)

Program Plan Code: BS_DASC_GEIN
Effective Semester: Fall 2024

BS Data Science: Mathematics Requirements

The major in Data Science focuses on the core concepts in computer science and mathematics, allowing students to build a foundation. Students will gain an understanding of basic programming, database, data analytics, and mathematics concepts to create a foundation in data science. They will also learn how to apply these concepts to a concentration area for a more general focus on data science. The concentration areas are bioinformatics, geospatial information, and mathematics.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final major GPA requirement for Data Science with a concentration in Mathematics is 2.25.

Required Computer Science Core Courses – 27 credits

CPSC 105 Introduction to Data Visualization (3 credits)
CPSC 123 Introduction to Scientific Programming *or* CPSC 135 Computer Science I (3 credits)
CPSC 125 Discrete Math for Computer Science I (3 credits)
CPSC 150 Ethical, Legal, and Professional Impacts of the Digital Age (3 credits)
CPSC 223 Advanced Scientific Programming (3 credits)
CPSC 256 SQL Programming (3 credits)
CPSC 356 Introduction to Database Management Systems (3 credits)
CPSC 458 Data Mining and Predictive Analytics I (3 credits)
CPSC 459 Introduction to Data Mining (3 credits)

Required Mathematics Courses – 6 credits

MATH 250 Applied Regression Analysis (3 credits)
MATH 304 Statistical Programming *or* MATH 325 Applied Time Series Analysis (3 credits)

Computer Science Electives – 6 credits

6 additional credits of CPSC courses numbered 125 or higher, not previously used for above requirements, excluding CPSC 280 and CPSC 380.

Mathematics Concentration – 19 credits

MATH 224 Foundations of Higher Mathematics *or* CPSC 225 Discrete Math for Computing II (3 credits)
MATH 260 Linear Algebra (3 credits)
MATH 283 Calculus III (4 credits)
MATH 301 Probability and Statistics I (3 credits)
MATH 302 Probability and Statistics II (3 credits)
MATH 380 Senior Seminar in Math *or* MATH 390 Directed Reading/ Research in Math *or* MATH 490 Advanced Directed Reading/ Research in Math *or* MATH 395 Honors Independent Study/Thesis *or* MATH 398 Honors Research *or* CPSC 385 Computer Science Seminar *or* CPSC 372 Independent Study / Project in Computer Science (3 credits)

Directed General Education Courses – 4 credits

The following courses are required to fulfill the major requirements and is suggested to satisfy general education.
MATH 181 Calculus I – Category C2 (4 credits)
MATH 182 Calculus II – Category C3 (4 credits)

Program Plan Code: BS_DASC_MATH
Effective Semester: Fall 2024

B.S. Environmental Science: Biology Requirements

The major in Environmental Science emphasizes student capacity to engage with interdisciplinary environmental challenges in both the field and laboratory. The major prepares students for graduate work or for a career in professions such as Environmental Consulting, Laboratory Analysis, Water and Wastewater Management, Geospatial Information Technology, Natural Resource Management and Remediation, and Wildlife Conservation. Students majoring in Environmental Science choose from one of the following tracks: Biology, Chemistry, Geography, Geology, and Regenerative Organic Agriculture.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Environmental Science: Biology is 2.0.

Required Environmental Science Core Courses – 20 to 21 credits

A grade of C or better for BIOL 104 is required to be counted as a prerequisite.
EVSC 100 Introduction to Environmental Science (3 credits)
EVSC 210 Environmental Geology (3 credits)
EVSC 220 Environmental Analysis (3 credits)
EVSC 222 Environmental Biology *or* BIOL 244 Ecology (3/4 credits)
ENVS 270 Applied Environmental Science (3 credits)
GEOG 274 Intro. to Geographic Information Systems (3 credits)
EVSC 380 Senior Seminar (2 credits)

Required Biology Track Courses – 24 credits

BIOL 104 Principles of Biology (4 credits) (must earn a C or better)
BIOL 106 Introduction to Zoology (4 credits)
BIOL 108 Introduction to Botany (4 credits)
BIOL 224 Applied Environmental Microbiology (3 credits)
Advanced Plant Course (3 credits)
Advanced Animal Course (3 credits)
Advanced Ecology (3 credits)

Other Required Courses – 14 to 15 credits

CHEM 102 General Chemistry II (4 credits)
CHEM 204 Fundamentals of Organic Chemistry (4 credits)
GEOG 10 Planet Earth Users Guide: Intro to Physical Geography (3 credits)
MATH 106 Trigonometry (3 credits) *or* MATH 115 Precalculus (3 credits) *or* MATH 181 Calculus I (4 credits)

Directed General Education Courses – 11 credits

These courses are required for the major and satisfy the general education requirement "Understanding Science and Technology."
CHEM 100 General Chemistry I – Category C1 (4 credits)
GEOL 100 Physical Geology – Category C2 (3 credits)
PHYS 40 General Physics I *or* PHYS 100 Physics I – Category C3 (4 credits)

University Electives – 15 to 17 credits

Program Plan Code: BS_EVSC_BIOL
Effective Date: Fall 2024

B.S. Environmental Science: Chemistry Requirements

The major in Environmental Science emphasizes student capacity to engage with interdisciplinary environmental challenges in both the field and laboratory. The major prepares students for graduate work or for a career in professions such as Environmental Consulting, Laboratory Analysis, Water and Wastewater Management, Geospatial Information Technology, Natural Resource Management and Remediation, and Wildlife Conservation. Students majoring in Environmental Science choose from one of the following tracks: Biology, Chemistry, Geography, Geology, and Regenerative Organic Agriculture.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Environmental Science is 2.0.

Required Environmental Science Core Courses – 20 to 21 credits

EVSC 100 Introduction to Environmental Science (3 credits)
EVSC 210 Environmental Geology (3 credits)
EVSC 220 Environmental Analysis (3 credits)
EVSC 222 Environmental Biology *or* BIOL 244 Ecology (3-4 credits)
EVSC 270 Applied Environmental Science (3 credits)
GEOG 274 Introduction to Geographic Information Systems (3 credits)
EVSC 380 Senior Seminar (2 credits)

Chemistry Track – 24 credits

Required + Elective courses.
Choice of courses made with advisor from a list maintained by Environmental Science committee.
CHEM 100 General Chemistry I (4 credits)
CHEM 102 General Chemistry II (4 credits)
CHEM 214 Organic Chemistry I (4 credits)
CHEM 216 Organic Chemistry II (4 credits)
CHEM 200-level *or* 300-level (4 credits)
CHEM 300-level (4 credits)

Environmental Science Electives – 3 to 4 credits

Select 1 course from among the following prefixes: EVSC, CHEM, BIOL, GEOG, GEOL, MATH, PHYS. Choice made with advisor from a list maintained by Environmental Science committee.

Other Required Courses – 11 credits

BIOL 106 Introduction to Zoology (4 credits) *or* BIOL 108 Introduction to Botany (4 Credits)
GEOG 10 Planet Earth Users' Guide (3 credits)
PHYS 100 Physics I (4 credits)

Directed General Education Courses – 12 credits

These courses are required for the major and satisfy the general education requirement "Understanding Science and Technology."
BIOL 104 Principles of Biology – Category C1 (4 credits)
GEOL 100 Physical Geology – Category C2 (4 credits)
MATH 181 Calculus I – Category C3 (4 credits)

University Electives – 14 to 17 credits

Program Plan Code: BS_EVSC_CHEM
Effective Date: Fall 2024

B.S. Environmental Science: Geography Requirements

The major in Environmental Science emphasizes student capacity to engage with interdisciplinary environmental challenges in both the field and laboratory. The major prepares students for graduate work or for a career in professions such as Environmental Consulting, Laboratory Analysis, Water and Wastewater Management, Geospatial Information Technology, Natural Resource Management and Remediation, and Wildlife Conservation. Students majoring in Environmental Science choose from one of the following tracks: Biology, Chemistry, Geography, Geology, and Regenerative Organic Agriculture.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Environmental Science is 2.0.

Required Environmental Science Core Courses – 20 to 21 credits

EVSC 100 Introduction to Environmental Science (3 credits)
EVSC 210 Environmental Geology (3 credits)
EVSC 220 Environmental Analysis (3 credits)
EVSC 222 Environmental Biology (3 credits) *or* BIOL 244: Ecology (4 credits)
EVSC 270 Applied Environmental Science (3 credits)
GEOG 274 Introduction to Geographic Information Systems (3 credits)
EVSC 380 Senior Seminar (2 credits)

Geography Track – 20 to 21 credits

Required courses plus 4 GEOG electives.
GEOG 10 Planet Earth Users' Guide: Introduction to Physical Geography (3 credits)
GEOG 375 Research Methods in Geography (3 credits)
GEOG 394 Internship in Geography (2-3 credits)
GEOG Electives (4 by 3 credits)

Other Required Courses – 18 to 19 credits

MATH 140 and 150 require either MATH 105, 106 or 115 as a prerequisite.
PSYC/SOCI/POLI 200 requires PSYC 11 and MATH 17 or higher (excluding 40 and 45) as prerequisites.
BIOL 106 Introduction to Zoology (4 credits) *or* BIOL 108 Introduction to Botany (4 credits)
CHEM 102 General Chemistry II (4 credits)
MATH 106 Trigonometry (3 credits) *or* MATH 115 Precalculus (3 credits) *or* MATH 181 Calculus I (4 credits)
MATH 140 Applied Statistics (3 credits) *or* MATH 150 Biostatistics (3 credits) *or* PSYC 200 Stats for Social and Behavioral Sciences (3 credits)
PHYS 40 General Physics I (4 credits) *or* PHYS 100 Physics I (4 credits)

Directed General Education Courses – 12 credits

These courses are required for the major and satisfy the general education requirement "Understanding Science and Technology."

BIOL 104 Principles of Biology – Category C1 (4 credits) (*grade of C or better required*)
CHEM 100 General Chemistry I – Category C3 (4 credits)
GEOL 100 Physical Geology – Category C2 (4 credits)

University Electives – 14 to 17 credits

Program Plan Code: BA_EVSC_GEOG
Effective Date: Fall 2024

B.S. Environmental Science: Geology
Program Requirements

The major in Environmental Science emphasizes student capacity to engage with interdisciplinary environmental challenges in both the field and laboratory. The major prepares students for graduate work or for a career in professions such as Environmental Consulting, Laboratory Analysis, Water and Wastewater Management, Geospatial Information Technology, Natural Resource Management and Remediation, and Wildlife Conservation. Students majoring in Environmental Science choose from one of the following tracks: Biology, Chemistry, Geography, Geology, and Regenerative Organic Agriculture.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Environmental Science Geology is 2.0.

Required Environmental Science Core Courses – 20 to 21 credits

A grade of C or better for BIOL 104 is required to be counted as a prerequisite.
EVSC 100 Introduction to Environmental Science (3 credits)
EVSC 210 Environmental Geology (3 credits)
EVSC 220 Environmental Analysis (3 credits)
EVSC 222 Environmental Biology *or* BIOL 244 Ecology (3-4 credits)
EVSC 270 Applied Environmental Science (3 credits)
GEOG 274 Intro. to Geographic Information Systems (3 credits)
EVSC 380 Senior Seminar (2 credits)

Geology Track – 17 credits

GEOL 100 Physical Geology (4 credits)
GEOL 102 Historical Geology (4 credits)
GEOL 200 Field Geology (3 credits)
GEOL 358 General Geophysics (3 credits)
GEOL 362 Hydrogeology (3 credits)

Other Required Courses – 22 to 23 credits

BIOL 106 Introduction to Zoology *or* BIOL 108 Introduction to Botany (4 credits)
CHEM 100 General Chemistry I (4 credits)
CHEM 214 Organic Chemistry I (4 credits) *or* CHEM 204 Fundamentals of Organic Chemistry (4 credits)
GEOG 10 Elements of Physical Geography (3 credits)
MATH 106 Trigonometry (3 credits) *or* MATH 115 Precalculus (3 credits) *or* MATH 181 Calculus I (4 credits)
PHYS 42 General Physics II (4 credits) *or* PHYS 102 Physics II (4 credits)

Directed General Education Courses – 12 credits

These courses are required for the major and satisfy the general education requirement "Understanding Science and Technology."

BIOL 104 Principles of Biology – Category C1 (4 credits) (*Grade of C or better required*)
CHEM 102 General Chemistry II – Category C2 (4 credits)
PHYS 40 General Physics I (4 credits) *or* PHYS 100 Physics I – Category C3 (4 credits)

University Electives – 14 to 16 credits

Program Plan Code: BS_EVSC_GEOL
Effective Date: Fall 2024

B.S. Environmental Science: Regenerative Organic Agriculture Requirements

The major in Environmental Science emphasizes student capacity to engage with interdisciplinary environmental challenges in both the field and laboratory. The major prepares students for graduate work or for a career in professions such as Environmental Consulting, Laboratory Analysis, Water and Wastewater Management, Geospatial Information Technology, Natural Resource Management and Remediation, and Wildlife Conservation. Students majoring in Environmental Science choose from one of the following tracks: Biology, Chemistry, Geography, Geology, and Regenerative Organic Agriculture.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Environmental Science: Regenerative Organic Agriculture is 2.0.

Required Environmental Science Core Courses – 20 to 21 credits

A grade of C or better for BIOL 104 is required to be counted as a prerequisite.
EVSC 100 Introduction to Environmental Science (3 credits)
EVSC 210 Environmental Geology (3 credits)
EVSC 220 Environmental Analysis (3 credits)
EVSC 222 Environmental Biology *or* BIOL 244 Ecology (3/4 credits)
EVSC 270 Applied Environmental Science (3 credits)
GEOG 274 Introduction to Geographic Information Systems (3 credits)
EVSC 380 Senior Seminar (2 credits)

Regenerative Organic Agriculture Track – 17 credits

A grade of C or better for BIOL 104 is required to be counted as a prerequisite.
EVSC 201 Fundamentals of Regenerative Agriculture (1 credit)
EVSC 202 Concepts of Food Justice (1 credit)
EVSC 203 Concepts of Soil Science (1 credit)
EVSC 204 Climate Change and Agriculture (1 credit)
EVSC 205 Diseases of Field Crops (1 credit)
EVSC 206 Agricultural Entomology (1 credit)
EVSC 207 Soil Analysis (1 credit)
EVSC 208 Biogeochemical Cycles (1 credit)
EVSC 200 Regenerative Field Lab (1 credit, taken 6 times)
EVSC 370 *or* 390 – Research or Internship in Agriculture during a Growing Season (3 credits)

Other Required Courses – 22 to 23 credits

BIOL 104 Principles of Biology (4 credits) (*must earn a C or better*)
BIOL 106 Introduction to Zoology (4 credits)
BIOL 108 Introduction to Botany (4 credits)
CHEM 204 Fundamentals of Organic Chemistry (4 credits)
GEOG 10 Planet Earth Users Guide: Intro to Physical Geography (3 credits)
MATH 106 Trigonometry (3 credits) *or* MATH 115 Precalculus (3 credits)
or MATH 181 Calculus I (4 credits)

Directed General Education Courses – 12 credits

These courses are required for the major and satisfy the general education requirement "Understanding Science and Technology."

CHEM 100 General Chemistry I – Category C1 (4 credits)
GEOL 100 Physical Geology – Category C2 (4 credits)
CHEM 102 General Chemistry II – Category C3 (4 credits)

University Electives – 14 to 16 credits

Program Plan Code: BS_EVSC_ORGA
Effective Date: Fall 2024

B.S. Game Development Requirements

The Game Development major is an interdisciplinary program incorporating courses from numerous departments. This interdisciplinary program incorporates the numerous aspects of game development, including programming, design, creative writing and music, to provide students with the opportunity to pursue a variety of careers in the field. This interdisciplinary approach to Game Development distinguishes KU's Game Development major from other programs in this area of study.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Game Development is 2.0.

Required Game Development Core Courses – 33 credits

ANIA 171 Introduction to Three-Dimensional Modeling and Rendering (3 credits)
ANIA 271 Three-Dimensional Prototyping (3 credits)
CPSC 125 Discrete Math for CS I (3 credits)
CPSC 120 Creative Graphical Programming *or* CPSC 135 Computer Science I (3 credits)
CPSC 136 Computer Science II *or* CPSC 220 Object-Oriented Multimedia Programming (3 credits)
CPSC 240 Fundamentals of Game Development (3 credits)
CPSC 320 Two-Dimensional Game Development (3 credits)
CPSC 323 Three-Dimensional Game Development (3 credits)
PRWR 108 Introduction to Creative Writing (3 credits)
MUSC 294 Sound Design for Visual Media (3 credits)
Capstone CODS 335 Interdisciplinary Team Project *or* CPSC 363 Interdisciplinary Software Rapid Prototyping (3 credits) *or* CPSC 385 Computer Science Seminar

Game Development Electives – 27 to 28 credits

At least 27 credits (9 courses) of additional courses from the list below.
Note that FINE 15 and FINE 16 are required prerequisites for most ANIA electives. ART 31 and/or ART 32 are recommended for most ANIA electives.
ANIA 141 Introduction to Visual Storytelling (3 credits)
ANIA 148 Game Design & Prototyping (3 credits)
ANIA 231 Introduction to Two-Dimensional Animation (3 credits)
ANIA 240 Introduction to Three-Dimensional Animation (3 credits)
ART 31 Two-Dimensional Design (3 credits)
ART 32 Three-Dimensional Design (3 credits)
CODS 347 Interactive Spaces (2 credits)
CODS 348 AR/VR/Mixed Reality (2 credits)
CODS 356 Creative Coding (3 credits)
COST 243 Social Games and Communication (3 credits)
CPSC 220 Object-Oriented Multimedia Programming (3 credits)
CPSC 223 Advanced Scientific Programming (3 credits)
CPSC 225 Discrete Math for Computer Science II (3 credits)
CPSC 237 Data Structures (3 credits)
CPSC 242 Server-Side Web Development (3 credits)
CPSC 243 Java Programming (3 credits)
CPSC 256 SQL Programming (3 credits)
CPSC 328 Network and Secure Programming (3 credits)
CPSC 330 Mobile Architecture and Development (3 credits)

CPSC 421 Web-Based Software Design & Development (3 credits)
CPSC 464 Human Computer Interaction (3 credits)
CTME 220 Media Law and Ethics (3 credits)
FINE 15 Drawing I (3 credits)
FINE 16 Drawing II (3 credits)
GEOG 25 Geofiction and Role-Playing (3 credits)
MATH 181 Calculus I (4 credits)
MATH 240 Synthetic Geometry (3 credits)
MATH 260 Linear Algebra I (3 credits)
PRWR/ENGL 223 Games and Literature (3 credits)
PRWR 311 Creative Writing Short Fiction (3 credits)
PRWR 313 Creative Writing Drama (3 credits)
Additional courses may serve as major electives upon approval of the computer science and information technology department.

Directed General Education Courses – 6 to 7 credits

The following courses are required to fulfill the Game Development requirements and are suggested to satisfy General Education categories C and D.
MATH 106 Trigonometry *or* MATH 115 Pre-Calculus *or* MATH 181 Calculus I – Category C2 (3-4 credits)
ARTH 27 History of Animation, Game Art & Inter Media – Category D (3 credits)

University Electives – 15 to18 credits

Program Plan Code: BS_CSGD
Effective Date: Fall 2024

B.S. General Studies Requirements

General Studies is an interdisciplinary program designed to optimize student creativity and flexibility. Instead of focusing intensely on one area in a pre-defined curriculum, students can custom tailor their plan of study to their individual interests and career goals. By combining coursework from multiple disciplines, the BS in General Studies is ideal for students seeking a well-rounded education that fosters critical thinking and problem-solving skills as well as knowledge and foci in one or more disciplines.

Student Learning Objectives

1. Critically analyze complex issues and evaluate diverse perspectives.
2. Integrate knowledge from multiple disciplines to answer questions and solve problems.
3. Demonstrate effective written and oral communication skills across different contexts and audiences.

Note that all students much achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for General Studies is 2.0.

Required BS General Studies Concentration Courses – 21 credits

Concentration courses must be in a single discipline. At least 12 of the 21 credits must be 200-level or above. At least 3 credits must be a culminating experience consisting of an internship, independent study, or senior seminar in lieu of a comprehensive exam.

Concentration courses (9 credits)
Concentration courses at the 200-level or above (9 credits)
Internship or Independent Study or Senior Seminar (3 credits)

Program Courses – 30 to 39 credits

Program courses may be from multiple disciplines including the concentration discipline. Program courses are defined by the prospectus, which is developed by the student and General Studies advisor. The prospectus must be approved by the General Studies committee prior to acceptance into the General Studies program.

Program courses (30-39 credits total)

Program Plan Code: BS_GENS
Effective Date: Fall 2018

B.S. General Studies: Professional Studies Requirements

General Studies: Professional Studies is an interdisciplinary program designed to maximize flexibility for students returning to higher education to finish their bachelor's degree. By combining existing and new coursework, students can choose to concentrate their major program in a single discipline or combine courses from two different disciplines into a single program of study.

Student Learning Objectives

1. Critically analyze complex issues and evaluate diverse perspectives.
2. Integrate knowledge from multiple disciplines to answer questions and solve problems.
3. Demonstrate effective written and oral communication skills across different contexts and audiences.

Note that all students much achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for General Studies is 2.0. Students admitted to this program must not have been enrolled in an institution of higher education within the past three years. Additionally, students admitted to this program must have already completed at least 90 credits of university coursework.

Option A: Concentration Courses – 30 credits (single discipline)

Concentration courses must be in a single discipline. At least 12 of the credits must be 200-level or higher.

Concentration courses (18 credits)
Concentration courses at the 200-level or above (12 credits)

Option B: Concentration Courses – 36 credits (two disciplines)

Students complete 18 credits in two different disciplines. At least 12 of the credits must be 200-level or higher.

Concentration Discipline One (18 credits)
Concentration Discipline Two (18 credits)

Program Plan Code: BS_GENS_PROF
Effective Date: Fall 2018

B.S. Geology Requirements

Geology majors develop a holistic view of the Earth by applying the fundamentals of chemistry, physics, and biology, and specialized geological knowledge toward problem-solving. Kutztown University's geology program meets all the curriculum requirements for becoming a licensed professional geologist. Geology graduates have the skills and knowledge necessary to directly work as professionals in the Geoscience workforce and/or enter graduate school. Recent geology graduates work as hydrogeologists providing clean water to municipalities; as geophysicists and geotechnical workers in engineering applications ensuring we have safe bridges and foundations; as environmental geologists cleaning contaminated aquifers to protect the health and safety of the community; and mineral exploration geologists discovering the materials of which civilization is made.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final major-GPA requirement for Geology is 2.0.

Required Geology Core Courses – 38 credits

GEOL 100 Physical Geology (4 credits)
GEOL 102 Historical Geology (4 credits)
GEOL 200 Field Geology (3 credits)
GEOL 220 Mineralogy (4 credits)
GEOL 230 Paleontology (3 credits)
GEOL 304 Structural Geology (4 credits)
GEOL 316 Petrology & Geochemistry (4 credits)
GEOL 346 Sedimentology & Stratigraphy (4 credits)
GEOL 358 Geophysics (3 credits)
GEOL 362 Hydrogeology (3 credits)
GEOL 380 Senior Seminar (2 credits)

Geology Major Electives – 6 credits

Choose 6 credits of major electives from the following list.
GEOL 205 Planetary Surface Processes (3 credits)
GEOL 210 Environmental Geology (3 credits)
GEOL 302 Economic Geology (3 credits)
GEOL 366 Marine Geology (3 credits)
GEOL 368 Research in Geology I (1-3 credits)
GEOL 369 Research in Geology II (1-3 credits)
GEOL 371-373 Selected Topics (1-6 credits)
GEOL 390 Internship in Geology (1-4 credits)
GEOL 398 Honors Suppl. Research (1-3 credits)

Other Required Courses – 12 to 14 credits

CHEM 100 General Chemistry I (4 credits)
PHYS 42 General Physics II *or* PHYS 102 Physics II (4 credits)
Mathematics
Option 1
MATH 181 Calculus I (4 credits)
Option 2
MATH 106 Trigonometry (3 credits)
MATH 122 Applied Calculus (3 credits)

Directed General Education Courses – 12 credits

PHYS 40 General Physics I *or* PHYS 100 Physics I – Category C1 (4 credits)
CHEM 102 General Chemistry II – Category C2 (4 credits)
BIOL 104 Principles of Biology – Category C3 (4 credits)

University Electives – 17 to 19 credits

Program Plan Code: BS_GEOL
Effective Date: Fall 2018

B.S. Information Technology Requirements

The major in Information Technology allows students to build a knowledge base for application support in any industry, from healthcare to sports, from retail to government. No organization can function without employees who have the skills and credentials of an IT professional. You can become one of those most sought-after experts by building a foundation of knowledge in the three key areas: networking, security and databases.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The GPA requirement for major courses for Information Technology is a minimum of 2.25.

Required Information Technology Core Courses – 39 credits

CPSC 122 Client-Side Web Development (3 credits)
CPSC 125 Discrete Math for CS I (3 credits)
CPSC 123 Intro to Scientific Programming (3 credits) *or* CPSC 135: Comp Sci I (3 credits)
CPSC 150 Ethical, Legal, and Professional Impacts of the Digital Age (3 credits)
CPSC 223 Advanced Scientific Programming (3 credits) *or* CPSC 242 Server-Side Web Development (3 credits)
CPSC 252 Unix Scripting and Administration (3 credits)
CPSC 253 IT Systems (3 credits)
CPSC 273 Computing Systems Integration (3 credits)
CPSC 311 Computer Networks (3 credits)
CPSC 341 Information Security (3 credits)
CPSC 354 Software Engineering I (3 credits)
CPSC 355 Software Engineering II (3 credits)
CPSC 356 Intro to Database Systems (3 credits)

Information Technology Electives – 18 credits

18 credits of additional CPSC courses, numbered 136 or above and not previously used for above requirements. CPSC 280 and CPSC 380 cannot be used here.

Other Required Courses – 3 credits

MATH 105 College Algebra *or higher* (3 credits)

Directed General Education Courses – 3 credits

The following courses are required to fulfill the Information Technology requirements and are suggested to satisfy General Education.
MATH 140 Applied Statistics *or* MATH 150 Intro Bio Stats – Category C2 (3 credits)

University Elective Courses – 15 to 18 credits

Note 1: Courses below CPSC 122, CPSC 280, and CPSC 380 do not count toward the major requirements for a BS in Information Technology; they count in university electives only.
Note 2: Internships are optional for program requirements, but highly recommended. These courses, CPSC 280 and CPSC 380, only count in university electives.

Program Plan Code: BS_ITEC
Effective Date: Fall 2024

B.S. Marine Science: Biology Requirements

The ocean covers over 71% of our planet. The Marine Science major focuses on the interactions between biology, chemistry, geology, and physics in the world's oceans. The laboratory and field-intensive interdisciplinary core curriculum prepares students for graduate school and careers in industry, government, fisheries, marine biology, oceanography, marine engineering, marine geology, pharmaceuticals, and natural resource development and protection. Recent marine science graduates work in diverse fields as biologists at zoos, aquariums, research labs, and national parks, as technicians at pharmaceutical and microbiology laboratories, as marine technicians on research ships, and as a video producer for NASA Earth. Students majoring in Marine Science choose from two concentration areas: Marine Biology and Oceanography.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Marine Science: Biology is 2.0.

Required Marine Science Courses – 27 credits

MRSC 110 Intro. to Oceanography (3 credits)
MRSC 226 Marine Biology (3 credits)
MRSC Method-Intense Field Course (3 credits) *Methods courses are offered at the Chincoteague Bay Field Station, Wallops Island, VA and must be approved by the MRSC Program Coordinator.*
MRSC 210 Sophomore Seminar (1 credit)
MRSC 364 Physical Oceanography (3 credits)
MRSC 366 Marine Geology (3 credits)
MRSC 380 Senior Seminar (2 credits)
MRSC 370 Research in Mar. Sci. *or* MRSC 390 Internship in Mar. Sci. (3 credits)
MRSC Elective (3 credits)
MRSC Elective (3 credits)
Courses in this category may be used to satisfy the minimum of 9 credit hours that must be taken at the Chincoteague Bay Field Station, Wallops Island, VA.

Required Biology Core Courses – 14 credits

BIOL 104 Principles of Biology (4 credits) (*must earn a C or better*)
BIOL 106 Intro. to Zoology (4 credits)
BIOL 224 Applied Environmental Microbiology (3 credits)
BIOL 216 Genetics (3 credits)

Other Required Courses – 18 to 19 credits

CHEM 102 General Chemistry II (4 credits)
CHEM 214 Organic Chemistry I *or* CHEM 204 Fundamentals of Organic Chemistry (4 credits)
GEOG 274 Geographic Information Systems I (3 credits)
PHYS 42 General Physics II (4 credits) *or* PHYS 102 Physics II (4 credits)
MATH 106 Trigonometry (3 credits) *or* MATH 115 Precalculus (3 credits) *or* MATH 181 Calculus I (4 credits)

Directed General Education Courses – 12 credits

These courses are required for the major and satisfy the general education requirement "Understanding Science and Technology."
CHEM 100 General Chemistry I – Category C1(4 credits)
GEOL 100 Physical Geology – Category C2 (4 credits)
PHYS 40 General Physics I (4 credits) *or* PHYS 100 Physics I – Category C3 (4 credits)

University Electives – 16 credits

Students may use a combination of 1, 3, and 4 credit courses to complete 16 credits of University Electives

Program Plan Code: BS_MARF_BIOL
Effective Date: Spring 2020

B.S. Marine Science: Oceanography Requirements

The ocean covers over 71% of our planet. The Marine Science major focuses on the interactions among biology, chemistry, geology, and physics in the world's oceans. The laboratory and field-intensive interdisciplinary core curriculum prepares students for graduate school and careers in industry, government, fisheries, marine biology, oceanography, marine engineering, marine geology, pharmaceuticals, and natural resource development and protection. Recent marine science graduates work in diverse fields as biologists at zoos, aquariums, research labs, and national parks, as technicians at pharmaceutical and microbiology laboratories, as marine technicians on research ships, and as a video producer for NASA Earth. Students majoring in Marine Science choose from two concentration areas: Marine Biology and Oceanography.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Marine Science: Oceanography is 2.0.

Required Marine Science: Oceanography Core Courses – 27 credits

MRSC 110 Intro. to Oceanography (3 credits)
MRSC 226 Marine Biology (3 credits)
MRSC Method-Intense Field Course (3 credits) *Methods courses are offered at the Chincoteague Bay Field Station, Wallops Island, VA and must be approved by the MRSC Program Coordinator.*
MRSC 210 Sophomore Seminar (1 credit)
MRSC 364 Physical Oceanography (3 credits)
MRSC 366 Marine Geology (3 credits)
MRSC 380 Senior Seminar (2 credits)
MRSC 370: Research in Marine Science (3 credits) *or* MRSC 390 Internship in Marine Science (3 credits)
MRSC Elective (3 credits)
MRSC Elective (3 credits)
Courses in this category may be used to satisfy the minimum of 9 credit hours that must be taken at the Chincoteague Bay Field Station, Wallops Island, VA.

Required Oceanography Track Courses – 13 credits

GEOL 100 Physical Geology (4 credits)
Physical Science courses include prefixes: MRSC, GEOL, PHYS, CHEM, ASTR
Physical Science course level 100 or higher (3 credits)
Physical Science course level 200 or higher (3 credits)
Physical Science course level 200 or higher (3 credits)

Other Required Courses – 19 credits

BIOL 106 Intro. to Zoology (4 credits) *or* BIOL 108 Intro. to Botany (4 credits)
CHEM 100 General Chemistry I (4 credits)
GEOG 274 Geo. Info. Sys. I (3 credits)
MATH 181 Calculus I (4 credits) or higher
PHYS 42 General Physics II (4 credits) *or* PHYS 102 Physics II (4 credits)

Directed General Education Courses – 12 credits

These courses are required for the major and satisfy the general education requirement "Understanding Science and Technology."
BIOL 104 Principles of Biology – Category C1 (4 credits)
CHEM 102 General Chemistry II – Category C2 (4 credits)
PHYS 40 General Physics I (4 credits) *or* PHYS 100 Physics I – Category C3 (4 credits)

University Electives – 16 credits

Students may use a combination of 1, 3 and 4 credit courses to complete 16 credits of University Electives

Program Plan Code: BS_MARF_OCEA
Effective Date: Spring 2020

B.S. Mathematics Requirements

The Department of Mathematics offers a comprehensive program designed to cultivate strong analytical and problem-solving skills and a deep understanding of mathematical principles. The curriculum provides students with a rigorous foundation in both pure and applied mathematics, complemented by specialized courses in areas that help graduates succeed in academia, industry, and beyond.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Mathematics is 2.0.

Required Mathematics Core Courses – 30 credits

MATH 181 Calculus I (4 credits)
MATH 182 Calculus II (4 credits)
MATH 224 Foundations of Higher Mathematics (3 credits)
MATH 260 Linear Algebra I (3 credits)
MATH 283 Calculus III (4 credits)
MATH 301 Probability & Statistics I (3 credits)
MATH 311 Abstract Algebra I (3 credits)
MATH 351 Real Analysis I (3 credits)
MATH 380 Senior Seminar in Mathematics (3 credits)

Specialization Courses – 12 credits

Students must satisfy the requirements for Specialization A or Specialization P.

Specialization A: Applied Mathematics

MATH 340 Differential Equations (3 credits)
Choose three courses, with at least one being MATH 302, MATH 306, MATH 362, or MATH 473.
MATH 250 Applied Regression Analysis (3 credits)
MATH 302 Probability & Statistics II (3 credits)
MATH 305 Mathematics of Finance I (3 credits)
MATH 306 Mathematics of Finance II (3 credits)
MATH 332 Numerical Analysis (3 credits)
MATH 347 Introduction to Dynamical Systems (3 credits)
MATH 361 Operations Research I (3 credits)
MATH 362 Operations Research II (3 credits)
MATH 367 Mathematical Modeling (3 credits)
MATH 403 Analysis of Data Sets (3 credits)
MATH 473 Partial Differential Equations (3 credits)

Specialization P: Pure Mathematics

Choose four courses, with at least one with being MATH 312, MATH 352, or MATH 460.
MATH 312 Abstract Algebra II (3 credits)
MATH 321 Combinatorics (3 credits)
MATH 330 Theory of Numbers (3 credits)
MATH 337 Introduction to Cryptography (3 credits)
MATH 352 Real Analysis II (3 credits)
MATH 369 Introduction to Graph Theory (3 credits)
MATH 400 Complex Variables (3 credits)
MATH 431 Topology (3 credits)
MATH 460 Linear Algebra II (3 credits)

Mathematics Electives – 9 credits

9 additional MATH credits at the 200-level or higher, with at least 6 credits at the 300-level or higher.

Other Required Courses

These courses may be taken as university electives or general education. However, they are required for the completion of the major.

Programming Courses – 6 credits

If MATH 210 is counted here, then it cannot count as a Mathematics Elective above.

CPSC 123 *or* 135 (Gen Ed Category C2) (3 credits)

CPSC 136, 220, 223, 240, 241, 242, 243, *or* MATH 210 Mathematical Computing and Typesetting (3 credits)

Laboratory Science Courses – 6-8 credits

Laboratory science sequence: choose two courses with the same prefix from the list below.

ASTR 140, 142, 205

BIOL 104, 106, 108, 120, 122, 160, 216, 218, 220, 222, 224, 226

CHEM 100, 102

EVSC 100, 210, 220, 222

GEOG 204, 304

GEOL 100, 102

PHYS 100, 102

University Electives – 24 to 27 credits

Program Plan Code: BS_MATH_MATH
Effective Date: Spring 2024

B.S. Physics: Astronomy Requirements

The BS Physics major focuses on fundamental knowledge in core areas of physics, engineering, and astronomy coupled with the development of foundational experimental, computational, and observational skills. The program helps students improve their analytical, problem-solving, and effective scientific communication skills through oral, written, and visual mechanisms. This major prepares students for graduate studies and for careers related to fundamental science, engineering, education, finance, public policy, and any other analytically and technologically demanding field. Students majoring in Physics choose from one of four concentration areas: Astronomy, Engineering Physics, Engineering Technology, or Physics.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final major-GPA requirement for Physics: Astronomy Track is 2.0.

Required Physics Core Courses – 21 credits

PHYS 100 Physics I (4 credits)
PHYS 102 Physics II (4 credits)
PHYS 212 Modern Physics (3 credits)
PHYS 220 Electronics (3 credits)
PHYS 230 Optics (3 credits)
PHYS 315 Advanced Lab (2 credits)
PHYS 380 Senior Seminar (2 credits)

Astronomy Track Required Courses – 24 credits

ASTR 140 Planetary Science (3 credits)
ASTR 142 Stellar and Galactic Astronomy (3 credits)
ASTR 242 Exoplanets (3 credits)
ASTR 342 / PHYS 342 Astrophysics (3 credits)
PHYS 245 Mathematical Physics I (3 credits)
PHYS 312 Classical Mechanics I (3 credits)
PHYS 316 Electromagnetism I (3 credits)
PHYS 327 Thermodynamics and Statistical Mechanics (3 credits)

Astronomy Track Electives – 3 credits

Students must discuss with their advisor which electives would best serve their future career goals before choosing them.
ASTR 205 / GEOL 205 Planetary Surface Processes (3 credits)
ASTR 240 The Planetarium (3 credits)
ASTR 350 Practical Astronomy (3 credits)
ASTR 370 Research in Astronomy (3 credits)
PHYS 214 Intro. to Subatomic Physics (3 credits)
PHYS 340 Computational Physics (3 credits)
PHYS 360 Quantum Mechanics I (3 credits)

Other Required Courses – 12 credits

CHEM 102 General Chemistry II (4 credits)
MATH 182 Calculus II (4 credits)
MATH 283 Calculus III (4 credits)

Directed General Education Courses

CHEM 100 General Chemistry I – Category C1 (4 credits)
MATH 181 Calculus I – Category C2 (4 credits)
BIOL 104 Principles of Biology – Category C3 (4 credits)

University Electives – 15 credits

Program Plan Code: BS_PHYS_ASTR
Effective Date: Fall 2020

B.S. Physics: Engineering Physics Requirements

The BS Physics major focuses on fundamental knowledge in core areas of physics, engineering, and astronomy coupled with the development of foundational experimental, computational, and observational skills. The program helps students improve their analytical, problem-solving, and effective scientific communication skills through oral, written, and visual mechanisms. This major prepares students for graduate studies and for careers related to fundamental science, engineering, education, finance, public policy, and any other analytically and technologically demanding field. Students majoring in Physics choose from one of four concentration areas: Astronomy, Engineering Physics, Engineering Technology, or Physics.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final major-GPA requirement for Physics: Engineering Physics Track is 2.0.

Required Physics Core Courses – 21 credits

PHYS 100 Physics I (4 credits)
PHYS 102 Physics II (4 credits)
PHYS 212 Modern Physics (3 credits)
PHYS 220 Electronics (3 credits)
PHYS 230 Optics (3 credits)
PHYS 315 Advanced Lab (2 credits)
PHYS 380 Senior Seminar (2 credits)

Engineering Physics Track Required Courses – 24 credits

ENGR 121 Engineering Drawing and Design (3 credits)
ENGR 130 Engineering Mechanics (3 credits)
ENGR 230 Strength of Materials (3 credits)
ENGR 330 Fluid Mechanics (3 credits)
PHYS 245 Mathematical Physics I (3 credits)
PHYS 312 Classical Mechanics I (3 credits)
PHYS 316 Electromagnetism I (3 credits)
PHYS 327 Thermodynamics and Statistical Mechanics (3 credits)

Engineering Physics Track Electives – 3 credits

Students must discuss with their advisor which electives would best serve their future career goals before choosing them.
ENGR 370 Research in Engineering (3 credits)
PHYS 214 Intro. to Subatomic Physics (3 credits)
PHYS 250 Programming for Experimental Research and Industry (3 credits)
PHYS 290 Intro. to Nanotechnology (3 credits)
PHYS 340 Computational Physics (3 credits)
PHYS 350 Instrumentation in Physics (3 credits)

Other Required Courses – 12 credits

CHEM 102 General Chemistry II (4 credits)
MATH 182 Calculus II (4 credits)
MATH 283 Calculus III (4 credits)

Directed General Education Courses

CHEM 100 General Chemistry I – Category C1 (4 credits)
MATH 181 Calculus I – Category C2 (4 credits)
BIOL 104 Principles of Biology – Category C3 (4 credits)

University Electives – 15 credits

Program Plan Code: BS_PHYS_ENGP
Effective Date: Fall 2020

B.S. Physics: Engineering Technology Requirements

The BS Physics major focuses on fundamental knowledge in core areas of physics, engineering, and astronomy coupled with the development of foundational experimental, computational, and observational skills. The program helps students improve their analytical, problem-solving, and effective scientific communication skills through oral, written, and visual mechanisms. This major prepares students for graduate studies and for careers related to fundamental science, engineering, education, finance, public policy, and any other analytically and technologically demanding field. Students majoring in Physics choose from one of four concentration areas: Astronomy, Engineering Physics, Engineering Technology, or Physics.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final major-GPA requirement for Physics: Engineering Technology Track is 2.0.

Required Physics Core Courses – 21 credits

PHYS 100 Physics I (4 credits)
PHYS 102 Physics II (4 credits)
PHYS 212 Modern Physics (3 credits)
PHYS 220 Electronics (3 credits)
PHYS 230 Optics (3 credits)
PHYS 315 Advanced Lab (2 credits)
PHYS 380 Senior Seminar (2 credits)

Engineering Technology Track Required Courses – 24 credits

ENGR 121 Engineering Drawing and Design (3 credits)
ENGR 130 Engineering Mechanics (3 credits)
ENGR 230 Strength of Materials (3 credits)
PHYS 80 Problem Solving Techniques (3 credits)
PHYS 250 Programming for Experimental Research and Industry (3 credits)
PHYS 290 Introduction to Nanotechnology (3 credits)
PHYS 340 Computational Physics (3 credits)
PHYS 350 Instrumentation in Physics (3 credits)

Engineering Technology Track Electives – 5 credits

Students must discuss with their advisor which electives would best serve their future career goals before choosing them.
ENGR 370 Research in Engineering (1-5 credits)
ENGR 390 Internship in Engineering (1-5 credits)

Other Required Courses – 10 credits

CHEM 102 General Chemistry II (4 credits)
MATH 140 Applied Statistical Methods (3 credits)
MATH 361 Operations Research I (3 credits)

Directed General Education Courses

CHEM 100 General Chemistry I – Category C1 (4 credits)
MATH 122 Applied Calculus (3 credits) *or* MATH 181 Calculus I – Category C2 (4 credits)
BIOL 104 Principles of Biology – Category C3 (4 credits)

University Electives – 15 credits

Program Plan Code: BS_PHYS_ENGT
Effective Date: Fall 2020

B.S. Physics Requirements

The BS Physics major focuses on fundamental knowledge in core areas of physics, engineering, and astronomy coupled with the development of foundational experimental, computational, and observational skills. The program helps students improve their analytical, problem-solving, and effective scientific communication skills through oral, written, and visual mechanisms. This major prepares students for graduate studies and for careers related to fundamental science, engineering, education, finance, public policy, and any other analytically and technologically demanding field. Students majoring in Physics choose from one of four concentration areas: Astronomy, Engineering Physics, Engineering Technology, or Physics.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final major-GPA requirement for Physics is 2.0.

Required Physics Core Courses – 21 credits

PHYS 100 Physics I (4 credits)
PHYS 102 Physics II (4 credits)
PHYS 212 Modern Physics (3 credits)
PHYS 220 Electronics (3 credits)
PHYS 230 Optics (3 credits)
PHYS 315 Advanced Lab (2 credits)
PHYS 380 Senior Seminar (2 credits)

Physics Track Required Courses – 24 credits

PHYS 214 Intro. to Subatomic Physics (3 credits)
PHYS 245 Mathematical Physics I (3 credits)
PHYS 312 Classical Mechanics I (3 credits)
PHYS 316 Electromagnetism I (3 credits)
PHYS 327 Thermodynamics and Statistical Mechanics (3 credits)
PHYS 340 Computational Physics (3 credits)
PHYS 345 Mathematical Physics II (3 credits)
PHYS 360 Quantum Mechanics I (3 credits)

Physics Track Electives – 3 credits

Students must discuss with their advisor which electives would best serve their future career goals before choosing them.
PHYS 250 Programming for Experimental Research and Industry (3 credits)
PHYS 290 Intro. to Nanotechnology (3 credits)
PHYS 314 Classical Mechanics II (3 credits)
PHYS 318 Electromagnetism II (3 credits)
PHYS 350 Instrumentation in Physics (3 credits)
PHYS 361 Quantum Mechanics II (3 credits)
PHYS 370 Research in Physics (3 credits)
PHYS 372-375 Selected Topics in Physics (3 credits)
ASTR Any course above 100 (3 credits)
ENGR Any course above 100 (3 credits)
GEOL 358 General Geophysics (3 credits)

Other Required Courses – 12 credits

CHEM 102 General Chemistry II (4 credits)
MATH 182 Calculus II (4 credits)
MATH 283 Calculus III (4 credits)

Directed General Education Courses

CHEM 100 General Chemistry I – Category C1 (4 credits)
MATH 181 Calculus I – Category C2 (4 credits)
BIOL 104 Principles of Biology – Category C3 (4 credits)

University Electives – 15 credits

Program Plan Code: BS_PHYS
Effective Date: Fall 2020

B.S. Psychology Requirements

The General Psychology major focuses on developing a working knowledge of all fields of psychology and approaching topics with innovative and critical problem-solving techniques. Incorporating diverse perspectives into all our courses is a primary goal of our program. Another important goal of our program is to improve students' communication skills. This major prepares students for jobs in various fields and post-secondary studies in clinical, counseling, school, health, industrial/organizational, and educational psychology. Students gain valuable research experience by working with individual faculty and practical skills by completing supervised internships at local facilities.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Psychology is 2.0.

Required Psychology General Core Courses – 15 credits

PSYC 11 is required for all other PSYC courses.
MATH 17 or higher (but not MAT 40) required for PSYC 200.
Prerequisite of PSYC 200 is required for PSYC 270 and all 300-level courses.
A grade of C or better is required for PSYC 11, PSYC 200, and PSYC 270.
PSYC 11 General Psychology (3 credits)
PSYC 200 Statistics for Social & Behavioral Sciences (3 credits)
PSYC 270 Experimental Psychology (3 credits)
PSYC 379 History & Systems (3 credits)
PSYC 380 Senior Seminar (3 credits)

Developmental Psychology – 3 credits

Select one of the following courses:
PSYC 110 Child Psychology (3 credits)
PSYC 125 Lifespan Development (3 credits)

Social & Individual Awareness – 3 credits

Select one of the following courses:
PSYC 202 Psychology of Personality (3 credits)
PSYC 240 Social Psychology (3 credits)
PSYC 250 Abnormal Psychology (3 credits)

Learning & Cognition – 3 credits

Select one of the following courses:
PSYC 311 Learning, Motivation & Emotion (3 credits)
PSYC 340 Cognitive Psychology (3 credits)

Biopsychology – 3 credits

Select one of the following courses:
PSYC 312 Sensation & Perception (3 credits)
PSYC 325 Physiological Psychology (3 credits)

Psychology Major Electives – 15 credits

Must include at least 2 courses PSYC 300 or above

University Electives – 36 credits

Only 9 credits may be PSYC; additionally, 9 credits must be non-PSYC and at the 100-level or above.

Program Plan Code: BS_PSYC
Effective Date: Spring 2024

B.S. Psychology Paralegal Studies Requirements

The General Psychology major focuses on developing a working knowledge of all fields of psychology and approaching topics with innovative and critical problem-solving techniques. Incorporating diverse perspectives into all our courses is a primary goal of our program. Another important goal of our program is to improve students' communication skills. This major prepares students for jobs in various fields and post-secondary studies in clinical, counseling, school, health, industrial/organizational, and educational psychology. Students gain valuable research experience by working with individual faculty and practical skills by completing supervised internships at local facilities.

The Psychology major with Paralegal Studies offers students a chance to simultaneously obtain a B.A. degree in Psychology and to complete Lehigh Carbon Community College's (LCCC) American Bar Association-approved Paralegal Studies Certificate which focuses on the paralegal profession and the limitations imposed by the unauthorized practice of law.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Psychology Paralegal Studies is 2.0.

Required Psychology General Core Courses – 18 credits

PSYC 11 is required for all other PSYC courses.
MATH 17 or higher (but not MAT 40) required for PSYC 200.
Prerequisite of PSYC 200 is required for PSYC 270 and all 300-level courses.
A grade of C or better is required for PSYC 11, PSYC 200, and PSYC 270.

PSYC 11 General Psychology (3 credits)
PSYC 200 Statistics for Social & Behavioral Sciences (3 credits)
PSYC 270 Experimental Psychology (3 credits)
PSYC 310 Principles of Measurement (3 credits) *(Another 300-level class can be substituted for this class with permission of the department chair)*
PSYC 379 History & Systems (3 credits)
PSYC 380 Senior Seminar (3 credits)

Developmental Psychology – 3 credits

Select one of the following courses:
PSYC 110 Child Psychology (3 credits)
PSYC 120 Adolescent Psychology (3 credits)
PSYC 125 Lifespan Development (3 credits)

Social & Individual Awareness – 3 credits

Select one of the following courses:
PSYC 202 Psychology of Personality (3 credits)
PSYC 240 Social Psychology (3 credits)
PSYC 250 Abnormal Psychology (3 credits)

Learning & Cognition – 3 credits

Select one of the following courses:
PSYC 311 Learning, Motivation & Emotion (3 credits)
PSYC 340 Cognitive Psychology (3 credits)

Biopsychology – 3 credits

Select one of the following courses:
PSYC 312 Sensation & Perception (3 credits)
PSYC 325 Physiological Psychology (3 credits)
PSYC 332 Neuropsychology (3 credits)

Psychology Major Electives – 9 credits

Paralegal Studies – 21 credits

Paralegal Studies Core Courses
PLGL 120 Intro to Paralegal Studies (3 credits)
PLGL 150 Torts and Personal Injury (3 credits)
PLGL 200 Civil Litigation and Procedure (3 credits)
PLGL 215 Law Office Management (3 credits)
PLGL 220 Contract Law & Bus Organizations (3 credits)
PLGL 245 Legal Research and Writing (3 credits)
Required Paralegal Studies Elective Course
Choose a course or a combination of courses from the following list to be taken in a single semester to total 3 credits:
PLGL 125 Workers' Comp Practice (2 credits)
PLGL 130 Social Security Disability Practice (2 credits)
PLGL 135 Interviewing for Paralegals (1 credit)
PLGL 228 Immigration Law for Paralegals (3 credits)
PLGL 230 Estates and Trusts (3 credits)
PLGL 235 Family Law (3 credits)
PLGL 240 Bankruptcy Law (3 credits)
PLGL 250 Legal Internship (3 credits)
PLGL 255 Legal Writing (3 credits)

University Electives – 15 to 18 credits

Only 12 credits may be PSYC.

Program Plan Code: BS_PSYC_PLST
Effective Date: Fall 2018

B.S. Public Relations Requirements

The BS in Public Relations teaches critical thinking, writing, and design skills that prepare students for a variety of strategic communications careers. PR professionals help build and maintain an organization's image or brand identity via media relations, social media, event planning, and crisis management. Our program enables students to build compelling portfolios from their coursework, their required internship, and their time working for our on-campus public relations agency. Students are trained on popular software and content platforms in our award-winning PR lab and are prepared for work in the non-profit and for-profit arenas as well as for graduate study.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Public Relations is 2.5.

Required Public Relations Core Courses – 36 credits

PRWR 111 Journalism I (3 credits)
PRWR 218 Writing for Public Relations (3 credits)
PRWR 226 Desktop Publishing Writing (3 credits)
COMM 319 Integrated Marketing Communication (3 credits)
COMM 170 Introduction to Public Relations (3 credits)
COMM 235 PR Cases & Campaigns (3 credits)
COMM 241 PR Processes & Techniques (3 credits)
PREL 310 Research for Public Relations (3 credits)
PREL 250 Public Relations Ethics & Law (3 credits)
PREL 380 The Agency Experience, Part One (3 credits)
PREL 381 The Agency Experience, Part Two (3 credits)
PREL 390 Internship in Public Relations (3 credits)

Public Relations Major Electives – 6 credits

Select any two courses with COMM, MKTG, PREL, or PRWR prefixes.

Diversity Requirement – 9 credits

Choose any three courses from below. Other courses may be used to fulfill requirement with permission of the PR program director:
ANTH/SOCI 213 World Religions (3 credits)
ANTH 215 Gender Across Cultures (3 credits)
ANTH/SOCI 241 Race and Ethnicity (3 credits)
ANTH 245 Language & Diversity (3 credits)
ANTH/PSYCH 290 Culture & Personality (3 credits)
ENGL 132 Contemporary Gay & Lesbian Literature (3 credits)
ENGL 137 Experiences in African American Literature (3 credits)
ENGL 234 Ethnic American Literature (3 credits)
ENGL 238 African Diasporic Literature (3 credits)
ENGL/WGST 323 Native American Women Writers (3 credits)
HIST 150 Minorities in American History (3 credits)
HIST 225 A History of the Jewish People in Modern Times (3 credits)
HIST 240 African American History (3 credits)
HIST 256 The Modern Middle East (3 credits)
PHIL 40 Into to Ethics (3 credits)

PHIL 60 Intro to Religious Ethics (3 credits)
PHIL 113 Environmental Philosophy (3 credits)
PSYC 208 Psychology of Gender (3 credits)
PSYC 217 Psychology and the Law (3 credits)
PSYC 220 Industrial/Organizational Psychology (3 credits)
PSYC 240 Social Psychology (3 credits)
SOCI 207 Families & Social Class (3 credits)
SOCI/WGST 217 LGBTQ Studies (3 credits)
SOCI 235 Sociology of Gender (3 credits)
WGST 10 Intro to Women's Studies (3 credits)
WGST 130 Interpersonal Communication (3 credits)
WGST 271 Sexualities & Communication in Everyday Life (3 credits)
WGST 285 Gender Communication (3 credits)
WGST 329 Feminist and Gender Theories (3 credits)

University Electives – 27 credits

Choose any university course.

Program Plan Code: BS_PBRL
Effective Date: Fall 2018

BSW Social Work Requirements

The Social Work major offers opportunities for careers that offer deep personal meaning, action, diversity of field, satisfaction, and an abundance of options. With a Bachelor of Social Work (BSW) you'll be prepared to apply your passion for helping others in a fulfilling career promoting social justice, community, family, and personal well-being. You will take a 400-hour senior level internship in fields such as mental health, addictions, community development, advocacy, schools, hospitals, public and private child welfare agencies. At any time during the four-year program, you may develop a plan to complete both the BSW and the Master of Social Work (MSW) in as little as five years.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Social Work is 2.0. A "C" or better is required in all social work courses.

Required Social Work Core Courses – 27 credits

SOWK 100 Introduction to Social Work and Social Welfare (3 credits)
SOWK 130 Poverty and Social Welfare (3 credits)
SOWK 160 Human Behavior and Social Environment and Social Work (3 credits)
SOWK 200 Professional Context of Social Work Practice (3 credits)
SOWK 250 Social Work Practice with Individuals: Practice I (3 credits)
SOWK 255 Social Welfare Policy (3 credits)
SOWK 265 Social Work Practice with Groups and Families: Practice II (3 credits)
SOWK 280 Social Work Practice with Communities and Organizations: Practice III (3 credits)
SOWK 360 Applied Methods of Social Work Research (3 credits)

Field Instruction I – 3 credits

Choose one:
SOWK 381 Field Instruction in Social Work I (3 credits)
SOWK 491 Internship for Advanced Standing I (3 credits)

Professional Seminar I – 3 credits

Choose one:
SOWK 382 Professional Seminar in Social Work I (3 credits)
SOWK 492 Generalist Social Work Practice for Advanced Standing (3 credits)

Field Instruction II – 3 credits

Choose one:
SOWK 383 Field Instruction in Social Work II (3 credits)
SOWK 493 Internship for Advanced Standing II (3 credits)

Professional Seminar II – 3 credits

Choose one:
SOWK 384 Professional Seminar in Social Work II (3 credits)
SOWK 494 Generalist Social Work Practice for Advanced Standing (3 credits)

Social Work Electives – 9 credits

Select any 3 SOWK courses not previously listed.

Other Required Courses – 12 credits

Any PHIL course (3 credits)
ANTH 10 (3 credits)
POLI 10 (3 credits)
Additional course relevant to social work major with advisor's approval (3 credits)

Directed General Education Courses – 18 to 24 credits

These courses may be taken in fulfillment of General Education, as University Electives, or as part of a minor. All must be approved General Education courses.
PSYC 11 – Category B (3 credits)
PSYC 125 – Category B (3 credits)
SOCI 10 – Category B (3 credits)
BIOL 12 *or* [BIOL 10 + (BIOL 140 *or* BIOL 130)] – Category C1 (3-6 credits)
MATH 140 *or* [MATH 17 + PSYC 200] – Category C2 (3-6 credits)

University Electives – 15 to 18 credits

Program Plan Code: BSW_SOWK
Effective Date: Fall 2018

Actuarial Science Minor Requirements

The Actuarial Science Minor program provides students with essential knowledge and skills vital to an actuarial career and prepares them for success in two of the mandatory national actuarial exams.

No student may count more than three courses from their major program check sheet. A student must take at least one course at the 200 level or higher from a department outside of their major.

Required Actuarial Science Minor Core Courses – 12 credits

Prerequisite for MATH 301 is (MATH 224 or CPSC 22) and MATH 283, each with a grade of "C" or better. Prerequisite for MATH 305 is MATH 182.
MATH 301 Probability & Statistics I (3 credits)
MATH 305 Mathematics of Finance I (3 credits)
ECON 110 Principles of Macroeconomics (3 credits)
ECON 120 Principles of Microeconomics (3 credits)

Elective Courses – 6 credits

Choose two courses. Prerequisite for ECON 205 is ECON 110 and ECON 120. Prerequisite for ECON 210 is ECON 110 and ECON 120. Prerequisite for MATH 302 is MATH 301. Prerequisite for MATH 306 is MATH 283 with a grade of "C" or better and MATH 305. Prerequisite for MATH 403 is MATH 302. The topics for MATH 372 should be related to Probability & Statistics, Mathematics of Finance, and/or Economics.

ECON 205 Intermediate Microeconomics (3 credits)
ECON 210 Intermediate Macroeconomics (3 credits)
MATH 302 Probability & Statistics II (3 credits)
MATH 306 Mathematics of Finance II (3 credits)
MATH 372 Independent Study and/or Project in Mathematics (3 credits)
MATH 403 Analysis of Data Sets (3 credits)

Program Plan Code: ACSC
Effective Date: Fall 2016

Anthropology Minor Requirements

The anthropology minor provides students an overview of human behavior from a comparative and holistic perspective, and how to apply this knowledge to understand contemporary issues in our own and other cultures. Minors may take courses focused on each of anthropology's four fields: social-cultural anthropology, linguistic anthropology, archeology and biological anthropology. The minor helps to prepare students for careers in a variety of professions concerned with contemporary social and cultural processes, including careers in social services, international affairs, cultural events, museums, cultural resources management, public service and private business.

Program requirements: 18 credits. At least 9 semester hours must be taken at the 200-level or above. A course cannot count as an elective if used as a required course. The final GPA requirement for the Anthropology minor is 2.0. The Anthropology minor is not available to Anthropology major students.

Required Anthropology Core Courses – 9 credits

Select two of the following courses:
ANTH 10 Cultural Anthropology (3 credits)
ANTH 20 Physical Anthropology (3 credits)
ANTH 30 Introduction to Archaeology (3 credits)
ANTH 40 Language and Culture (3 credits)
Select one of the following courses:
ANTH 201 Archaeology Theory and Technique (3 credits)
ANTH 202 Research Methods in Physical Anthropology (3 credits)
ANTH 236 Ethnographic Research Methods (3 credits)
ANTH 360 History and Theory of Anthropology (3 credits)
ANTH 380 Senior Seminar (3 credits)
ANTH 390 Internship (3 credits)

Anthropology Elective Courses – 9 credits

At least 9 semester hours must be taken at the 200-level or above. A course cannot count as an elective if used as a required course.

Program Plan Code: ANTH
Effective Semester: Fall 2011

Applied Engineering Minor Requirements

The Applied Engineering minor provides students with foundational knowledge of classical physics and an applied knowledge of the modern engineering design process. Students may choose the electives to focus on specific topics in physics and many engineering fields. This minor helps students develop experimental, design, computational, problem-solving, critical thinking, and effective scientific communication skills. It prepares students for careers in places where design, problem-solving abilities, and effective communication are great assets.

Program requirements: 20 credits.

Required Courses – 11 Credits

PHYS 100 Physics I *or* PHYS 40 General Physics I (4 credits)
PHYS 102 Physics II *or* PHYS 42 General Physics II (4 credits)
ENGR 121 Engineering Drawing & Design (3 credits)

Elective Courses – 9 Credits

Select a minimum of three courses from the following:
ENGR 130 Engineering Mechanics (3 credits)
ENGR 230 Strength of Materials (3 credits)
ENGR 330 Fluid Mechanics (3 credits)
ENGR 370 Research in Engineering (3 credits)
ENGR 390 Internship in Engineering (3 credits)
PHYS 220 Electronics (3 credits)
PHYS 230 Optics (3 credits)
PHYS 250 Programming for Experimental Research & Industry (3 credits)
PHYS 290 Introduction to Nanotechnology (3 credits)
PHYS 350 Instrumentation in Physics (3 credits)

Notes:
A student majoring in B.S. Physics: Engineering Physics or B.S. Physics: Engineering Technology may not minor in Applied Engineering.
No student may use more than three courses from their major or another minor toward the Applied Engineering Minor.

Program Plan Code: APEN
Effective Date: Fall 2024

Astronomy Minor Requirements

The Astronomy minor provides students of any major with educational options to explore the universe. The program is suitable for any student interested in astronomy, and it particularly benefits students who are majoring in collaborative fields and may pursue careers in a wide range of areas such as aerospace and engineering industries, science-fiction writing, astrophotography, science communication and journalism, teaching, and public policy and law. Students may take advantage of on-campus resources (observatory and planetarium) and may participate in research projects that utilize space-based observations.

Program requirements: 20 credits

Required Courses – 14 credits

PHYS 040 General Physics I *or* PHYS 100 Physics I (4 credits)
PHYS 042 General Physics II *or* PHYS 102 Physics II (4 credits)
ASTR 140 Planetary Science (3 credits)
ASTR 142 Stellar & Galactic Astronomy (3 credits)

Elective Courses – 6 credits

Select at least 2 additional ASTR courses above the 200-level.

Program Plan Code: ASTR
Effective Date: Fall 2015

Biochemistry Minor Requirements

The Biochemistry minor focuses on understanding life at the level of how molecules interact and react, explaining such things as how oxygen is transported in the blood, how food is converted into metabolic energy, and how medicines work within our bodies. The minor applies fundamental chemical concepts of general and organic chemistry to biological processes. An emphasis is placed on critical thinking and quantitative analysis along with hands-on laboratory experience using state-of-the-art instrumentation.

Program requirements: 24 credits.

Required Courses – 24 Credits

CHEM 100 General Chemistry I (4 credits)
CHEM 102 General Chemistry II (4 credits)
CHEM 214 Organic Chemistry I (4 credits)
CHEM 216 Organic Chemistry II (4 credits)
CHEM 310 Biochemistry I (4 credits)
CHEM 312 Biochemistry II (4 credits)

Program Plan Code: BIOC
Effective Date: Fall 2005

Bioethics Minor Requirements

The minor in Bioethics is designed to provide students with a broad understanding of the field of bioethics, including medical and environmental ethics. The program emphasizes understanding of biology and environmental science, ethical theories and values, and philosophical theories concerning humanity's relationship to the natural world. The minor in Bioethics prepares students for graduate studies or for a career in any profession linked to science, law, and medicine.

Program requirements: 18-19 credits. The final GPA requirement for Bioethics Minor is 2.0.

Courses with an asterisk (*) require approval of topic by Philosophy department to count toward the minor.

Required Bioethics Minor Core Courses – 9 credits

PHIL 40 Introduction to Ethics (3 credits)
PHIL 210 Medical Ethics (3 credits)
PHIL 113 Environmental Philosophy (3 credits)

Biology Requirement – 3-4 credits

Select one of the following
BIOL 10/11 Introduction to Biology with Lab (3 credits)
BIOL 104/105 Principles of Biology with Lab (4 credits)

Physical Science Requirement – 3 credits

Select one of the following
BIOL 130 Environmental Issues: Global Perspectives (3 credits)
BIOL 140 Biology and Society (3 credits)
BIOL/EVSC 222/223 Environmental Biology (3 credits)
BIOL 242/243 Ecosystem Ecology with Lab (3 credits)
BIOL 244/245 Ecology with Lab (3 credits)
EVSC 100/101 Introduction to Environmental Science (3 credits) *
GEOG 210 Environmental Conservation (3 credits)

Electives – 3 credits

Select one of the following
ANTH 125 The Anthropology of Death and Dying (3 credits)
ANTH 254 Medical Anthropology (3 credits)
ANTH 272 Human Genetics (3 credits)
ECON 322 The Economics of Health and Medicine (3 credits)
GEOG 212 Geography of Natural Hazards (3 credits)
GEOG 225 Spaces of Globalization (3 credits)
GEOG 323 Global Warming (3 credits)
GEOG 341 Environmental Planning (3 credits)
HLTH 370 Selected Topics in Health (3 credits) *
HLTH 380 Independent Study in Health (3 credits) *
HLTH 395 Honors Health Independent Study/Thesis (3 credits) *
HLTH 421 Critical Issues in Health (3 credits)
PHIL 125 Philosophical Aspects of Death and Dying (3 credits)

PHIL 215 Persons, Life, and Death (3 credits)
PHIL 235 Topics in Moral Theory (3 credits)
PHIL 245 Human Love and Sexual Morality (3 credits)
PHIL 330 Philosophy of Science (3 credits)
POLI 258 The Administration of U.S. Environmental Law (3 credits)
POLI 435 Technology and Contemporary Politics and Society (3 credits)
PSYC 255 Environmental Psychology (3 credits)
PSYC 331 Health Psychology: Biopsychosocial Factors in Health and Illness (3 credits)
SOCI/SOWK 290 Social Gerontology and Social Welfare (3 credits)
SOCI 335 Introduction to Public Health (3 credits)
SOWK 130 Poverty and Social Welfare (3 credits)
SOWK 328 Child Welfare and Social Work (3 credits)

Program Plan Code: PHLB
Effective Date: Spring 2014

Biology Minor Requirements

The biology minor provides interested student with a foundation in the unifying principles of life from cells to biodiversity, detailed study of the plant and animal kingdoms, and the opportunity for each student in the minor to focus on topics in biology of interest to them. These topics range from cells to microbiology, to human biology, to advanced study of plants and animals, to ecology and evolution. This minor allows students to expand their knowledge of topics outside their major and sometimes to forge a career path that blends concepts from their major with ideas from biology.

Program requirements: 21 credits

Required Biology Courses – 12 credits

BIOL 104 Principles of Biology (4 credits)
BIOL 106 Introduction to Zoology (4 credits)
BIOL 108 Introduction to Botany (4 credits)

Elective Courses – 9 credits

Select three BIOL courses. Two electives must be at the 200-level or above and one elective must be at the 300-level or above.

Note:
The following BIOL courses may not be used to satisfy the minor in Biology: BIOL 380 Senior Seminar in Biology and BIOL 390 Internship in Biology.

Program Plan Code: BIOL
Effective Date: Fall 1997

Case Management Minor Requirements

The Case Management Minor, based on the planned change model of practice, provides the opportunity for: personal growth and development; practical hands-on assignments; real-life examples; career enhancement for the helping professional. The minor is designed to assist students majoring in Communication Studies, Criminal Justice, Education, Professional Studies, Psychology, Social Work, Sociology and/or embarking on a career as a helping professional.

Program requirements: 18 credits. The final GPA requirement for Case Management Minor is 2.00. Courses with an asterisk have restrictions; see notes below.

Required Case Management Core Course – 12 credits

SOWK 320 Case Management an Interdisciplinary Approach (3 credits)
SOWK 321 Professional Dimensions of Case Management *or* SOWK 200 Professional Context of Social Work Practice* (3 credits)
PSYC 250 Abnormal Psychology *or* SOWK 160 Human Behavior in the Social Environment* (3 credits)
SOCI 110 Contemporary Social Problems *or* SOWK 130 Poverty and Social Welfare* (3 credits)

Elective Courses* – 6 credits

Choose two courses from the following courses:
COMM 130 Interpersonal Communications (3 credits)
COMM 210 Persuasion (3 credits)
COMM 215 Small Group Communication (3 credits)
CRJU 221 Juvenile Justice System (3 credits)
CRJU/SOCI 250 Criminology (3 credits)
CRJU 270 Management of Offenders (3 credits)
CRJU 272 Community Corrections (3 credits)
CRJU 274 Policy, Punishment, and Society (3 credits)
PRST 185 Fundamentals of Personal Finance (3 credits)
PSYC 120 Adolescent Psychology (3 credits)
PSYC 125 Life Span Development (3 credits)
PSYC 217 Forensic Psychology (3 credits)
PSYC 331 Health Psychology (3 credits)
SOCI 207 Families and Social Class (3 credits)
SOCI 241 Race and Ethnicity (3 credits)
SPEE 101 Early Intervention for Students with Disabilities (3 credits)
SPEE 201 Cognitive Development (3 credits)
SOWK 285 Essential Skills in Helping (3 credits)
SOWK 286 Social Work and Substance Abuse (3 credits)
SOWK/SOCI 290 Gerontology and Social Work (3 credits)
SOWK 315 Human Services Administration (3 credits)
SOWK 328 Child Welfare and Social Work (3 credits)
Other Social Work course by permission

Notes:
Courses listed in the minor have individual and department prerequisites and permissions. Students of this minor are not exempt from these requirements unless otherwise stated. While SOWK 250 is

generally a prerequisite for Social Work Electives (non-mandatory SOWK courses), social work students may take SOWK 320 and 321 concurrent with SOWK 250. Students in other majors are exempt from the SOWK 250 prerequisite.

**Restrictions for social work majors only:*
1. Required courses for the minor: SOWK 320, SOWK 321, SOCI 110, PSYC 250
2. Electives: Social Work Majors can use no more than one course with SOWK prefix to fulfill minor electives

**Restrictions for all non-social work majors: All non-social work majors can use no more than 3 courses with a course prefix of their major.*

Program Plan Code: SWKC
Effective Date: Spring 2018

Chemistry Minor Requirements

The Chemistry minor stresses foundational chemical principles in general, organic, and analytical chemistry. It allows students to supplement their major field of study with in-depth chemistry knowledge and laboratory techniques that facilitate interdisciplinary problem-solving skills vital to many career pathways.

Program Requirements: 23-24 credits

Required Courses – 20 Credits

CHEM 100 General Chemistry I (4 credits)
CHEM 102 General Chemistry II (4 credits)
CHEM 214 Organic Chemistry I (4 credits)
CHEM 216 Organic Chemistry II (4 credits)
CHEM 230 Analytical Chemistry I (4 credits)

Elective Courses – 3 to 4 Credits

This course must be at the 300-level with the consent of the minor department advisor.

Program Plan Code: CHEM
Effective Date: Fall 1982

Computer Science Minor Requirements

Required Computer Science Minor Courses – 12 credits

CPSC 125 Discrete Math for Computing I (3 credits)
CPSC 135 Computer Science I (3 credits)
CPSC 136 Computer Science II (3 credits)
CPSC 237 Data Structures (3 credits)

Required Computer Science Minor Courses – 3 credits

Choose one course.
CPSC 310 Programming Languages (3 credits)
CPSC 328 Network and Secure Programming (3 credits)
CPSC 343 Operating Systems (3 credits)

Elective Courses – 6 credits

Any one 200-level or higher CPSC course.
Any one 300-level or higher CPSC course.

Program Plan Code: CPCS
Effective Date: Fall 2024

Creative Writing Certificate Requirements

Program requirements: 9 credits

Required Creative Writing Core Courses – 3 credits

PRWR 108 Introduction to Creative Writing (3 credits)

Electives – 6 credits

Select two courses from the following:
CTME 70 Scriptwriting (3 credits)
CTME 270 Script to Screen (3 credits)
CTME 325 Comedy Writing and Production for Sitcoms and Screen Media (3 credits)
PRWR 235 Lyric Writing (3 credits)
PRWR 244 Story Analysis and Screenplay Development (3 credits)
PRWR 251 Prose Poetry, Flash Fiction and other Short-Short Stories (3 credits)
PRWR 304 American Literary Journalism (3 credits)
PRWR 311 Creative Writing – Short Fiction (3 credits)
PRWR 312 Creative Writing – Poetry (3 credits)
PRWR 313 Creative Writing – Drama (3 credits)
PRWR 330 Writing the Novel (3 credits)
PRWR 400 Creative Writing – Theory and Practice (3 credits)

Program Code: CERT_CRWT
Effective Date: Spring 2023

Criminal Justice Minor Requirements

The minor in criminal justice provides students with an understanding of the origin, aims, operation, and impact of the criminal justice system. Students from a variety of majors choose to minor in criminal justice. The minor requires successful completion of Introduction to Criminal Justice, in addition to five other criminal justice courses. Half of the courses in the minor must be at the 200-level or above, and at least half of the eighteen credits must be taken at Kutztown University.

Required Criminal Justice Core Course – 3 credits

CRJU 010 Introduction to Criminal Justice (3 credits)

Elective courses – 15 credits

Select five additional courses with CRJU prefix other than CRJU 010.

Note:

In order to receive transcript recognition of a minor program, students must complete half of the minor course work at KU AND must earn a minimum G.P.A. of 2.00 in their minor course work. A grade of "C" or higher is required for CRJU 010 Intro to Criminal Justice. At least nine S.H. must be taken at the 200 level or above. CRJU 880s will count as 100-level courses.

Program Plan Code: CRJU
Effective Date: Fall 2011

Cultural Geography Minor Requirements

The Cultural Geography Minor enriches an education in the social sciences by providing a geographical perspective on global issues. The minor expands employment opportunities as its perspectives are valued by governmental agencies, non-governmental organizations, business and marketing firms, and education.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. Program requirements: 18 credits. The final GPA requirement for the Cultural Geography Minor is 2.0. Geography majors are not eligible for this minor.

Required Cultural Geography Minor Program – 6 credits

GEOG 020 Our Human Earth: Introduction to Cultural Geography (3 credits)
GEOG 101 World Regional Geography (3 credits)

Cultural Geography Course – 3 credits

Choose one:
GEOG 210 Environmental Conservation (3 credits)
GEOG 225 Spaces of Globalization (3 credits)
GEOG 335 Political Geography (3 credits)
GEOG 338 Geography of Population (3 credits)

Economic Geography Course – 3 credits

Choose one:
GEOG 220 Economic Geography (3 credits)
GEOG 223 Introduction to Transportation Geography (3 credits)
GEOG 225 Spaces of Globalization (3 credits)
GEOG 310 Urban Geography (3 credits)

Regional Geography Course – 3 credits

Choose one:
GEOG 110 Geography of United States and Canada (3 credits)
GEOG 112 Geography of Pennsylvania (3 credits)
GEOG 120 Geography of Sub-Saharan Africa (3 credits)
GEOG 140 Geography of Europe (3 credits)

Elective Course – 3 credits

Choose one course from those listed above.

Program Plan Code: CUGO
Effective Date: Fall 2022

Cybersecurity Certificate Requirements

Program requirements: 18 credits. The final GPA requirement for the Cybersecurity certificate is 2.0. The Cybersecurity certificate also requires at least half of the coursework to be completed at Kutztown University. No student may use more than three courses from their major towards the Cybersecurity certificate.

Required Cybersecurity Courses – 12 credits

CRJU 170 Introduction to Security Management (3 credits)
CPSC 111 Computer Forensics (3 credits)
CPSC 253 Information Technology Systems (3 credits)
CPSC 341 Introduction to Information Security (3 credits)

Elective Courses – 6 credits

Choose two courses from the following:
CRJU 171 Loss Prevention and Asset Protection (3 credits)
CRJU 215 Introduction to Crime Mapping and Analysis (3 credits)
CPSC 351 Digital Forensics for Computer Scientists (3 credits)
CPSC 441 Advanced Information Security (3 credits)

Note:
To receive transcript recognition of a minor program, students must complete half of the minor course work at KU AND must earn a minimum G.P.A. of 2.00 in their certificate course work.

Program Plan Code: CERT_RCBS
Effective Date: Fall 2021

Database Design and Implementation Certificate

Required Database Design and Implementation Core Courses – 9 credits
CPSC 256 SQL Programming (3 credits)
CPSC 356 Introduction to Database Management Systems (3 credits)
CPSC 456 Database Management Systems I (3 credits)

Program Plan Code: CERT_DBDI
Effective Date: Spring 2024

Data Science Minor Requirements

Required Courses – 12 credits

CPSC 123 Introduction to Scientific Programming *or* CPSC 135Computer Science I (3 credits)
CPSC 223 Advanced Scientific Programming (3 credits)
CPSC 256 SQL Programming (3 credits)
MATH 140 Applied Statistical Methods *or* MATH 150 Introduction to Biostatistics (3 credits)
or MATH 301 Probability and Statistics I (3 credits)

Elective CPSC Courses – 3 or 6 credits

CPSC 458 Data Mining and Predicative Analysis (3 credits)
CPSC 459 Introduction to Big Data (3 credits)

Elective MATH Courses – 3 or 6 credits

MATH 250 Applied Regression Analysis (3 credits)
MATH 304 Statistical Programming (3 credits)
MATH 325 Applied Time Series Analysis (3 credits)

Notes:
Students must take a total of three elective courses: 2 CPSC courses and 1 MATH course, or 1 CPSC course and 2 MATH courses.

Program Plan Code: DASC
Effective Date: Fall 2024

Diversity, Equity, Inclusion, and Community Certificate Requirements

Program requirements: 7 credits. The final GPA requirement for the Diversity, Equity, Inclusion, and Community certificate is 2.0 with a minimum grade of C or higher in all courses. The Diversity, Equity, Inclusion, and Community Certification requires all coursework be completed at Kutztown University. The certificate capstone course cannot be used for the BA Sociology degree.

Required Diversity, Equity, Inclusion, and Community Core Courses – 7 credits

Choose two courses from the following:
SOCI 217 LGBTQ Studies (3 credits)
SOCI 235 Sociology of Gender (3 credits)
SOCI 224 Immigration and Assimilation (3 credits)
SOCI 241 Race and Ethnicity (3 credits)

Capstone Course – 1 credit

SOCI 30X Certificate Capstone (1 credit)

Program Plan Code: CERT_DEIC
Effective Semester: Fall 2025

Environmental Geography Minor Requirements

The Environmental Geography Minor enriches an education in the environmental and social sciences by providing geographical perspectives on global issues. The minor also expands employment opportunities as its perspectives are valued by governmental agencies, non-governmental organizations, environmental conservation groups, business and marketing firms, para-legal professions, and education.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. Program requirement: 18 credits. The final GPA requirement for the Environmental Geography Minor is 2.0. Geography majors are not eligible for this minor.

Required Environmental Geography Minor Courses– 6 credits

GEOG 10 Planet Earth Users' Guide: Intro to Physical Geography (3 credits)
GEOG 274 Introduction to Geographic Information Systems (3 credits)

Elective Courses – 12 Credits

Choose four.
GEOG 204 Meteorology / Lab (3 credits)
GEOG 210 Environmental Conservation (3 credits)
GEOG 212 Geography of Natural Hazards (3 credits)
GEOG 304 Weather Analysis / Lab (3 credits)
GEOG 322 Climatology (3 credits)
GEOG 323 Global Warming and the Science of Climate Change (3 credits)
GEOG 330 Cartography (3 credits)
GEOG 333 Advanced Geographic Information Systems (3 credits)
GEOG 343 Land Use Planning (3 credits)
GEOG 347 Remote Sensing of the Environment / Lab (3 credits)
GEOG 375 Research Methods (3 credits)
GEOG 394 Internship in Geography (3 credits)

Program Plan Code: GEOE
Effective Date: Spring 2023

Forensics Studies Minor Requirements

The minor in forensic studies is an 18-credit interdisciplinary collaboration which includes criminal justice, anthropology, biology, chemistry, psychology, and computer science. The minor requires successful completion of CRJU 301 Investigation and Intelligence, which reinforces an understanding of the criminal justice system.

In order to receive transcript recognition of a minor program, students must complete half of the minor course work at KU and must earn a minimum G.P.A. of 2.00 in their minor course work. No student may use more than two courses from their major or another minor toward the Forensic Studies minor. Please note that prerequisites are required for courses marked with an asterisk (*).

Required Forensic Studies Courses – 3 credits

CRJU 301 Investigation and Intelligence* (3 credits)

Core Courses – 6 credits

Choose two courses from the following:
ANTH 258 Forensic Anthropology (3 credits)
BIOL 111 Forensic Biology* (3 credits)
CHEM 051 Introduction to Forensic Science (3 credits)
CPSC 111 Computer Forensics *or* CPSC 351 Digital Forensics* (3 credits)

Elective courses – 9 credits

Choose three courses from the following courses not previously used in Core Course requirement:
ANTH 258 Forensic Anthropology (3 credits)
ANTH 320 Archeological Field Methods (3 credits)
ANTH 321 Advanced Archeological Field Methods (3 credits)
BIOL 111 Forensic Biology* (3 credits)
CHEM 051 Introduction to Forensic Science (3 credits)
CRJU 181 Criminal Law (3 credits)
CRJU 182 Criminal Procedure (3 credits)
CRJU 320 Evidence* (3 credits)
CPSC 111 Computer Forensics *or* CPSC 351 Digital Forensics* (3 credits)
PSYC 217 Psychology and the Law* (3 credits)
PRWR 205 Scientific Writing* (3 credits)

Program Plan Code: MCRF
Effective Date: Fall 2016

Game Development Minor Requirements

Required Computer Science Core Courses – 12 credits

CPSC 120 Introduction to Creative Graphical Coding (3 credits)
or CSPC 135 Computer Science I (3 credits)
CPSC 220 Object Oriented Multimedia Programming (3 credits)
or CPSC 136 Computer Science II (3 credits)
CPSC 240 Fundamentals of Game Development (3 credits)
CPSC 320 2D Game Development (3 credits)
or CPSC 323 3D Game Development (3 credits)

Required Animated Art Courses – 3 credits

ANIA 271 3D Prototyping (3 credits)

Elective Courses – 6 to 7 credits

CODS 10 Digital Foundations (3 credits)
or CPSC 102 Computer Graphics (3 credits)
ARTH 27 History of Animation, Game Art, and Interactive Media (3 credits)
or ANIA 302 Digital Futures (3 credits)
ANIA 171: Introduction to 3D Modeling and Rendering
CODS 347 Interactive Spaces (2 credits)
CODS 348 VR/AR/Mixed Reality (2 credits)
CODS 356 Creative Coding (2 credits)

Program Plan Code: CSGD
Effective Date: Spring 2025

Geography Minor Requirements

The Geography Minor instills in students a spatial perspective on the processes and problems that operate at varying geographic scales. Through courses in physical and human geography, and in geographic techniques, students will be able to synthesize and integrate concepts and techniques needed to address the important issues facing the world today. The Geography Minor expands employment opportunities in business and education, and with governmental and non-governmental agencies.

Program requirements: 18 credits. The final GPA requirement for the Environmental Geography Minor is 2.0. Geography majors are not eligible for this minor.

Required Geography Minor Core Courses – 6 credits

GEOG 10 Planet Earth Users' Guide: Introduction to Physical Geography (3 credits)
GEOG 20 Our Human Earth: Introduction to Cultural Geography (3 credits)

Technique Course – 3 credits

Choose one.
GEOG 274 Introduction to Geographic Information System and Lab (3 credits)
GEOG 330 Cartography (3 credits)
GEOG 333 Advanced Geographic Information Systems (3 credits)
GEOG 343 Land Use Planning (3 credits)
GEOG 347 Remote Sensing of the Environment / Lab (3 credits)
GEOG 375 Research Methods in Geography (3 credits)

Geography Electives – 9 credits

Only one regional course is acceptable in this section. At least one course must be at the 200-level or above. Choose three.

Cultural Geography Courses
GEOG 210: Environmental Conservation (3 credits)
GEOG 225: Spaces of Globalization (3 credits)
GEOG 335: Political Geography (3 credits)
GEOG 338: Geography of Population (3 credits)

Physical Geography Courses
GEOG 204: Meteorology Lecture / Lab (3 credits)
GEOG 212: Geography of Natural Hazards (3 credits)
GEOG 304: Weather Analysis Lecture / Lab (3 credits)
GEOG 322: Climatology (3 credits)
GEOG 323: Global Warming & Science of Climate Change (3 credits)

Economic Geography Courses
GEOG 220: Economic Geography (3 credits)
GEOG 223: Introduction to Transportation Geography (3 credits)
GEOG 225: Spaces of Globalization (3 credits)
GEOG 310: Urban Geography (3 credits)

Geographic Technique Courses
GEOG 274: Introduction to GIS Lecture / Lab (3 credits)
GEOG 330: Cartography (3 credits)
GEOG: 333 Advanced GIS (3 credits)

GEOG: 343 Land Use Planning (3 credits)
GEOG: 347 Remote Sensing Lecture / Lab (3 credits)
GEOG: 375 Research Methods in Geography (3 credits)
Regional Geography Courses
GEOG: 101 World Regional Geography (3 credits)
GEOG: 110 Geography of United States and Canada (3 credits)
GEOG: 112 Geography of Pennsylvania (3 credits)
GEOG: 120 Geography of Sub-Saharan Africa (3 credits)
GEOG: 140 Geography of Europe (3 credits)

Program Plan Code: GEOG
Effective Date: Spring 2023

Geology Minor Requirements

Students who pursue the Geology minor develop a deeper understanding of the Earth on a scientific level. The Geology minor provides two courses that establish the fundamentals of all geology, then gives students the freedom to choose three additional, more advanced courses in aspects of geology most interesting to them. The Geology minor does not provide the complete coverage required for licensure as a professional geologist, but does give students a very sound understanding that will feed their curiosity and supplement their career goals.

Program Requirements: 20 credits.

Required Courses – 8 Credits

GEOL 100 Physical Geology (4 credits)
GEOL 102 Historical Geology (4 credits)

Elective Courses – 12 Credits

Select any four GEOL courses at the 200-level or above except GEOL 237.

Program Plan Code: GEOL
Effective Date: Fall 1991

Geospatial-Information Technology Certificate Requirements

Geospatial-Information Technology refers to the various forms of technology used to collect, analyze, and display geographic data. These technologies include Remote Sensing (air photos and satellite imagery), Global Positioning Systems (GPS, GNSS), and Geographic Information Systems (GIS). Developing skills in these technologies prepares students for a wide variety of rewarding careers.

Program requirements: 12 credits. The final GPA requirement for Geospatial-Information Technology Certificate is 3.0. Transfer Courses will not be automatically accepted. A student seeking to have up to two transfer courses count towards the certificate must submit a portfolio of relevant coursework for evaluation by the GIS, Cartography, and Remote Sensing faculty of the department of Geology.

Required Geospatial Information Technology Core Courses – 12 credits

GEOG 275 Introduction to Geographical Information Systems and Lab (3 credits)
GEOG 330 Cartography (3 credits)
GEOG 333 Advanced Geographical Information Systems (3 credits)
GEOG 347 Remote Sensing of the Environment and Lab (3 credits)

Program Plan Code: CERT_GEOC
Effective Semester: Fall 2017

German Communication and Cultures Minor Requirements

The German Communication and Culture Minor focuses on the language and cultures of the German-speaking world. The program prepares students to apply German language and intercultural skills to effectively interact in diverse personal, professional, and community settings.

Program requirements: 18 credits. The final GPA requirement for the German Communication and Cultures minor is 2.0.

Required German Communication and Cultures Core Courses – 12 credits

GERM 103 Intermediate German III (3 credits)
GERM 104 Intermediate German IV (3 credits)
GERM 211 German Composition and Conversation I (3 credits)
GERM 212 German Composition and Conversation II (3 credits)

German Communication and Cultures Elective Courses – 6 credits

Students may choose any two 3-credit GERM courses in consultation with an academic minor advisor. GERM 101 and 102 are not to be considered part of the minor and must be excluded from the 18-credit hour requirement in German.

Program Plan Code: GRCC
Effective Semester: Spring 2009

Global Studies Minor Requirements

The Global Studies minor is interdisciplinary, bringing together a broad range of courses to maximize students' understanding of international history, geography, politics, and culture. The Global Studies minor prepares students for graduate work in political science, economics, and history.

Program requirements: 18 credits. The final GPA requirement for Global Studies Minor is 2.0.

Required Global Studies Core Courses – 6 credits

INTL 10 Introduction to International Studies (3 credits)
Choose One of the Following
ANTH 10 Cultural Anthropology (3 credits)
GEOG 20 Elements of Cultural Geography (3 credits)
HIST 15 History of Civilization B (3 credits)
POLI 20 Introduction to International Relations (3 credits)
POLI 30 Introduction to World Politics (3 credits)

Electives – 12 credits

Choice of Four Courses. You must choose from at least two (2) categories and at least two (2) different prefixes. See below for the categories.

I. Understanding Globalization
HIST 131 History of Latin America: Colonial (3 credits)
HIST 232 History of Latin America: Modern (3 credits)
HIST 233 20th Century Latin American Revolutions (3 credits)
HIST 254 History of China and Japan since 1800 (3 credits)
HIST 261 History of Africa since 1800 (3 credits)
HIST 262 The History of Africans in the Americas (3 credits)
HIST 353 Communist Revolution in China (3 credits)
GEOG 101 World Regional Geography (3 credits)
GEOG 120 The Geography of Sub-Saharan Africa (3 credits)
GEOG 225 Spaces of Globalization (3 credits)

II. Economic Globalization
ANTH/SOCI 246 Globalization and Development (3 credits)
ECON 360 International Trade and Development (3 credits)
GEOG 140 Geography of Europe (3 credits)
GEOG 220 Economic Geography (3 credits)

III. Political Globalization
GEOG 335 Political Geography (3 credits)
POLI 132 Politics of Europe (3 credits)
POLI 133 Politics of Cuba and the Caribbean (3 credits)
POLI 134 Politics of the Middle East (3 credits)
POLI 231 Social Movements and Revolutions (3 credits)

IV. Cultural Globalization
ANTH 165 The Muslim Middle East (3 credits)
ANTH 180 The Pacific and Australia (3 credits)
ANTH/SOCI 213 World Religions (3 credits)
ANTH 215 Gender Across Cultures (3 credits)
ANTH 218 Culture and Consumption (3 credits)

ARTH 325 Contemporary African Art and the Diaspora (3 credits)
ARTH 326 Latin American and Caribbean Art (3 credits)
COMM 315 International Communication (3 credits)
GERM 260 German Cinema in English (3 credits)
GERM 324 Race and Gender in the German-speaking world (3 credits)
SPAN 230 Cultural Issues Through Spanish Language Film (3 credits)
SPAN 247 Modern Latin American Literature in Translation (3 credits)
MUSC 108 Introduction to World Music (3 credits)

V. Global Issues

ANTH 254 World Health Issues (3 credits)
ANTH 262 Hate Across Cultures (3 credits)
ARTH 322 Visualizing Food and Empire (3 credits)
BIOL 130 Environmental Issues: Global Perspectives (3 credits)
ENGR 272 Women and Violence in Contemporary World Texts (3 credits)
GEOG 323 Global Warming and the Science of Climate Change (3 credits)
GEOG 338 Geography of Population (3 credits)
POLI 227 Causes of War (3 credits)
SOCI 247 Environmental Sociology (3 credits)
INTL 375 Independent Study in International Studies (3 credits)

Program Plan Code: GLST
Effective Date: Spring 2023

History Minor Requirements

The Minor in History, 18 total credits, offers students a great deal of flexibility to add historical studies to whatever major they are pursuing.

Program requirements: 18 credits

Elective Courses – 18 credits

Select six HIST courses. At least 9 C.H. must be taken at the 200-level or above.

Program Plan Code: HIST
Effective Date: Fall 1986

Information Technology Minor Requirements

Required Information Technology Courses – 9 credits
CPSC 125 Discrete Math for CS I (3 credits)
CPSC 253 IT System (3 credits)
CPSC 273 Computing Systems Integration (3 credits)

Required Programming Course – 3 credits
Choose one course
CPSC 120 Introduction to Creative Graphical Coding (3 credits)
CPSC 123 Introduction to Scientific Programming (3 credits)
CPSC 135 Computer Science I (3 credits)

Required Scripting Course – 3 credits
Choose one course
CPSC 252 UNIX Scripting and Administration (3 credits)
CPSC 256 SQL Programming (3 credits)

Required Information Technology Course – 3 credits
Choose one course
CPSC 311 SQL Programming (3 credits)
CPSC 341 Introduction to Information Security (3 credits)
CPSC 356 Introduction to Database Management Systems (3 credits)

Elective Courses – 3 credits
Any 300-level or higher CPSC course.

Program Plan Code: ITEC
Effective Date: Fall 2024

Literature Minor Requirements

The Minor in Literature includes required coursework in major English literary traditions, especially American and British, and in world literatures, classical and contemporary. Students additionally choose three English electives, all at the upper level. The minor emphasizes skills in literary and cultural analysis, in effective writing and rhetorical choices, and in understanding relations between literary traditions and social change.

Program Requirements: 18 credits

Required Literature Core Courses – 9 credits

ENGL 100 Principles of Literature Analysis (3 credits)
Select two of the following:
ENGL 101 World Literature I (3 credits) *or* ENGL 102 World Literature II (3 credits)
ENGL 105 Experiences in American Literature (3 credits)
ENGL 106 Experiences in British Literature (3 credits)

Electives – 9 credits

Choose any three literature courses at the 200-level or above (ENGL prefix only)

Program Plan Code: LITT
Effective Date: Spring 2009

Marine Science Minor Requirements

The ocean covers over 71% of our planet. The Marine Science minor provides students with a strong foundation in this interdisciplinary field. The laboratory and field-intensive curriculum complements students' majors and prepares them for graduate school and entry-level jobs in diverse fields such as fisheries, science education, environmental science, and natural resource development and protection.

Program requirements: 18 credits.

Required Courses – 6 credits

Methods courses are offered at the Marine Science Consortium and must be approved by the MRSC Program Coordinator.
MRSC 110 Introduction to Oceanography (3 credits)
MRSC Method-Intensive Field Course (3 credits)

Elective Courses – 12 credits

Select four MRSC courses at the 200-level or above, two of which must be taken at Marine Science Consortium, Wallops Island, VA.

Program Plan Code: MARF
Effective Date: Fall 2011

Mathematics Minor Requirements

The Mathematics Minor program provides students with a foundation in mathematics, complemented by a specialized course in an area of choice that helps graduates succeed in their respective fields.

Program requirements: 21 credits

Required Mathematics Minor Core Courses – 18 credits

MATH 181 Calculus I (4 credits)
MATH 182 Calculus II (4 credits)
MATH 224 Foundations of Higher Mathematics
or CPSC 225 Discrete Mathematics for Computing II (3 credits)
MATH 260 Linear Algebra I (3 credits)
MATH 283 Calculus III (4 credits)

Elective Course – 3 credits

Choose one 300-level or higher MATH course.

Program Plan Code: MATH
Effective Date: Spring 2012

Multicultural Studies in the United States Minor Requirements

Program requirements: 18 credits.

Required Multicultural Studies in the United States Core Course – 3 credits

MCST 010 Introduction to Multicultural Studies (3 credits)

Required course – 3 credits

MCST 370 Selected Research Topics (3 credits) *or*
MCST 380 Seminar in Multicultural Studies (3 credits) *or*
MCST 390 Internship in Multicultural Studies (3 credits)

Elective courses – 12 credits

Choose four courses from the following courses:
ANTH 101 North American Indian (3 credits)
ANTH 190 Human Cultural Diversity & Adaptations in Pennsylvania (3 credits)
ANTH/SOCI 241 Race & Ethnicity (3 credits)
ANTH 262 Hate Across Cultures (3 credits)
COMM 301 Performance & Culture (3 credits)
COMM 313 Communicating in a Multi-cultural World (3 credits)
CRJU 232 Diversity in the Criminal Justice System (3 credits)
EDUC 120 Hip-Hop and Multicultural Education (3 credits)
ENGL 129 Jazz Culture (3 credits)
ENGL 132 Contemporary Gay and Lesbian Literature (3 credits)
ENGL 137 Experiences in African American Literature (3 credits)
ENGL 234 Ethnic American Literature (3 credits)
ENGL 236 Black American Literature: Poetry/Drama (3 credits)
ENGL 237 Black American Literature: Novel (3 credits)
ENGL/SPAN 247 Modern Latin American Literature in Translation (3 credits)
ENGL 271 Native American Writing and Rhetoric (3 credits)
ENGL/WGST 323 Native American Women Writers (3 credits)
HIST 145 Search for Social Justice in America (3 credits)
HIST 150 Minorities in American History (3 credits)
HIST 247 Work and Workers in American History (3 credits)
HIST 262 Africans in the Americas (3 credits)
PGST 010 Introduction to Pennsylvania German Studies (3 credits)
PSYC 205 Psychology of Black Experience (3 credits)
SOCI 165 Social Inequality (3 credits)
SOCI 207 Families & Social Class (3 credits)
SOCI 222 Rural Poverty (3 credits)
SOCI 224 Immigration and Assimilation (3 credits)
SOCI 230 Urban Sociology (3 credits)
SOCI 247 Environmental Sociology (3 credits)
SOCI 280 Social Movements (3 credits)
SOWK 130 Poverty & Social Welfare (3 credits)
SOWK 160 Human Behavior & Social Environment (3 credits)

Program Plan Code: MCST
Effective Date: Fall 2021

Pennsylvania German Studies Minor Requirements

Kutztown University's Minor in Pennsylvania German Studies offers opportunities to pursue intellectual and hands-on experiences in Pennsylvania German history, culture, language, crafts, and preservation. Students are encouraged to pursue their own interests within the structure of the program, through a variety of different disciplines, including anthropology, arts, geography, language, history, biology, library science, and many others. The program encourages use of the unique resources of the Pennsylvania German Cultural Heritage Center at Kutztown University. Students will have opportunities to receive professional experience in heritage programming, archiving, museum studies, community event planning, among many other skills.

Program requirements: 18 credits. The final GPA requirement for the Pennsylvania German Studies minor is 2.0.

Required Pennsylvania German Studies Core Courses – 6 credits

PGST 10 Introduction to Pennsylvania German Studies (3 credits)
PGST 390 Internship in Pennsylvania German Studies (3 credits)

Pennsylvania German Studies Elective Courses – 12 credits

With approval by contract, students may count any course in any department on a Pennsylvania German topic. Students can take up to four GERM courses that include German language content but not German in translation. Nine credits must be above the 200-level, which is a university requirement.

ANTH 135 Pennsylvania German Cultural Traditions (3 credits)
ANTH 190 Human Cultural Diversity and Adaptations in Pennsylvania (3 credits)
ANTH 242 Museums, Festivals, and Cultural Events (3 credits)
ANTH 320 Archeological Field Methods (3 credits)
ANTH 335 Ethnographic Research Methods (3 credits)
ANTH 379 Independent Study (1-6 credits)
ANTH 390 Internship in Anthropology (3-6 credits)
ARTH 339 Independent Studies in the History of Art (1-6 credits)
ARTH 385 Selected Topics in Art History (3 credits)
CRFT 377/378/379/380 Independent Study: Craft Studio I-IV (1-6 credits)
GEOG 112 Geography of Pennsylvania (3 credits)
GEOG 371 Independent Study (3 credits)
GERM 101 Beginning German I (3 credits)
GERM 102 Beginning German II (3 credits)
GERM 103 Intermediate German III (3 credits)
GERM 104 Intermediate German IV (3 credits)
GERM 301 Survey of German Literature I (3 credits)
GERM 302 Survey of German Literature II (3 credits)
GERM XXX German Language Content course (3-12 credits)
GERM 390 International Internship (3-6 credits)
GERM 495 Independent Study (1-6 credits)
HIST 120 History of Pennsylvania (3 credits)
HIST 257 Introduction to Public History (3 credits)
HIST 260 Historic Preservation (3 credits)
HIST 275 Pennsylvania German Landscape (3 credits)

HIST 350 Local Community Studies (3 credits)
HIST 379 Independent Study (1-6 credits)
HIST 390 History Internship (3-6 credits)
PGST 101 Introduction to the Pennsylvania German Language I (3 credits)
PGST 102 Introduction to the Pennsylvania German Language II (3 credits)
PGST 251 Pennsylvania German Literature in English and Translation I (3 credits)
PGST 275 Pennsylvania German Landscape (3 credits)
PGST 301 Pennsylvania German Literature (3 credits)
PGST 360 Pennsylvania German Studies Abroad (3-9 credits)
PGST 370 Readings about Pennsylvania Germans (3-9 credits)
PGST 379 Independent Study (3-9 credits)

Program Plan Code: PGST
Effective Semester: Fall 2024

Philosophy Minor Program

The Philosophy minor focuses on the development of skills in thinking and communicating clearly, critically, and creatively. The program coursework emphasizes student abilities to analyze and advance arguments dealing with logical and ethical issues. The Philosophy minor prepares students for graduate studies and nearly any area of work, including law, business, public service, publishing, medicine, ministry, and teaching.

Program requirements: 18 credits. The final GPA requirement for Philosophy Minor is 2.0.

Restricted Elective I – 3 credits

Select One
PHIL 30 Introduction to Philosophy (3 credits)
PHIL 40 Introduction to Ethics (3 credits)

Restricted Elective II – 3 credits

Select One
PHIL 15 Critical Thinking (3 Credits)
PHIL 20 Introduction to Logic (3 Credits)
PHIL 140 Symbolic Logic (3 Credits)

Restricted Elective III – 3 credits

Select One
PHIL 105 Medieval Philosophy (3 Credits)
PHIL 116 Ancient Philosophy (3 Credits)
PHIL 121 Modern Philosophy (3 Credits)
PHIL 136 Kant to Hegel (3 Credits)

Philosophy Electives – 9 credits

Select ant three PHIL courses with the minor advisor. At least one course must be at the 100-level or above. At least one course must be at the 200-level or above with a prerequisite of a restricted elective II course or the permission of the instructor.

Program Plan Code: PHIL
Effective Date: Fall 2023

Physics Minor Requirements

The Physics minor provides students with foundational knowledge of classical and modern physics and the opportunity to study a selection of advanced physics topics. This minor helps students develop experimental, computational, problem-solving, critical thinking, and effective scientific communication skills. It prepares students for careers in places where problem-solving abilities, analytical skills, and effective communication are great assets.

Program requirements: 20 credits.

Required Courses – 11 Credits

PHYS 100: Physics I (4 credits)
PHYS 102: Physics II (4 credits)
PHYS 212: Modern Physics (3 credits)

Elective Courses – 9 Credits

Select at least nine additional credit hours in PHYS courses above the 200-level.

Program Plan Code: PHYS
Effective Date: Spring 2007

Planning Geography Minor Requirements

The Planning Geography Minor enriches an education in the environmental and social sciences by providing a geographical perspective on issues central to contemporary planning. The minor expands employment opportunities as its perspectives and techniques are valued by governmental agencies, non-governmental organizations, environmental conservation groups, planning organizations, business firms, and education.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. Program requirements: 18 credits. The final GPA requirement for the Environmental Geography Minor is 2.0. Geography majors are not eligible for this minor.

Required Geography Planning Minor Program– 9 credits

GEOG 10: Planet Earth Users' Guide: Introduction to Physical Geography (3 credits)
GEOG 20: Our Human Earth: Introduction to Cultural Geography (3 credits)
GEOG 343: Land Use Planning (3 credits)

Elective Courses – 9 credits

Choose three:
GEOG 210: Environmental Conservation (3 credits)
GEOG 212: Geography of Natural Hazards (3 credits)
GEOG 220: Economic Geography (3 credits)
GEOG 223: Introduction to Transportation Geography (3 credits)
GEOG 225: Spaces of Globalization (3 credits)
GEOG 274: Introduction to GIS Lecture / Lab (3 credits)
GEOG 310: Urban Geography (3 credits)
GEOG 335: Political Geography (3 credits)
GEOG 338: Geography of Population (3 credits)
GEOG 347: Remote Sensing of the Environment Lecture / Lab (3 credits)
GEOG 375: Research Methods (3 credits)
GEOG 394: Internship in Geography (3 credits)

Program Plan Code: GEOP
Effective Date: Spring 2023

Political Science Minor Requirements

The minor in Political Science emphasizes analytical and writing skills together with developing knowledge of the US government, global political systems, and the means of inquiry in the social sciences. Students opting for the Political Science minor complete 18 credits of coursework, including the core course in American politics and either the core course in international relations or state & local government.

Program requirements: 18 credits. The final GPA requirement for Political Science Minor is 2.0. At least two elective courses need to be at the 141 level or above.

Required Political Science Core Course – 6 credits

POLI 10 American Government (3 credits)
POLI 20 International Relations (3 credits) *or* POLI 50 State & Local Government (3 credits)

Elective courses – 12 credits

Select any four POLI courses in consultation with your advisor.

Program Plan Code: POLI
Effective Date: Fall 2020

Professional Writing Minor Requirements

The Professional Writing minor emphasizes effective writing and design, critical reading and analysis, and professionalization in the workplace. Students minoring in Professional Writing may choose from an array of classes in creative writing, technical writing, arts and entertainment writing, or journalism. The minor helps prepare students for graduate work or careers in professions such as author, editor, social media analyst, reporter, technical content writer, or web developer.

Program Requirements: 18 credits

Required Professional Writing Core Course – 3 credits

PRWR 213 Copy Editing: Revision and Style (3 credits)

Foundation course – 3 credits

Select one of the following courses:
PRWR 108 Intro to Creative Writing (3 credits)
PRWR 111 Journalism (3 credits)
PRWR 120 Technical Writing and Communication (3 credits)

Elective courses – 12 credits

Select four PRWR courses. Additional courses from the Foundation course section are permitted. At least two courses must be at the 200-level or above.

Program Plan Code: ENPW
Effective Date: Fall 2021

Psychology Minor Requirements

Program requirements: 18 credits; a "C" or better in PSYC 011; a 2.0 GPA; and at least half of the credits must be taken at Kutztown University.

Required Psychology Core Course – 3 credits

PSYC 011 General Psychology (3 credits)

Required courses – 9 credits

Select three PSYC courses at the 200-level or above.

Elective courses – 6 credits

Select any two PSYC courses not chosen above.

Program Plan Code: PSYC
Effective Date: Fall 2005

Public Administration Minor Requirements

The minor in Public Administration emphasizes skill development that prepares students for employment in the public and non-profit sectors. Coursework focuses on public planning and decision-making, including public budgeting and human resource management. The Public Administration minor includes a 6- or 12-credit government internship, providing students with a pathway for careers in state, local, and federal government, business, law, consulting, finance, community service and non-governmental organizations (NGOs).

Program requirements: 21 credits. The final GPA requirement for Public Administration minor is 2.0. Students must maintain a minimum 2.0 GPA in minor courses.

Public Administration Minor Core Courses – 15-21 credits

POLI 115 Public Administration (3 credits)
POLI 346 Public Budgeting and Fiscal Management (3 credits)
POLI 347 Human Resource Management (3 credits)
POLI 390 Federal, State and/or Local Government Internship (6-12 credits)

Elective Courses – 0-6 credits

POLI 50 State and Local Government (3 credits)
POLI 425 Public Policy Making (3 credits)
POLI 441 Managerial Leadership and Ethics (3 credits)
POLI 465 Administrative Law (3 credits)

Notes:
At least 9 credit hours in the minor must be in 300-level courses or above.

Program Plan Code: PBAD
Effective Date: Spring 2024

Public History, Archives, and Museums Minor Requirements

This minor draws upon a number of different departments and resources to offer Kutztown University students the opportunity to develop the necessary skills to succeed in archival management, museums, and public history. Students will learn both the theoretical and practical considerations of public history and archival management by combining classroom and hands-on coursework. This includes a required internship, which could be done either on campus or off at a museum, library, or similar institution. This interdisciplinary minor will allow students to pursue graduate degrees and careers in these fields.

Program requirements: 18 credits. Only 9 credits may be taken from a single prefix; students may take up to 2 internships.

Required Public History, Archives, and Museums Core Courses – 6 credits

HIST 257 Introduction to Public History *or* LLTC 364 Preservation, Digitization, and Archiving (3 credits)
ANTH 390 Internship *or* HIST 390 Internship *or* LLTC 390 Internship *or* PGST 390 Internship (3 credits)

Elective Courses – 12 credits

ANTH 030 Introduction to Archeology (3 credits)
ANTH 201 Archeological Theory (3 credits)
ANTH 202 Research Methods in Physical Anthropology (3 credits)
ANTH 239 Historical Archeology (3 credits)
ANTH 242 Museums, Festivals (3 credits)
ANTH 258 Forensic Anthropology (3 credits)
ANTH 263 Archeological Methods (3 credits)
ANTH 264 Advanced Archeological Methods (3 credits)
ANTH 390 Internship (3 credits)
ARHT 341 Beautiful and Useful: The Functional Arts and Their World (3 credits)
GEOG 112 Geography of Pennsylvania (3 credits)
HIST 120 History of Pennsylvania (3 credits)
HIST 260 Historic Preservation Studies (3 credits)
HIST 276 The Pennsylvania German Landscape (3 credits)
HIST 379 Independent Study (3 credits)
HIST 390 Internship (3 credits)
LLTC 350 Collecting and Curating Print and Digital Sources (3 credits)
LLTC 390 Internship (3 credits)
PGST 010 Introduction to Pennsylvania German Studies (3 credits)
PGST 390 Internship (3 credits)

Program Plan Code: PHAM
Effective Semester: Fall 2024

Public Relations Minor Requirements

The Minor in Public Relations provides opportunities for students to bolster their critical thinking and communication skills. Required coursework emphasizes foundational skills related to reputation management and organizational communication, and elective options provide the chance to build skills and portfolio pieces in social media, crisis communication, or visual communication.

Program Requirements: 18 credits. Students must have an overall GPA of 2.5 before declaring the minor in public relations. The final GPA requirement for public relations minor courses is 2.75. The public relations minor is not available to public relations major students.

Required Public Relations Core Courses – 15 credits

PRWR 111 Journalism (3 credits)
COMM 170 Introduction to Public Relations (3 credits)
COMM 235 Public Relations Cases & Campaigns (3 credits)
PRWR 216 Writing for Public Relations (3 credits)
PREL 310 Research for Public Relations (3 credits)

Electives – 3 credits

Students must select one of the following courses:
COMM 214 Public Relations Processes & Techniques (3 credits)
COMM 311 Crisis Communications (3 credits)
COMM 319 Integrated Marketing Comm (3 credits)
COMM 336 PR Workshop (3 credits)
PREL 250 Public Relations Ethics and Law (3 credits)
PREL 338 Personal PR: Entering the Profession (3 credits)
PRWR 217 Storytelling in Public Relations (3 credits)
PRWR 226 Desktop Publishing: Writing & Editing Newsletters (3 credits)
PRWR 250 Writing for Social Media (3 credits)
PRWR 316 PR for the Corporate Environment (3 credits)
PRWR 326 Advanced Desktop Publishing: Writing & Designing Documents (3 credits)

Program Code: PBRL
Effective Date: Fall 2020

Scripting for Data Manipulation Certificate Requirements

Required Scripting for Data Manipulation Core Courses – 9 credits
CPSC 123 Introduction to Scientific Programming (3 credits)
or CPSC 135 Computer Science I (3 credits)
CPSC 223 Advanced Scientific Programming (3 credits)
CSPC 256 SQL Programming (3 credits)

Program Plan Code: CERT_SCDM
Effective Date: Fall 2024

Social Work Minor Requirements

The minor in Social Work provides the opportunity for an introduction to the science of helping; an understanding of the social welfare policies designed to help our most vulnerable populations; an understanding of the ethics and values of the social work profession; personal growth and development; practical hands-on assignments. The minor is designed to assist students majoring in Communication Studies, Criminal Justice, Education, Professional Studies, Psychology, Sociology, Anthropology and/or those who are embarking on a career as a helping professional.

Program requirements: 18 credits. The final GPA requirement for Social Work Minor is 2.0.

Required Social Work Minor Core Courses – 18 credits

SOWK 100 Introduction to Social Work and Social Welfare (3 credits)
SOWK 130 Poverty and Social Welfare (3 credits)
SOWK 160 Human Behavior and Social Environment (3 credits)
SOWK 200 Professional Context of Social Work Practice (3 credits) *A grade of "C" or better is required.*
SOWK 255 Social Welfare Policy (3 credits)
SOWK 320 Case Management-An Interdisciplinary Approach *or other Social Work Elective with the permission of the department chair* (3 credits)

Program Plan Code: SOWK
Effective Semester: Fall 1995

Sociology Minor Requirements

Students with a minor in sociology will gain a familiarity with sociological subfields. We offer a variety of classes that provide a broad perspective on the social significance of diversity and inequality, focusing on class, gender, age, race, and ethnicity. Students will also learn to think critically, analytically, and logically about social issues and social problems, using the sociological perspective.

Students majoring in Sociology cannot minor in Sociology.

Required General Sociology Core Courses – 6 credits

SOCI 10 Principles of Sociology (3 credits)
Select ONE course from the following:
SOCI 120 Marriage and the Family (3 credits)
SOCI 165 Social Inequity (3 credits)
SOCI 224 Immigration and Assimilation (3 credits)
SOCI 235 Sociology of Gender (3 credits)
SOCI 241 Race and Ethnicity (3 credits)
SOCI 245 Sociology of Deviance (3 credits)
SOCI 310 Foundations of Social Theory (3 credits)
SOCI 350 Methods of Social Research (3 credits)

Sociology Electives – 12 credits

Cannot count as an elective if used as a required course. At least 9 total S.H. must be taken at the 200-level or above.

Program Plan Code: SOCI
Effective Date: Spring 2020

Spanish Communication and Cultures Minor Requirements

The Spanish Communication and Cultures Minor focuses on the language and cultures of Spanish-speaking communities. The program prepares students to apply Spanish language and intercultural skills to effectively interact in diverse personal, professional, and community settings.

Program requirements: 21 credits. The final GPA requirement for the Spanish Communication and Cultures minor is 2.0.

Required Spanish Communication and Cultures Core Courses – 3 credits

SPAN 213 is the required course for students who are learning Spanish as a second language. SPAN 214 is the required course for native or Heritage learners of Spanish who have conversational Spanish skills but may or may not have formal education in Spanish. Students may not take both SPAN 213 and SPAN 214.

SPAN 213 Advanced Conversation in Spanish *or* SPAN 214 Written and Oral Communication for Spanish-speaking Heritage Learners (3 credits)

Spanish Communication and Cultures Elective Courses – 18 credits

Students may choose any six 3-credit SPAN courses.

Program Plan Code: SPAN
Effective Semester: Fall 2024

Technical Communication Minor Requirements

The Minor in Technical Communication focuses on creating effective pieces of technical writing for specific audiences and helps students to communicate complex information clearly, correctly, and concisely. The minor pairs with a variety of majors and prepares students to develop, design, and evaluate technical documents in their specialized fields.

Program Requirements: 18 credits

Required Technical Communication Core Courses – 9 credits

PRWR 120 Technical Writing and Communication (3 credits)
PRWR 320 Advanced Technical Writing (3 credits)
SCED 240 The Writing Scientist
SCED 250 Scientific Storytelling (3 credits) *or* PWRW 321 Information Design: Data Visualization in Technical Writing (3 credits)

Elective Courses – 6 credits

Select two of the following
CPSC 105 Introduction to Data Visualization (3 credits)
SMTS 320 User Experience Design and Research (3 credits)
SCED 250 Scientific Storytelling (3 credits)
PRWR 205 Scientific Writing (3 credits)
PRWR 213 Copy Editing: Revision and Style (3 credits)
PRWR 226 Desktop Publishing (3 credits)
PRWR 255 Creating User Documentation (3 credits)
PRWR 321 Information Design: Data Visualization in Technical Writing (3 Credits)

Program Plan Code: TEWT
Effective Date: Fall 2022

Technical Writing Certificate Requirements

Program requirements: 9 credits

Required Technical Writing Core Courses – 6 credits

PRWR 120 Technical Writing and Communication (3 credits)
PRWR 320 Advanced Technical Writing (3 credits)

Electives Courses – 3 credits

Select one course from the following:
PRWR 205 Scientific Writing (3 credits)
PRWR 213 Copy Editing: Revision and Style (3 credits)
PRWR 255 Creating User Documentation (3 credits)
PRWR 321 Information Design: Data Visualization and Technical Writing (3 credits)

Program Plan Code: CERT_TCWR
Effective Date: Fall 2021

Web Development Minor Requirements

Required Programming Courses – 9 credits

CPSC 122 Client-side Web Development (3 credits)
CPSC 242 Server-side Web Development (3 credits)
CPSC 342 Web Technologies (3 credits)

Required Design Course – 9 credits

CODS 10 Digital Foundations (3 credits) *or* CPSC 102 Computer Graphics (3 credits)
CODS 140 Instruction to Interactive Design (3 credits)
CODS 276 Interactive Design (3 credits)

Program Plan Code: CSWB
Effective Date: Spring 2025

Women's, Gender & Sexuality Studies Minor Requirements

The minor in Women's, Gender, and Sexuality Studies emphasizes an intersectional approach to interrogating key terms and ideas in the field. The minor complements all majors in all colleges and prepares students for graduate work or for any career.

Required Women's, Gender & Sexuality Core Courses – 6 credits

WGST 100 Introduction to Women's, Gender & Sexuality Studies (3 credits)
WGST 3XX *Any 300-level WGST course* (3 credits)

Women's, Gender & Sexuality Electives – 12 credits

Satisfy elective requirements by:
Taking four WGST courses
Taking a total of four courses that span at least two different disciplines (ex. Courses with SOCI prefix and two courses with ENGL prefix)
Taking a total of four courses that span two different disciplines and WGST program (ex. One course with a WGST prefix, one with a SOCI prefix, and two with a COMM prefix)
At least two elective courses must be at the 200-level or above. A list of acceptable elective courses for the WGST minor may be found on MyKU or the program's web page.

Program Plan Code: WGSS
Effective Date: Fall 2019

COLLEGE OF VISUAL & PERFORMING ARTS

The mission of the College of Visual and Performing Arts is to provide an innovative contemporary education to prepare future leaders in art, design, media, music, and communication. Our students have it all: the intensity, the immersion, and the creative environment of an art, design, media, music, or communication school plus the energy, excitement, and diversity that large universities offer. Select a single major, add a minor, or declare a double major; find the passion that prepares you for the future of your dreams. No matter which program you choose, creative avenues abound to develop your skills, practice your techniques, and cultivate your vision. This is where our excellent faculty, come in. Our professors are committed to your growth as an individual. Experts in their field, they are passionate about inspiring students to meld their passions with ideas from the larger university. Expand your horizons. Study on our picturesque campus in a tranquil atmosphere away from distractions. Hear world-class artists at KU Presents! and attend Faculty First Thursdays. Be inspired by the big city life of Philadelphia, New York City, Baltimore, or Washington on a field trip or with the Art Bus. Venture further afield with a study abroad experience. The choices are boundless. Imagine a community that values your creativity. Discover the arts at Kutztown University.

-Dr. Bradley Shope, Dean

Bachelor of Arts

B.A. Art History

B.A. Communication Studies

B.A. Music

B.A. Music: Business

B.A. Music: Commercial Music

B.A. Music: Performance

Bachelor of Fine Arts

B.F.A. Animated Arts

B.F.A. Art

B.F.A. Communication Design

Bachelor of Science

B.S. Art Education

B.S. Art Education: Alternative Settings

B.S. Cinema, Television, and Media Production

B.S. Music Education

B.S. Social Media Theory and Strategy

Minors and Certificates

Art Minor

Art History Minor

Audio Engineering Minor

Audio Production Certificate

Cinema, Television, & Media Production Minor

Cinematography Certificate

Communication Studies Minor

Digital Video Production Certificate

Global Communication Certificate

Jazz Minor

Leadership Minor

Music Minor

Music History Minor

Musical Theatre Minor

Performance and Storytelling Minor

Post-Production Certificate

Professional Studies in Music Certificate

Social Media Analytics Certificate

Social Media Strategies Certificate

Social Media Theory and Strategy Minor

Strategic Communication Certificate

Television Production Certificate

B.A. Art History Requirements

The Art History major prepares students for careers in museums, galleries, historic sites, arts organizations, and various academic pursuits. Students explore social and cultural history through the lens of the visual arts, reaching from the prehistoric to the global contemporary.

Student Learning Objectives

1. Critically evaluate cultural artifacts according to the principles of formal analysis.
2. Employ the language of Art History to communicate effectively.
3. Apply diverse critical methodologies to the analysis of cultural artifacts.
4. Execute a professional-quality art historical research project.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Art History is 2.0.

Required Art History Core Courses – 15 credits

ARTH 024 *or* 124: Art History A: Prehistory to 1200 CE (3 credits)
ARTH 025 *or* 125: Art History B (3 credits)
ARTH 026 *or* 126: Art History C: 1850 – today (3 credits)
ARTH 380: Art History Seminar (3 credits)
ARTH 390: Internship in Art History (3 credits)

Art History Electives 300-Level – 18 credits

Select 6 300-level ARTH courses:
ARTH 302: Early Christian and Byzantine Art (3 credits)
ARTH 303: Art of Ancient Greece and Rome (3 credits)
ARTH 304: Renaissance Art (3 credits)
ARTH 305: Medieval Art: Carolingian to High Gothic (3 credits)
ARTH 306: Art of Northern Europe: 1350 – 1580 (3 credits)
ARTH 307: European Art: 1580 – 1780 (3 credits)
ARTH 308: European Art: 1780 – 1880 (3 credits)
ARTH 309: Art Since 1950 (3 credits)
ARTH 318: Picturing Gender (3 credits)
ARTH 319: Arts of the Islamic World (3 credits)
ARTH 320: Early Modern Villas and Gardens (3 credits)
ARTH 321: The History of Photography (3 credits)
ARTH 322: Visualizing Food and Empire (3 credits)
ARTH 324: Contemporary African American Art (3 credits)
ARTH 325: Contemporary African Art and the Diaspora (3 credits)
ARTH 326: Latin American and Caribbean Art (3 credits)
ARTH 334: American Art (3 credits)
ARTH 336: Paragone: Rivalry in the Arts (3 credits)
ARTH 337: Ancient Egypt: Art, Exploration, and Afterlife (3 credits)
ARTH 338: European Modernism: 1880 – 1940 (3 credits)
ARTH 339: Independent Studies in the History of Art (3 credits)

ARTH 340: Pompeii and Ravenna: Bookends of the Roman Empire (3 credits)
ARTH 341: Beautiful and Useful: The Functional Arts and Their World (3 credits)
ARTH 343: Early Modern Italy: Beyond Painting, Sculpture, and Architecture (3 credits)
ARTH 344: 'La Dolce Vita': Italian Art and Culture (3 credits)
ARTH 345: Crosscurrents in Italian and Northern Renaissance Art (3 credits)
ARTH 350: Baroque Art in Italy, France and Spain between 1590 and 1700 (3 credits)
ARTH 351: Baroque Art in The Dutch Republic, Flanders, and England between 1590 and 1700 (3 credits)
ARTH 364: Art and Sport (3 credits)
ARTH 365: Cut and Paste: A History of Collage (3 credits)
ARTH 367: Contemporary British Art (3 credits)
ARTH 370: Art Today: The Next Decade (3 credits)
ARTH 380: Seminar in Art History (3 credits)
ARTH 385: Selected Topics in Art History (3 credits)
ARTH 390: Internship in Art History (3 credits)
ARTH 395: Honors Independent Study/Thesis (3 credits)

Visual Culture Electives – 3 credits

Choose 1 course from the following list:
ARTH 027: History of Animation, Game Art, and Interactive Media (3 credits)
ARCR 211: Women in the Arts (3 credits)
ARCR 241: Color- Perception, Properties, & Production (3 credits)
ARCR 300: Visual Culture: Critical Practice (3 credits)
CODS 160: Historical Survey of Graphic Design A (3 credits)
CODS 161: Historical Survey of Graphic Design B (3 credits)
CTME 206: Masterpieces in Film History (3 credits)

Art Electives – 6 credits

Take 6 credits from any of the following prefixes: ART, CRFT, FINE, or FAST. Students may select multiple courses from the same prefix.

University Electives – 36 credits

Program Plan Code: BA_ARHI
Effective Date: Spring 2022

B.A. Communication Studies Requirements

Strong communication is at the root of every successful company, and our communication major will teach you the skills to succeed anywhere. We believe that doing is succeeding. From day one, you will learn professional skills that employers value the most: problem solving, speaking, writing, critical thinking, analysis, and so much more. As a communication major, you can take your degree a step further by choosing among the following areas of focus:

- Interpersonal Communication
- Media Studies
- Rhetoric & Civic Engagement
- Strategic Communication
- Performance & Culture

Student Learning Outcomes:

1. Develop formal and informal oral presentations within varied contexts.
2. Compose written communication appropriate for specific contexts.
3. Apply communication concepts to the praxis of communication.
4. Create research projects guided by communication theory.
5. Analyze communication norms through diverse points of view.

Note that all students much achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Communication Studies is 2.0.

Required Communication Studies Core Courses – 12 credits

Take the following courses in the order listed. After taking COMM 140 and COMM 240, students may choose either COMM 327 or COMM 340 and then take COMM 380 in their final semester. Students are encouraged to take both 327 and 340. If both are taken, one will count in the core requirements, and the second will count as a 300-level COMM elective.

COMM 140: Intro. To Communication Studies (3 credits)
COMM 240: Survey of Communication Theory (3 credits)
COMM 327: Rhetorical Theory & Methods *or* COMM 340: Comm. Research Methods (3 credits)
COMM 380: Senior Capstone (3 credits)

Communication Studies Program Requirements – 30 credits

300-Level Communication Studies Courses – 9 credits

Select three 300-level courses not used in the core or for General Education A3 or A4. Internship credits may not be used in this section.

200-Level Communication Studies Courses – 12 credits

Select four 200-level courses not used in the core or for General Education A3 or A4. Internship credits may not be used in this section.

Additional Communication Studies Courses – 9 credits

Select three courses from any level not used in the core or for General Education A3 or A4. Only three (3) credits of COMM 390 Internship may be used in meeting the requirements for the major. An additional three (3) credits may be applied to University Electives.
Note: Acceptance into an internship requires the approval of the advisor and department; client internships are neither required nor guaranteed in the B.A. Communication Studies Program.

Directed General Education Courses – 3 credits

While counting toward General Education fulfillment, this course is required for completion of the major.
Select one of the following courses for General Education Category A3 or A4. A minimum grade of C is required.
COMM 010: Fundamental of Oral Communication (3 credits)
or COMM 103: Introduction to Acting (3 credits)
or COMM 201: Storytelling I (3 credits)
or COMM 215: Small Group Communication (3 credits)

University Electives – 36 credits

Any course carrying university credit. Students are encouraged to work towards the completion of a minor or second major.

Program Plan Code: BA_COST
Effective Date: Spring 2022

B.A. Music Requirements

The Bachelor of Arts in Music provides rigorous musical training within a broad, interdisciplinary education, perfect for students with diverse interests. With expert faculty, personalized instruction, and abundant performance opportunities, students refine their musical skills and explore music's broader cultural context.

Student Learning Outcomes

1. Perform with competence as soloist and ensemble members.
2. Identify, define, and engage the elements of music in sound and notation.
3. Describe current practices and historical trends in music.

Note that all students much achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Music is 2.0. Piano proficiency is required. Students who take FYSM 100: Finding Your Voice do not need to and may not take MUSC 116 for credit towards graduation.

Required Music Core Courses – 17 credits

All courses in this section require a C or better.
MUSC 101 Aural Skills I (2 credits)
MUSC 102 Harmony & Theory I (3 credits)
MUSC 201 Aural Skills II (2 credits)
MUSC 202 Harmony & Theory II (3 credits)
MUSC 213 Aural Skills III (2 credits)
MUSC 214 Harmony & Theory III (3 credits)
MUSC 325 Conducting (2 credits)

Music Literature– 6 credits

All courses in this section require a C or better.
MUSC 311 Music Ancient Times to 1750 (3 credits)
MUSC 312 Music from 1750 to Present (3 credits)

Applied Music Courses – 16 credits

Students must achieve a C or better in the Major Performance area to continue as a Music Major. (Students participating in the senior recital need 7 credits of applied lessons. Students choosing an Independent Study or Field Experience only need 5 credit hours of applied lessons).
Private Instruction – 5-7 credits
MUPF 236 Applied Music: French Horn (1 credit)
MUPF 237 Applied Music: Piano (1 credit)
MUPF 238 Applied Music: Organ (1 credit)
MUPF 239 Applied Music: Voice (1 credit)
MUPF 240 Applied Music: Viola (1 credit)
MUPF 241 Applied Music: Cello (1 credit)
MUPF 242 Applied Music: String Bass (1 credit)
MUPF 243 Applied Music: Flute (1 credit)
MUPF 244 Applied Music: Oboe (1 credit)
MUPF 245 Applied Music: Clarinet (1 credit)
MUPF 246 Applied Music: Bassoon (1 credit)
MUPF 247 Applied Music: Saxophone (1 credit)

MUPF 248 Applied Music: Trumpet (1 credit)
MUPF 249 Applied Music: Violin (1 credit)
MUPF 250 Applied Music: Baritone Horn/Trombone (1 credit)
MUPF 252 Applied Music: Tuba (1 credit)
MUPF 253 Applied Music: Percussion (1 credit)
MUPF 254 Applied Music: Guitar (1 credit)
MUPF 277 Studio Performance Seminar (1 credit)
Large Ensemble in Major Area – 6 credits
MUPF 281 University Band (1 credit)
MUPF 282 University Marching Band (1 credit)
MUPF 283 University Choir (1 credit)
MUPF 285 University Orchestra (1 credit)
MUPF 289 Large Jazz Ensemble (1 credit)
Small Ensemble in Major Area – 2 credits
MUPF 230 Chamber Ensemble (1 credit)
MUPF 231 String Ensemble (1 credit)
MUPF 232 Woodwind Ensemble (1 credit)
MUPF 233 Brass Ensemble (1 credit)
MUPF 234 Percussion Ensemble (1 credit)
MUPF 235 Vocal Ensemble (1 credit)
MUPF 275 Jazz Combo (1 credit)
MUPF 276 Popular Music Ensemble (1 credit)
MUPF 287 New Music Ensemble (1 credit)
Choose one – 1-3 credits
MUFP 399 Senior Recital (1 credit) – *Requires a C or better.*
MUSC 391 Field Experience in Music (3 credits) – *Requires a C or better*.
MUSC 399 Independent Study in Music (3 credits) – *Requires a C or better*.

Music Elective – 3 credits

Select one advanced MUSC course:
MUSC 194 French German and Italian Diction for Musicians (3 credits)
MUSC 199 Songwriting (3 credits)
MUSC 205 The Physical Properties of Sound: Music and Music Reproduction (3 credits)
MUSC 209 Women in Music (3 credits)
MUSC 215 American Popular Music (3 credits)
MUSC 225 Jazz: Its History and Influence (3 credits)
MUSC 228 The History of American Musical Theatre (3 credits)
MUSC 230 Introduction to Music Technology (3 credits)
MUSC 292 Audio Engineering I (3 credits)
MUSC 293 Hip-Hop Music and Culture (3 credits)
MUSC 294 Sound Design for Visual Media (3 credits)
MUSC 295 Artist Management and Touring (3 credits)
MUSC 296 Live Audio Production (3 credits)
MUSC 303 Electric Music Composition (3 credits)
MUSC 310 Composition and Arranging (3 credits)
MUSC 315 Audio Engineering II (3 credits)
MUSC 391 Field Experience in Music (3 credits)
MUSC 399 Independent Study: Music (3 credits)
MUSC 450 Performing Arts Administration (3 credits)

University Electives – 36 credits

Select any university course between 1-4 credits, totaling 36 credits.

Program Plan Code: BA_MUSC
Effective Date: Fall 2025

B.A. Commercial Music Requirements

A track in Commercial Music Studies will prepare students who wish to pursue careers in recording studios, arts administration, performance of popular music, and other positions in the music industry. The program is comprised of a combination of mentoring from renowned artists/teachers, small class sizes, diverse commercial performance opportunities, and a well-rounded academic curriculum

Student Learning Outcomes

1. Perform with competence as soloist and ensemble members.
2. Identify, define, and engage the elements of music in sound and notation.
3. Describe current practices and historical trends in music.
4. Demonstrate technology-based skills used in the music industry.
5. Describe the management and operating systems of the music industry.

Note that all students much achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Commercial Music is 2.0. Piano proficiency is required.

Students who take FYSM 100: Finding Your Voice do not need to and may not take MUSC 116 for credit towards graduation.

Required Music Core Courses – 15 credits

MUSC 101 Aural Skills I (2 credits)
MUSC 102 Harmony & Theory I (3 credits)
MUSC 201 Aural Skills II (2 credits)
MUSC 202 Harmony & Theory II (3 credits)
MUSC 308 Jazz and Commercial Arranging (2 credits)
MUSC 195 Music in Human Experience (3 credits)

Required Commercial Core Courses – 15 credits

MUSC 121 Fundamentals of Music Business (3 credits)
MUSC 215 American Popular Music (3 credits)
MUSC 292 Audio Engineering I (3 credits)
MUSC 450 Performing Arts Administration (3 credits)
MUSC 391 Field Experience in Music (3 credits)

Applied Music Courses – 12 credits

Private Instruction – 5 credits

MUPF 236 Applied Music: French Horn (1 credit)
MUPF 237 Applied Music: Piano (1 credit)
MUPF 238 Applied Music: Organ (1 credit)
MUPF 239 Applied Music: Voice (1 credit)
MUPF 240 Applied Music: Viola (1 credit)
MUPF 241 Applied Music: Cello (1 credit)
MUPF 242 Applied Music: String Bass (1 credit)
MUPF 243 Applied Music: Flute (1 credit)
MUPF 244 Applied Music: Oboe (1 credit)
MUPF 245 Applied Music: Clarinet (1 credit)
MUPF 246 Applied Music: Bassoon (1 credit)
MUPF 247 Applied Music: Saxophone (1 credit)

MUPF 248 Applied Music: Trumpet (1 credit)
MUPF 249 Applied Music: Violin (1 credit)
MUPF 250 Applied Music: Baritone Horn/Trombone (1 credit)
MUPF 252 Applied Music: Tuba (1 credit)
MUPF 253 Applied Music: Percussion (1 credit)
MUPF 254 Applied Music: Guitar (1 credit)

Large Ensemble in Major Area – 4 credits

MUPF 281 University Band (1 credit)
MUPF 282 University Marching Band (1 credit)
MUPF 283 University Choir (1 credit)
MUPF 285 University Orchestra (1 credit)
MUPF 289 Large Jazz Ensemble (1 credit)

Small Ensemble in Major Area – 3 credits

MUPF 230 Chamber Ensemble (1 credit)
MUPF 231 String Ensemble (1 credit)
MUPF 232 Woodwind Ensemble (1 credit)
MUPF 233 Brass Ensemble (1 credit)
MUPF 234 Percussion Ensemble (1 credit)
MUPF 235 Vocal Ensemble (1 credit)
MUPF 251 Recorder Ensemble (1 credit)
MUPF 275 Jazz Combo (1 credit)
MUPF 276 Popular Music Ensemble (1 credit)
MUPF 287 New Music Ensemble (1 credit)

University Electives – 36 credits

Select any university course between 1-4 credits, totaling 36 credits.

Program Plan Code: BA_MUSC_MCOM
Effective Date: Fall 2018

B.A. Music Business Requirements

The B.A. in Music with a track in Music Business provides practical experiences and exploration of career opportunities in the music entertainment industry through classroom study that includes technical instruction and hands-on experience. Required courses help students systematically acquire fundamental musical skills by studying basic concepts of music, learning theory through playing and singing, and becoming confident as a singer or instrumentalist in a group.

Student Learning Outcomes

1. Perform with basic competence as soloist and/or ensemble member.
2. Identify, define and engage the elements of music in sound and/or notation.
3. Describe current practices and historical trends in music.
4. Demonstrate technology-based skills used in the music industry.
5. Describe management and operating systems of the music industry.

Note that all students much achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Music Business is 2.0.

Music Business students may NOT take FYSM 100: Finding your Voice.

Required Music Business Core Courses – 12 credits

Minimum of C grade
MUSC 126 Aural Skills through Performance (3 credits)
MUSC 102 Harmony & Theory I (3 credits)
MUSC 215 American Popular Music (3 credits)
MUSC 292 Audio Engineering I (3 credits)

Required Business Core Courses – 21 credits

Minimum of C grade
BUSN 131 Business Law (3 credits)
MKTG 210 Principles of Marketing (3 credits)
MGM 210 Principles of Management (3 credits)
MUSC 121 Fundamentals of Music Business (3 credits)
MUSC 295 Artist Management and Touring (3 credits)
MUSC 391 Field Experience in Music (3 credits)
MUSC 450 Performing Arts Administration (3 credits)

Applied & Performance Core Courses – 9 credits

Applied & Performance Core – 3 credits
MUSC 116 Finding Your Voice (3 credits) – *Requires a minimum C grade*
Large or Small Ensembles – 4 credits
MUPF 228 Recording Ensemble (1 credit)
MUPF 228 Recording Ensemble (1 credit)
Choose two from small and large ensemble offerings
MUPF 230 Chamber Ensemble (1 credit)
MUPF 231 String Ensemble (1 credit)
MUPF 232 Woodwind Ensemble (1 credit)
MUPF 233 Brass Ensemble (1 credit)

MUPF 234 Percussion Ensemble (1 credit)
MUPF 235 Vocal Ensemble (1 credit)
MUPF 275 Jazz Combo (1 credit)
MUPF 276 Popular Music Ensemble (1 credit)
MUPF 287 New Music Ensemble (1 credit)
MUPF 281 University Band (1 credit)
MUPF 282 University Marching Band (1 credit)
MUPF 283 University Choir (1 credit)
MUPF 285 University Orchestra (1 credit)
MUPF 289 Large Jazz Ensemble (1 credit)

Private or Small Group Instruction – 2 credits

Choose private instruction or small group instruction
All private and small group instruction requires a minimum C grade

Private Instruction in one applied area – 0-2 credits

MUPF XXX (1 credit)
MUPF XXX (1 credit)

Small Group Instruction in one applied area – 0-2 credits

Choose one of the following applied areas
MUSC 24 Class Piano I (1 credit) *and* MUSC 124 Class Piano II (1 credit)
MUSC 122 Classical Guitar I (1 credit) *and* MUSC 222 Classical Guitar II (1 credit)
MUSC 179 Voice Class II (1 credit) *and* MUSC 222 Applied Voice (1 credit)

University Elective – 36 credits

Select any university course between 1-4 credits, totaling 36 credits.

Program Plan Code: BA_MUSC_MUSB
Effective Date: Fall 2020

B.A. Music Performance Requirements

The KU Music Performance emphasis is designed for students with an interest in performing, conducting, writing or teaching music outside of the public schools. The Music major with an emphasis in Music Performance provides preparation for students aspiring to take their place on the stage, to teach in private or community music settings, or to work collaboratively in the vast field of the performing arts.

Student Learning Outcomes

1. Perform with competence as soloist and ensemble members and self-assess performance for continued improvement.
2. Identify, define, and engage the elements of music in sound and notation.
3. Describe current practices and historical trends in music.

Note that all students much achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Music Performance is 2.0. Piano proficiency is required.

Students who take FYSM 100: Finding Your Voice do not need to and may not take MUSC 116 for credit towards graduation.

Required Music Performance Core Courses – 21 credits

MUSC 101 Aural Skills I (2 credits)
MUSC 102 Harmony & Theory I (3 credits)
MUSC 201 Aural Skills II (2 credits)
MUSC 202 Harmony & Theory II (3 credits)
MUSC 213 Aural Skills III (2 credits)
MUSC 310 Composition and Arranging (3 credits)
Choose either MUSC 195 & MUSC 215 or MUSC 311 & MUSC 312
Option A
MUSC 195 Music in Human Experience (3 credits) *and*
MUSC 215 American Popular Music (3 credits)
Option B
MUSC 311 Music from Ancient Times to 1750 (3 credits) *and*
MUSC 312 Music from 1750 to Present (3 credits)

Applied & Performance Music Core Courses – 21 credits

Private Instruction – 7 credits
MUPF 236 Applied Music: French Horn (1 credit)
MUPF 237 Applied Music: Piano (1 credit)
MUPF 238 Applied Music: Organ (1 credit)
MUPF 239 Applied Music: Voice (1 credit)
MUPF 240 Applied Music: Viola (1 credit)
MUPF 241 Applied Music: Cello (1 credit)
MUPF 242 Applied Music: String Bass (1 credit)
MUPF 243 Applied Music: Flute (1 credit)
MUPF 244 Applied Music: Oboe (1 credit)
MUPF 245 Applied Music: Clarinet (1 credit)
MUPF 246 Applied Music: Bassoon (1 credit)
MUPF 247 Applied Music: Saxophone (1 credit)

MUPF 248 Applied Music: Trumpet (1 credit)
MUPF 249 Applied Music: Violin (1 credit)
MUPF 250 Applied Music: Baritone Horn/Trombone (1 credit)
MUPF 252 Applied Music: Tuba (1 credit)
MUPF 253 Applied Music: Percussion (1 credit)
MUPF 254 Applied Music: Guitar (1 credit)
MUPF 277 Studio Performance Seminar (1 credit)
Large Ensemble in Major Area – 6 credits
MUPF 281 University Band (1 credit)
MUPF 282 University Marching Band (1 credit)
MUPF 283 University Choir (1 credit)
MUPF 285 University Orchestra (1 credit)
MUPF 289 Large Jazz Ensemble (1 credit)
Small Ensemble in Major Area – 5 credits.
MUPF 230 Chamber Ensemble (1 credit)
MUPF 231 String Ensemble (1 credit)
MUPF 232 Woodwind Ensemble (1 credit)
MUPF 233 Brass Ensemble (1 credit)
MUPF 234 Percussion Ensemble (1 credit)
MUPF 235 Vocal Ensemble (1 credit)
MUPF 275 Jazz Combo (1 credit)
MUPF 276 Popular Music Ensemble (1 credit)
MUPF 287 New Music Ensemble (1 credit)
Senior Recital – 1 credit
MUPF 399 Senior Recital (1 credit)
Supportive Performance Courses – 2 credits
MUPF 277 Studio Performance Seminar (1 credit)
Select one of the following course offerings.
MUSC 302 The Modern Private Music Teacher (1 credit) *or* MUSC 304 The Professional Classical Musician (1 credit) *or* MUSC 305 The Professional Jazz Musician (1 credit)

University Electives – 36 credits

Select any university course between 1-4 credits, totaling 36 credits.

Program Plan Code: BA_MUSC_PERF
Effective Date: Fall 2025

BFA Animated Arts Requirements

Animated Arts is the newest and fastest growing visual art program at Kutztown University. Here, students work with the latest technology across a range of visual fields – 2D and 3D Animation, Concept Art and Storyboarding, and 3D Digital Modeling & Rendering – becoming leaders in visual innovation for all types of media production, from film to television to video games.

Student Learning Objectives:
Engage the elements and principles of animated arts.

a. Demonstrate proficiency in the tools and techniques used to create artworks in the animation industry.
b. Develop knowledge of the history and critical theory of animation and digital art.
c. Execute the stages of the animation production process in professional-level work.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Animated Arts is 2.0.

Foundations – 15 credits

FINE 015: Drawing I (3 credits)
ART 031: 2D Design (3 credits)
FINE 016: Drawing II (3 credits)
ART 032: 3D Design (3 credits)
CODS 010: Digital Foundation (3 credits)

Core Animated Arts Courses – 21 credits

ANIA 141: Intro to Visual Storytelling (3 credits)
FINE/ART 182: Intro to Time Based Media (3 credits)
ANIA 231: Intro to 2D Animation (3 credits)
ANIA 171: Intro to 3D Modeling and Rendering (3 credits)
ANIA 240: Intro to 3D Animation (3 credits)
FINE 151: Intro to Life Drawing (3 credits)
ANIA 303: Senior Seminar (3 credits)

Art History Courses – 12 credits

ARTH 027: History of Animation (3 credits)
ANIA 302: Digital Futures (3 credits)

Select 1 course with an ARTH prefix

Select 1 of the following options
ARTH 024 *or* 124: Art History A: Prehistory to 1200 CE (3 credits)
ARTH 025 *or* 125: Art History B (3 credits)
ARTH 026 *or* 126: Art History C: 1850-today (3 credits)
CODS 160: Historical Survey of Graphic Design A (3 credits)
CODS 161: Historical Survey of Graphic Design B (3 credits)

Courses with an asterisk and bolded have a prerequisite of ARTH 024/124 or ARTH 025/125 or ARTH 026/126

ARTH 024 or 124: Art History A: Prehistory to 1200 CE (3 credits)
ARTH 025 or 125: Art History B (3 credits)
ARTH 026 or 126: Art History C: 1850-today (3 credits)
ARTH 128: Global Art Survey (3 credits)
ARTH 302: Early Christian and Byzantine Art* (3 credits)
ARTH 303: Art of Ancient Greece and Rome* (3 credits)
ARTH 304: Renaissance Art* (3 credits)
ARTH 305: Medieval Art: Carolingian to High Gothic* (3 credits)
ARTH 306: Art of Northern Europe: 1350 – 1580* (3 credits)
ARTH 307: European Art: 1580 – 1780* (3 credits)
ARTH 308: European Art: 1780 – 1880* (3 credits)
ARTH 309: Art Since 1950* (3 credits)
ARTH 318: Picturing Gender* (3 credits)
ARTH 319: Arts of the Islamic World* (3 credits)
ARTH 320: Early Modern Villas and Gardens* (3 credits)
ARTH 321: The History of Photography* (3 credits)
ARTH 322: Visualizing Food and Empire (3 credits)
ARTH 324: Contemporary African American Art* (3 credits)
ARTH 325: Contemporary African Art and the Diaspora* (3 credits)
ARTH 326: Latin American and Caribbean Art (3 credits)
ARTH 334: American Art* (3 credits)
ARTH 336: Paragone: Rivalry in the Arts (3 credits)
ARTH 337: Ancient Egypt: Art, Exploration, and Afterlife* (3 credits)
ARTH 338: European Modernism: 1880 – 1940* (3 credits)
ARTH 339: Independent Studies in the History of Art* (3 credits)
ARTH 340: Pompeii and Ravenna: Bookends of the Roman Empire* (3 credits)
ARTH 341: Beautiful and Useful: The Functional Arts and Their World* (3 credits)
ARTH 343: Early Modern Italy: Beyond Painting, Sculpture, and Architecture* (3 credits)
ARTH 344: 'La Dolce Vita': Italian Art and Culture* (3 credits)
ARTH 345: Crosscurrents in Italian and Northern Renaissance Art* (3 credits)
ARTH 350: Baroque Art in Italy, France, and Spain between 1590 and 1700* (3 credits)
ARTH 351: Baroque Art in The Dutch Republic, Flanders, and England between 1590 and 1700* (3 credits)
ARTH 364: Art and Sport* (3 credits)
ARTH 365: Cut and Paste: A History of Collage* (3 credits)
ARTH 367: Contemporary British Art* (3 credits)
ARTH 370: Art Today: The Next Decade* (3 credits)
ARTH 380: Seminar in Art History* (3 credits)
ARTH 385: Selected Topics in Art History* (3 credits)
ARTH 390: Internship in Art History* (3 credits)
ARTH 395: Honors Independent Study/Thesis (3 credits)

Primary Specialization – 12 credits

Students will select one primary advanced specialization and take 12 credits in that discipline. Courses under primary specialization are repeatable up to six times for credit for a maximum of 18 credits and up to six credits each semester. Each time a student repeats the class, they will be expected to further develop their technical expertise and a professional cohesive body of artwork.

Primary Specialization: Concept Art

ANIA 341: Visual Storytelling Studio (3 credits)

Primary Specialization: 3D Modeling and Rendering

ANIA 351: 3D Modeling and Rendering Studio (3 credits)

Primary Specialization: Animation

ANIA 361: Animation Studio (3 credits)

Secondary Specialization – 3 credits

Students will select one secondary advanced specialization and take 3 credits in that discipline.

Secondary Specialization: Concept Art

ANIA 341: Visual Storytelling Studio (3 credits)

Secondary Specialization: 3D Modeling and Rendering

ANIA 351: 3D Modeling and Rendering Studio (3 credits)

Secondary Specialization: Animation

ANIA 361: Animation Studio (3 credits)

Art Electives – 15 credits

Take 15 credits from any of the following prefixes: ANIA, ARTH, ARCR, ART, CODS, CPSC, CTME, FINE, FAST
Students may select multiple courses from the same prefix.

Program Plan Code: BFA_ANAR
Effective Date: Fall 2023

BFA Art Requirements

The Bachelor of Fine Arts in Art hones student skills across a wide range of approaches and media, from traditional to digital. Following a foundational year studying drawing, design, and art history, students explore a variety of artistic practices before concentrating in their chosen medium. Art specializations include ceramics, drawing, painting, photography, printmaking, sculpture, and textiles.

Student Learning Objectives:

1. Demonstrate competency with the elements and principles of visual art.
2. Develop knowledge of art history.
3. Demonstrate technical proficiency in the production of art.
4. Create a professional presentation of artwork.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Art is 2.0.

Art Foundations Courses – 12 credits

FINE 015: Drawing I (3 credits)
ART 031: 2D Design (3 credits)
FINE 016: Drawing II (3 credits)
ART 032: 3D Design (3 credits)

Studio Core – 18 credits

Photography, Drawing, Painting, and Textiles & Material Studies Specializations require one 3-credit course that will count towards Art Electives. Please see specialization notes.
ART 141: Intro to Textiles & Material Studies *or* ART 142: Intro to Weaving (3 credits)
ART 161: Intro to Ceramics (3 credits)
FINE 111: Intro to Painting (3 credits)
FINE 141: Intro to Printmaking (3 credits)
FINE 161: Intro to Photo Darkroom *or* FINE 162: Intro to Photo Digital (3 credits)
FINE 171: Intro to Sculpture (3 credits)

Professional Development – 9 credits

FINE 110: Studio Practices (3 credits)
FINE 210: Professional Practices (3 credits)
FINE 310: Senior Seminar (3 credits)
FINE 399: Student Exhibition (0 credits)

Art History – 12 credits

Select 2 courses (6 credits) of 100-level ARTH courses
ARTH 124: Art History A: Prehistory to 1200 CE (3 credits)
ARTH 125: Art History B (3 credits)
ARTH 126: Art History C: 1850-today (3 credits)

Select 2 courses (6 credits) of 300-level ARTH courses (excluding ARTH 390).
ARTH 302: Early Christian and Byzantine Art (3 credits)
ARTH 303: Art of Ancient Greece and Rome (3 credits)
ARTH 304: Renaissance Art (3 credits)
ARTH 305: Medieval Art: Carolingian to High Gothic (3 credits)
ARTH 306: Art of Northern Europe: 1350 – 1580 (3 credits)
ARTH 307: European Art: 1580 – 1780 (3 credits)
ARTH 308: European Art: 1780 – 1880 (3 credits)
ARTH 309: Art Since 1950 (3 credits)
ARTH 318: Picturing Gender (3 credits)
ARTH 319: Arts of the Islamic World (3 credits)
ARTH 320: Early Modern Villas and Gardens (3 credits)
ARTH 321: The History of Photography (3 credits)
ARTH 322: Visualizing Food and Empire (3 credits)
ARTH 324: Contemporary African American Art (3 credits)
ARTH 325: Contemporary African Art and the Diaspora (3 credits)
ARTH 326: Latin American and Caribbean Art (3 credits)
ARTH 334: American Art (3 credits)
ARTH 336: Paragone: Rivalry in the Arts (3 credits)
ARTH 337: Ancient Egypt: Art, Exploration, and Afterlife (3 credits)
ARTH 338: European Modernism: 1880 – 1940 (3 credits)
ARTH 339: Independent Studies in the History of Art (3 credits)
ARTH 340: Pompeii and Ravenna: Bookends of the Roman Empire (3 credits)
ARTH 341: Beautiful and Useful: The Functional Arts and Their World (3 credits)
ARTH 343: Early Modern Italy: Beyond Painting, Sculpture, and Architecture (3 credits)
ARTH 344: 'La Dolce Vita': Italian Art and Culture (3 credits)
ARTH 345: Crosscurrents in Italian and Northern Renaissance Art (3 credits)
ARTH 350: Baroque Art in Italy, France and Spain between 1590 and 1700 (3 credits)
ARTH 351: Baroque Art in The Dutch Republic, Flanders, and England between 1590 and 1700 (3 credits)
ARTH 364: Art and Sport (3 credits)
ARTH 365: Cut and Paste: A History of Collage (3 credits)
ARTH 367: Contemporary British Art (3 credits)
ARTH 370: Art Today: The Next Decade (3 credits)
ARTH 380: Seminar in Art History (3 credits)
ARTH 385: Selected Topics in Art History (3 credits)
ARTH 395: Honors Independent Study/Thesis (3 credits)

Studio Specialization – 15 credits

Students will select one studio specialization and complete 15 credits at the 200 or 300 Level. Specialization choices are Ceramics, Drawing, Painting, Photography, Printmaking, Sculpture, or Textile & Material Studies

Ceramics

Ceramics Studio Course – 12 credits

Complete 12 credits in Ceramics Studio
ART 360: Ceramics Studio (repeatable) (3 credits)
ART 361: Ceramics Studio – Raw Materials (3 credits)

ART 362: Ceramics Studio – Tableware (3 credits)
ART 363: Ceramics Studio – Sculpture (3 credits)
ART 364: Ceramics Studio – Mold Making (3 credits)

Facultative Ceramics Courses – 3 credits

Select 3 credits max from the list below.

ART 360-364: Ceramics Studio Courses (3 credits)
ART 340: Weaving, Textiles, & Material Studies Studio (3 credits)
FAST 370: Sculpture Studio (3 credits)
ANIA 271: 3D Prototyping (3 credits)
ART 392: Field Experience in Art (3 credits)
FINE 377-378: Independent Study – Art Studio I-II (3 credits)

Drawing

All students specializing in Drawing must take FINE 151: Intro to Life Drawing as an ART ELECTIVE in their core program

Drawing Courses – 12-15 credits

Complete 12-15 credits of drawing courses below.

FAST 320: Drawing Studio (repeatable) (3 credits each)
FAST 230: Works on Paper Studio (repeatable) (3 credits each)
FINE 329: Topics in Drawing (3 credits each)
FINE 307: Visual Journal (3 credits)
FINE 328: Renaissance Drawing Materials (3 credits)

Facultative Drawing Courses – 3 credits

Select 3 credits max from the list below.

FINE 380: Independent Study: Art Studio (3 credits)
ART 392: Field Experience in Art (3 credits)
FAST 380: Lithography Studio (3 credits)
FAST 340: Printmaking Studio (3 credits)

Painting

All students specializing in Painting must take one 200 or 300 level Drawing course or Works on Paper as an ART ELECTIVE.

Painting Courses – 12 credits

Complete 12 credits of the following courses.

FAST 310: Painting Studio (repeatable) (3 credits each)

Facultative Painting Courses – 3 credits

Select 3 credits max from the list below.

FAST 230: Works on Paper Studio (3 credits)
FAST 310: Painting Studio (3 credits)
FINE 307: Visual Journal (3 credits)
FINE 328: Renaissance Drawing Materials (3 credits)
FINE 380: Independent Study: Art Studio (3 credits)
ART 392: Field Experience in Art (3 credits)

Photography

All students specializing in Photography must take both FINE 161 and FINE 162 – one as a STUDIO CORE course and one as an ART ELECTIVE.

Photography Courses – 12 credits

Complete 12 credits of the following courses.

FINE 360: Photography Studio (repeatable) (3 credits)
FINE 383: Advanced Digital Photo (3 credits)
FINE 387: Landscape and Location in Photo (3 credits)
FINE 388: The Staged and Constructed Photo (3 credits)
FINE 309: Photogravure & Polymer Printmaking (3 credits)
FINE 337: Themes & Practices in Photo (may be repeatable up to 3 times for 9 credits with different themes/practices 3 credits each) (3 credits)

Facultative Photography Courses – 3 credits

Select 3 credits max from the list below.

FINE 318: Film & Video Art (3 credits)
FINE 380: Independent Study: Art Studio (3 credits)
ART 392: Field Experience in Art (3 credits)

Printmaking

Printmaking Courses – 12 credits

Complete 12 credits in printmaking studio and/or lithography studio

FAST 340: Printmaking Studio (repeatable) (3 credits each)
FAST 380: Lithography Studio (repeatable) (3 credits each)

Facultative Printmaking Courses – 3 credits

Select 3 credits max from the list below.

FAST 230: Works on Paper Studio (3 credits)
FAST 320: Drawing Studio (3 credits)
FINE 309: Photogravure & Polymer Printmaking (3 credits)
FINE 327: Figure in Mixed Media (3 credits)
FINE 328: Renaissance Drawing Materials (3 credits)
FINE 329: Topics in Drawing (3 credits)
FINE 380: Independent Study: Art Studio (3 credits)
ART 392: Field Experience in Art (6 credits)

Sculpture

Sculpture Courses – 12 credits

Complete 12 credits of the following courses.

FAST 370: Sculpture Studio (repeatable) (3 credits)

Facultative Sculpture Courses – 3 credits

Select 3 credits max from the list below.

FAST 370: Sculpture Studio (3 credits)
ART 340: Weaving, Textiles, & Material Studies (3 credits)
ART 360-364: Ceramics Studio Courses (3 credits)
ANIA 351: 3D Modeling & Rendering Studio (3 credits)
ANIA 271: 3D Prototyping (3 credits)
FINE 380: Independent Study: Art Studio (3 credits)
ART 392: Field Experience in Art (6 credits)

Textile & Material Studies

All students specializing in Textiles & Material Studies must take ART 141 and ART 142, one as a STUDIO CORE course and one as an ART ELECTIVE.

Weaving, Textile, and Material Study Courses – 12 credits

Complete 12 credits of the following courses.

ART 340: Weaving, Textiles, & Material Studies (repeatable) (3 credits)

Facultative Textile and Material Study Courses – 3 credits

Select 3 credits max from the list below.

ART 340: Weaving, Textiles, & Material Studies (3 credits)
FAST 370: Sculpture Studio (3 credits)
ART 360-364: Ceramics Studio Courses (3 credits)
FINE 380: Independent Study: Art Studio (3 credits)
ART 392: Field Experience in Art (3 credits)

Art Electives – 12 credits

Complete 12 credits from the following prefixes: ANIA, ARTH, ART, CODS, FAST, FINE. Photography, Drawing, Painting, and Textiles & Material Studies Specializations require one 3 credit course that will count towards Art Electives, see additional notes under the specializations for more details.

Directed General Education Courses – 3 credits

While counting toward General Education fulfilment, this course is required for completion of the major.

CODS 010: Digital Foundation (3 credits) – *General Education Category D Course*

Program Plan Code: BFA_STAR
Effective Date: Spring 2024

BFA Communication Design Requirements

Kutztown University's Communication Design (KUCD) program is a community of designers who are passionate about what they create. We empower you to solve problems, communicate visually, and evoke meaningful change—all through dynamic visual expression. CD students learn all aspects of design as required by the industry: Graphic Design, Advertising Design, Interactive Design, and Illustration.

Student Learning Objectives

1. Solve communication problems through research and development.
2. Describe and respond to the audiences and contexts that shape design decisions.
3. Create and develop visual form in response to communication problems.
4. Apply tools and technology through the creation, reproduction, and distribution of visual messages.
5. Employ professionalism and best business practices through presentation.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Communication Design is 2.0.

Foundations – 12 credits

FINE 015: Drawing I (3 credits)
ART 031: 2D Design (3 credits)
FINE 016: Drawing II (3 credits)
ART 032: 3D Design (3 credits)

Communication Design Program Courses – 44 credits

CODS 106: Intro to Motion Graphics (2 credits)
CODS 130: Typography (3 credits)
CODS 151: Intro to Illustration (3 credits)
CODS 140: Intro to Interactive Design (3 credits)
CODS 141: Intro to Design (3 credits)
CODS 252: Digital Illustration (3 credits)
CODS 220: Print Media Production (2 credits)
CODS 238: Graphic Design (3 credits)
CODS 241: Advertising Design (3 credits)
CODS 276: Interactive Design (3 credits)
CODS 231: Advanced Typography (3 credits)
CODS 243: Advanced Advertising Design (2 credits)
CODS 278: Advanced Interactive Design (2 credits)
CODS 280: Integrated Branding (2 credits)
Directed Art Elective: *Select 1 course from the Directed Art Elective list.*
CODS 374: Portfolio Seminar (2 credits)
CODS 398: Professional Practices (2 credits)
CODS 399: Student Exhibition (0 credits)

Seminar Courses – 10 credits

Select 5 CD seminar courses. Up to 1 General Art Elective may be used for a total of up to 3 credits of the 10 credits required. Art Electives may be ANIA, ART, ASEL, CODS, CPSC, CTME, FINE, FAST, MKTG, BUSN, or SMTS courses

CODS 315: Emerging Media Campaigns (2 credits)
CODS 316: The Art of the Pitch (2 credits)
CODS 335: Interdisciplinary Team Project (2 credits)
CODS 346: Motion Graphics II (2 credits)
CODS 347: Interactive Spaces (2 credits)
CODS 348: VR/AR/Mixed Reality (2 credits)
CODS 349: Physical Computing (2 credits)
CODS 355: User Experience (2 credits)
CODS 356: Creative Coding (2 credits)
CODS 357: Typeface Design (2 credits)
CODS 359: Design for the Greeting Card and Gift Industry (2 credits)
CODS 361: Restaurant Graphics (2 credits)
CODS 364: Poster Design (2 credits)
CODS 366: Motion Graphics (2 credits)
CODS 367: Package Design (2 credits)
CODS 377-380: Independent Study in Communication Design (1-3 credits)
CODS 381: Publication Design (2 credits)
CODS 382: Advanced Branding (2 credits)
CODS 383: Campaigns for Social Good (2 credits)
CODS 384: Consumer Product Campaigns (2 credits)
CODS 385: Content Management Systems (2 credits)
CODS 386: Web Applications (2 credits)
CODS 387: Visual Essay (2 credits)
CODS 388: Self Promotion (2 credits)
CODS 389: Personal Style (2 credits)
CODS 390: Illustration for Publishing (2 credits)
CODS 391: Illustration for Design (2 credits)
CODS 392: Field Experience in Communication Design (1-16 credits)
CODS 395: Honors Independent Study/Thesis (1-6 credits)
CODS 397: Self-Generated Projects (2 credits)

Internship or Art Electives – 6 credits

Internship – 0-6 credits

CDE 394: Communication Design Internship (6 credits)

Art Electives – 0-6 credits

Art Electives may be ANIA, ART, ASEL, CODS, CPSC, CTME, FINE, FAST, MKTG, BUSN, or SMTS courses

Design/Art History – 6 credits

CODS 160: Historical Survey of Graphic Design A (3 credits)
CODS 161: Historical Survey of Graphic Design B (3 credits)

Directed General Education Courses – 9 credits

While counting toward General Education Category D, Understanding and Creating Ideas fulfillment, these courses are required for completion of the major.

CODS 010: Digital Foundation (3 credits)

Select 2 ARTH courses:
ARTH 024 *or* 124: Art History A (3 credits)
ARTH 025 *or* 125: Art History B (3 credits)
ARTH 026 *or* 126: Art History C (3 credits)
ARTH 027: History of Animation, Game Art, & Interactive Media (3 credits)
or any 300-Level ARTH course

Program Plan Code: BFA_COMD
Effective Date: Fall 2022

B.S. Art Education Requirements

As an Art Education major, you will receive training in a wide range of studio processes, obtain a solid art history foundation, and learn and grow as an educator. The program concludes with a clinical student teaching experience in an elementary, middle, or high school. Students have the option to teach in a variety of settings, including rural, suburban, and urban locations in eastern Pennsylvania.

Student Learning Objectives

1. Investigate purposes and practices of art education.
2. Apply art processes and practices to make works of art.
3. Apply and analyze diverse critical methodologies to the analysis of cultural artifacts.
4. Demonstrate dispositions of a professional practitioner.
5. Design a curriculum with strategies to deliver instruction and assess learning.
6. Deliver art instruction that reflexively assesses teaching and learning.

Note that all students much achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Art Education is 3.0.

Art Education Foundation Courses – 15 credits

FINE 015: Drawing I (3 credits)
FINE 016: Drawing II (3 credits)
ART 031: 2d Design (3 credits)
ART 032: 3d Design (3 credits)
ART/FINE 182: Time-Based Media (3 credits)

Art Studio – 21 credits

Art Studio – 6 credits

Take both art studio courses:
ART 161: Intro to Ceramics (3 credits)
FINE 111: Intro to Painting (3 credits)

Photography Elective – 3 credits

Select one of the following courses:
FINE 161: Intro to Photography Darkroom (3 credits)
FINE 162: Intro to Photography Digital (3 credits)

Drawing Elective – 3 credits

Select one of the following courses:
FINE 151: Life Drawing (3 credits) **or**
FAST 320: Drawing Studio I (3 credits) **or**
FAST 350: Life Drawing Studio I (3 credits)

Studio Electives – 6 credits

Select two courses with the following prefixes:
ART, ANIA, CODS, FINE, **or** FAST XXX (3 credits)
ART, ANIA, CODS, FINE, **or** FAST XXX (3 credits)

Art Elective– 3 credits

Choose any studio or art history. Choose one course at the 100 level or higher that begins with the following prefixes:
ART, ARTH, ANIA, CODS, CDHI, FINE, **or** FAST XXX (3 credits)

Senior Exhibition – 0 credits

Senior Exhibition Required: Complete in the Spring Semester
ARED 399: Senior Exhibition (0 credits)

Art Studio Depth – 6 credits

Choose 6 credits (two 200-300 level courses) in a SINGLE artform to concentrate in a studio program such as Fine Arts, Design & Media Arts

Art History, Criticism, & Theory – 9 credits

ARTH 125: Intro To Western Art II (3 credits)
ARCR/HUMN/WGST 211: Women in the Arts (3 credits)
Visual Studies Elective *– Choose any course that begins with the following prefixes*
ARCR, ARTH, **or** CDHI XXX (3 credits)

Art Education Courses – 27 credits

ARED 210, 310, 330 and 301 must be taken in sequence. ARED 301 must be taken the semester before ARED 390/391 Clinical Experience
ARED 132: Art in Alternative Settings (3 credits)
ARED 310: Learning in the Visual Arts: Adolescence (3 credits)
ARED 330: Studio Thinking (3 credits)
ARED 331: Designing For Disabilities (3 credits)
ARED 301: Art Education Field Experience (3 credits)
ARED 390: Clinical Field Experience (Placement 1) (6 credits)
ARED 391: Clinical Field Experience (Placement 2) (6 credits)

Directed General Education Courses – 30 credits

While counting toward General Education fulfillment, these courses are required for completion of the major.
Gen Ed C2 Mathematics Course: *Suggested MATH 103: Fundamentals of Math I* (3 credits)
Gen Ed C3 Mathematics Course: *Suggested MATH 104: Fundamentals of Math II* (3 credits)
ENGL Literature – Gen Ed D (3 credits)
CODS 010: Digital Foundation – Gen Ed D (3 credits)
EDUC 150: English Language Learners – Gen Ed B (3 credits)
ARTH 124: Intro To Western Art I – Gen Ed D (3 credits)
SPEE 201: Cog. Dev./Diverse Learners – Gen Ed B (3 credits)
ARED 210: Learning In Visual Arts: Childhood – Gen Ed A3 (3 credits)
ARCR 300: Visual Culture: Critical Practice – Gen Ed A4 (3 credits)
PSYC 011: General Psychology – Gen Ed B (3 credits)

Program Plan Code: BS_ARED
Effective Date: Spring 2021

B.S. Art Education: Alternative Settings Requirements

A Bachelor of Science in Art Education - Alternative Settings prepares you for careers in museum settings, settings for health and well-being (e.g., art therapy) and community arts organizations. This includes serving programs at art museums, anthropology museums, children's museums, community arts centers, family support agencies, hospitals, parks & recreation departments, private studios, and plenty of other settings.

Students Learning Objectives

1. Investigate purposes and practices of art education.
2. Apply art processes and practices to make works of art.
3. Interpret and analyze works of art as they relate to historical and contemporary contexts.
4. Demonstrate dispositions of a professional practitioner.
5. Design a curriculum with strategies to deliver instruction and assess learning.
6. Deliver art instruction that reflexively assesses teaching and learning.

Note that all students much achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Art Education Alternative Settings is 3.0.

Art Education: Alt. Settings Foundation Courses – 15 credits

FINE 015: Drawing I (3 credits)
FINE 016: Drawing II (3 credits)
ART 031: 2d Design (3 credits)
ART 032: 3d Design (3 credits)
ART/FINE 182: Time-Based Media (3 credits)

Art Studio – 18 credits

Art Studio – 6 credits

Take both art studio courses:
FINE 111: Intro to Painting (3 credits)
ART 161: Intro to Ceramics (3 credits)

Photography Elective – 3 credits

Select one of the following courses:
FINE 161: Intro to Photography Darkroom (3 credits) **or**
FINE 162: Intro to Photography Digital (3 credits)

Drawing Elective – 3 credits

Select one of the following courses:
FINE 151: Life Drawing (3 credits) **or**
FAST 320: Drawing Studio I (3 credits) **or**
FAST 350: Life Drawing Studio I (3 credits)

Studio Electives – 6 credits

Select two courses with the following prefixes ART, ANIA, CODS, FINE, FAST
ART, ANIA, CODS, FINE, **or** FAST XXX (3 credits)
ART, ANIA, CODS, FINE, **or** FAST XXX (3 credits)

Senior Exhibition – 0 credits
Graduation Requirement. Complete in the spring semester
ARED 399: Senior Exhibition (0 credits)

Art Studio Depth – 6 credits
Choose 6 credits (200-300 level) in a SINGLE art form to concentrate in a studio program such as Fine Arts, Design & Media Arts

Art History, Criticism, Theory – 9 credits
ARCR/HUMN/WGST 211: Women in The Arts (3 credits)

Visual Studies Elective *– Choose any course that begins with the following prefixes*
ARCR, ARTH, **or** CDHI XXX (3 credits)

Art Elective – 3 credits
Any 100-level or higher with the following prefixes
ART, ARTH, ANIA, CODS, CDHI, FINE, **or** FAST XXX (3 credits)

Art Education Courses – 21 credits
ARED 210, 310, 330, and 301 must be taken in sequence.
All courses in this section require a minimum B grade.
ARED 132: Art in Alternative Settings (3 credits)
ARED 210: Learning in the Visual Arts: Childhood (3 credits)
ARED 310: Learning in the Visual Arts: Adolescence (3 credits)
ARED 301: Art Education Field Experience (3 credits)
ARED 330: Studio Thinking (3 credits)
ARED 331: Designing for Disabilities (3 credits)
ARED 392: Field Experience Internship (3 credits)

Alternative Settings Depth – 9 credits
Choose one of the three areas of emphasis: Museum Settings, Health Settings, or Community Settings.

Museum Settings Courses – 9 credits
Take three courses with any of the following prefixes: ARTH, ARCR, ANTH
ARTH, ARCR, or ANTH XXX (3 credits)
ARTH, ARCR, or ANTH XXX (3 credits)
ARTH, ARCR, or ANTH XXX (3 credits)

Health Settings Courses – 9 credits
Take three courses with the PSYC prefix. If emphasis is Health Track, PSYC Directed Gen Ed

Community Settings Courses – 9 credits
Take three courses with any of the following prefixes. Only 3 credits from prefixes with asterisks and bolded may count towards the alt. settings depth requirement.
ANTH, COMM, PSYC, SOCI, SOWK, SPEE, **or** PRWR XXX (3 credits)
ANTH, COMM, PSYC, SOCI, SOWK, SPEE, **or** PRWR XXX (3 credits)
ANTH, COMM, PSYC, SOCI, SOWK, SPEE, PRWR, **BUSN*, ACCT*, MKTG*, or FINE 210*** *(or appropriate course)* (3 credits)

Directed General Education Courses – 12 to 15 credits

While counting toward General Education fulfillment, these courses are required for completion of the major.

CODS 010: Digital Foundation – Gen. Ed. D (3 credits)
ARTH 124: Intro To Western Art I – Gen. Ed. D (3 credits)
ARTH 125: Intro To Western Art II – Gen. Ed. D (3 credits)
ARCR 300: Visual Culture: Critical Practice – Gen. Ed. A4 (3 credits)
If emphasis in health settings:
PSYC 011: General Psychology – Gen Ed B (3 credits)

Program Plan Code: BS_ARED_ALTS
Effective Date: Spring 2021

B.S. Cinema, Television & Media Production Requirements

Bring your creative vision to life with our all-in-one film, television, and media production major from Kutztown University. In this major, gain real film experience with the latest production tools; access our on-campus multi-set television studio; produce live events from the KU remote production trailer; and work with award-winning film professors.

Student Learning Outcomes

1. Students will understand current business practices and their development in the Cinema, Television and Media Production industry.
2. Students will write quality content that could be produced for various media platforms.
3. Students will produce a completed work for exhibition and distribution.
4. Students will demonstrate proficiency in cinema, television, media production technical processes.

Note that all students much achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Cinema, Television & Media Production is 2.0.

All students must earn a C or higher in all CTME courses.

Required Cinema, Television & Media Production Core Courses – 21 credits

CTME 10: Introduction to Cinema, Television, and Media (3 credits)
CTME 50: Audio Production (3 credits)
CTME 55: Fundamentals of Studio Production (3 credits)
CTME 70: Scriptwriting (3 credits)
CTME 130: Media Theory and Aesthetics (3 credits)
CTME 160: Cinematography (3 credits)
CTME 180: Post-Production (3 credits)

Cinema, Television & Media Production Requirements

200-Level Program Requirements – 15 credits

Take CTME 220: Media Law & Ethics in the Digital Age and four additional 200-level CTME courses
CTME 220: Media Law & Ethics in the Digital Age (3 credits)
Select 4 courses:
CTME 205: Narrative Video Production (3 credits)
CTME 206: Masterpieces in Film History (3 credits)
CTME 211: Post-9/11 American Cinema (3 credits)
CTME 218: Studio Production Practicum (3 credits)
CTME 222: The Evolution of Sports and the Media (3 credits)
CTME 250: Engineering and Troubleshooting (3 credits)
CTME 255: Field Production (3 credits)
CTME 262: American Independent Cinema (3 credits)
CTME 263: Cult Cinema (3 credits)
CTME 270: Script to Screen (3 credits)
CTME 271: Graphics for Digital Media (3 credits)

300-Level Program Requirements – 12 credits

Take CTME 380: Senior Seminar in CTME and three additional 300-level CTME courses
CTME 380: Senior Seminar in CTME (3 credits)
Select 3 courses:
CTME 306: Audio Post-Production (3 credits)
CTME 307: Writing for Narrative Television (3 credits)
CTME 324: Laughing Matters: The Evolution of Comedy Through Cinema, TV… (3 credits)
CTME 325: Comedy Writing and Production for Sitcoms and Screen Media (3 credits)
CTME 350: Documentary (3 credits)
CTME 355: Music Video Production (3 credits)
CTME 360: Advanced Cinematography (3 credits)
CTME 364: Advanced Audio (3 credits)
CTME 366: Advanced Post-Production (3 credits)
CTME 368: Post-Production Practicum (3 credits)
CTME 369: Field/Post-Production Practicum (3 credits)
CTME 370: Selected Topics in Electronic Media (3 credits)
CTME 374: Selected Topics in Electronic Media (3 credits)
CTME 375: Live-Event Production (3 credits) **is repeatable for up to 9 credits*
CTME 379: Independent Study in Electronic Media (3 credits)
CTME 395: Honors Independent Study/Thesis (3 credits)
CTME 398: Honors Supplementary Research (3 credits)

Senior Internship – 12 credits

Select a 12-credit internship or a 6-credit internship and two CTME courses.
CTME 375: Live Event Production is repeatable for up to 9 credits.

Option A:

CTME 390: Full-Time Senior Internship in Cinema, Television, and Media (12 credits)

Option B:

CTME 390: Part-Time Senior Internship in Cinema, Television, and Media (6 credits)
CTME XXX (3 credits)
CTME XXX (3 credits)

University Electives – 18 credits

Program Plan Code: BS_CTMP
Effective Date: Fall 2021

B.S. Music Education Requirements

This National Association of Schools of Music (NASM) accredited program serves teacher candidates who wish to be certified in instrumental, choral, and general music in pre-kindergarten through 12th grade in Pennsylvania. This certification is also accepted as initial certification in many other states. The Music Education major at Kutztown combines the studies of the College of Visual and Performing Arts and the College of Education.

Student Learning Outcomes:

1. Perform with competence as soloist and ensemble members.
2. Identify, define, and engage the elements of music in sound and notation.
3. Describe current practices and historical trends in music.
4. Demonstrate current pedagogical practices.
5. Conduct musical groups with attention to artistic concerns.

Note that all students much achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Music Education is 3.0. Piano proficiency is required.

Students who take FYSM 100: Finding Your Voice do not need to and may not take MUSC 116 for credit towards graduation.

Required Music Core Courses – 32 credits

Music Core – 27 credits

MUSC 101 Aural Skills I (2 credits)
MUSC 102 Harmony and Theory I (3 credits)
MUSC 201 Aural Skills II (2 credits)
MUSC 202 Harmony & Theory II (3 credits)
MUSC 214 Harmony & Theory III (3 credits)
MUSC 213 Aural Skills III (2 credits)
MUSC 230 Intro to Music Technology (3 credits)
MUSC 310 Composition & Arranging (3 credits)
MUSC 311 Music/Ancient Times to 1750 (3 credits)
MUSC 325 Conducting (Vocal & Instrumental) (2 credits)
MUSC 326 Advanced Conducting (1 credit)

Music Electives – 5 credits

Any combination of courses with a MUSC and/or MUPF prefix totaling 5 credits

MUSC 020 Basic Concepts and Skills of Music (3 credits)
MUSC 108 Intro to World Music (3 credits)
MUSC 113 Intro to Film Music (3 credits)
MUSC 114 Musical Theatre Performance (3 credits)
MUSC 116 Finding Your Voice (3 credits)
MUSC 121 Fundamentals of Music Business (3 credits)
MUSC 127 Commercial Music Theory (3 credits)
MUSC 194 French German and Italian Diction for Musicians (3 credits)
MUSC 199 Songwriting (3 credits)
MUSC 205 The Physical Properties of Sound: Music and Music Reproduction (3 credits)
MUSC 209 Women in Music (3 credits)
MUSC 215 American Popular Music (3 credits)
MUSC 225 Jazz: Its History and Influence (3 credits)

MUSC 228 The History of American Musical Theatre (3 credits)
MUSC 292 Audio Engineering I (3 credits)
MUSC 293 Hip-Hop Music and Culture (3 credits)
MUSC 294 Sound Design for Visual Media (3 credits)
MUSC 295 Artist Management and Touring (3 credits)
MUSC 296 Live Audio Production (3 credits)
MUSC 315 Audio Engineering II (3 credits)
MUSC 391 Field Experience in Music (3 credits)
MUSC 399 Independent Study: Music (3 credits)
MUSC 450 Performing Arts Administration (3 credits)

MUPF 230 Chamber Ensemble (1 credit)
MUPF 231 String Ensemble (1 credit)
MUPF 232 Woodwind Ensemble (1 credit)
MUPF 233 Brass Ensemble (1 credit)
MUPF 234 Percussion Ensemble (1 credit)
MUPF 235 Vocal Ensemble (1 credit)
MUPF 236 Applied Music: French Horn (1 credit)
MUPF 237 Applied Music: Piano (1 credit)
MUPF 238 Applied Music: Organ (1 credit)
MUPF 239 Applied Music: Voice (1 credit)
MUPF 240 Applied Music: Viola (1 credit)
MUPF 241 Applied Music: Cello (1 credit)
MUPF 242 Applied Music: String Bass (1 credit)
MUPF 243 Applied Music: Flute (1 credit)
MUPF 244 Applied Music: Oboe (1 credit)
MUPF 245 Applied Music: Clarinet (1 credit)
MUPF 246 Applied Music: Bassoon (1 credit)
MUPF 247 Applied Music: Saxophone (1 credit)
MUPF 248 Applied Music: Trumpet (1 credit)
MUPF 249 Applied Music: Violin (1 credit)
MUPF 250 Applied Music: Baritone Horn/Trombone (1 credit)
MUPF 252 Applied Music: Tuba (1 credit)
MUPF 253 Applied Music: Percussion (1 credit)
MUPF 254 Applied Music: Guitar (1 credit)
MUPF 275 Jazz Combo (1 credit)
MUPF 277 Studio Performance Seminar (1 credit)
MUPF 276 Popular Music Ensemble (1 credit)
MUPF 281 University Band (1 credit)
MUPF 282 University Marching Band (1 credit)
MUPF 283 University Choir (1 credit)
MUPF 285 University Orchestra (1 credit)
MUPF 287 New Music Ensemble (1 credit)
MUPF 289 Large Jazz Ensemble (1 credit)

Applied Music Courses – 18 credits

Students must achieve a C or better in the Major Performance area to continue as a Music Major.

Private Instruction – 7 credits

MUPF 236 Applied Music: French Horn (1 credit)
MUPF 237 Applied Music: Piano (1 credit)
MUPF 238 Applied Music: Organ (1 credit)
MUPF 239 Applied Music: Voice (1 credit)

MUPF 240 Applied Music: Viola (1 credit)
MUPF 241 Applied Music: Cello (1 credit)
MUPF 242 Applied Music: String Bass (1 credit)
MUPF 243 Applied Music: Flute (1 credit)
MUPF 244 Applied Music: Oboe (1 credit)
MUPF 245 Applied Music: Clarinet (1 credit)
MUPF 246 Applied Music: Bassoon (1 credit)
MUPF 247 Applied Music: Saxophone (1 credit)
MUPF 248 Applied Music: Trumpet (1 credit)
MUPF 249 Applied Music: Violin (1 credit)
MUPF 250 Applied Music: Baritone Horn/Trombone (1 credit)
MUPF 252 Applied Music: Tuba (1 credit)
MUPF 253 Applied Music: Percussion (1 credit)
MUPF 254 Applied Music: Guitar (1 credit)

Piano Instruction – 3 credits

MUSC 24 Class Piano I (1 credit)
MUSC 124 Class Piano II (1 credit)
MUSC 224 Class Piano III (1 credit)

Large Ensemble in Major Area – 5 credits

MUPF 281 University Band (1 credit)
MUPF 282 University Marching Band (1 credit)
MUPF 283 University Choir (1 credit)
MUPF 285 University Orchestra (1 credit)
MUPF 289 Large Jazz Ensemble (1 credit)

Small Ensemble in Major Area – 2 credits

MUPF 230 Chamber Ensemble (1 credit)
MUPF 231 String Ensemble (1 credit)
MUPF 232 Woodwind Ensemble (1 credit)
MUPF 233 Brass Ensemble (1 credit)
MUPF 234 Percussion Ensemble (1 credit)
MUPF 235 Vocal Ensemble (1 credit)
MUPF 275 Jazz Combo (1 credit)
MUPF 276 Popular Music Ensemble (1 credit)
MUPF 287 New Music Ensemble (1 credit)

Senior Recital – 1 credit

MUFP 399 Senior Recital (1 credit)

Music Education Courses – 16 credits

MUED 100 Overture to Music ED (2 credits)
MUED 222 Secondary Music Methods (3 credits)
MUED 231 String Techniques (1 credit)
MUED 232 Woodwind Techniques (1 credit)
MUED 233 Brass Techniques (1 credit)
MUED 234 Percussion Techniques (1 credit)
MUED 299 Music ED Lab (1 credit)
MUED 320 Instrumental Methods (3 credits)
MUED 322 Choral Methods (3 credits)

Clinical Component – 12 credits

MUED 390 Clinical Experience I (6 credits)
MUED 391 Clinical Experience II (6 credits)

Directed General Education Courses – 30 credits

While counting toward General Education fulfillment, these courses are required for completion of the major.
MUSC 312 Music/1750 to Present (3 credits) – Category D
MUED 220 Elementary Music Methods (3 credits) – Category D
EDUC 150 English Language Learners (3 credits) – Category B
SPEE 201 Cognitive Dev. Of Diverse Learners (3 credits) – Category B
MUED 335 Music for the Exceptional Learner (3 credits) – Category D
SPEE 316 Literacy Dev. & Instruction in Core & Intervention Areas (3 credits) – Category A4

The following courses are suggested to meet your General Education and Certification requirements. If any of these are taken outside General Education, your total credits could be as high as 141.
MATH 017 or above; *suggested MATH 103* (3 credits) – Category C2
MATH 017 or above; *suggested MATH 104* (3 credits) – Category C3
ENGL – Any literature course in Category B (*If none offered in Category B, Category D literature course may be substituted*) (3 credits)
MUSC 116 Finding Your Voice (3 credits) – Category A3

Program Plan Code: BA_MUSE
Effective Date: Fall 2021

B.S. Social Media Theory & Strategy Requirements

Kutztown University's B.S. in Social Media Theory & Strategy (SMTS) is a one-of-a-kind program combining Business, English, and Communication Studies. The SMTS boasts a SMASH Lab (Social Media Analytics Strategic Hub); a unique, innovative, collaborative space with access to software and technology only available at select research institutions in the U.S.

Student Learning Outcomes

1. Analyze and recommend appropriate social media marketing communication options.
2. Design effective social media content strategies.
3. Construct high-quality social media projects in multiple modes.
4. Analyze and interpret patterns and trends in social media data.
5. Apply social media content and structures based on ethical and theoretical approaches.
6. Appraise the benefits and drawbacks of specific social media approaches and platforms.

Note that all students much achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. The final GPA requirement for Social Media Theory & Strategy is 2.0.

Required Social Media Theory & Strategy Core Courses – 21 credits

SMTS 101: Intro. To Social Media Theory & Strategy (3 credits)
MKTG 210: Principles of Marketing (3 credits)
PRWR 250: Writing for Social Media (3 credits)
SMTS/ENGL 314: Social Media Analytics (3 credits)
MKTG 351: Media Concepts & Planning *or* MKTG 362: Digital Marketing (3 credits)
SMTS 380: Capstone (3 credits)
SMTS 390: Social Media Internship (3 credits)

Ethics Requirement – 3 credits

Select one course from the following:
CPSC 150: Ethical, Legal, and Professional Impacts of the Digital Age (3 credits) *or*
CTME 220: Media Law & Ethics in the Digital Age (3 credits) *or*
SMTS 224: Social Media Ethics (3 credits) *or*
MKTG 315: Marketing Ethics in Society (3 credits)

Social Media Theory and Strategy Electives – 21 credits

300-Level Program Electives – 6 credits

Select two of the following courses:
Courses with a prerequisite are bolded and include an asterisk (*).
COMM 305: Theories of Emerging Media* (3 credits)
COMM 307: Rhetoric of Visual Media (3 credits)
COMM 311: Crisis Communication (3 credits)
COMM 319: Integrative Marketing & Communication* (3 credits)
COMM 360: The Digital Self* (3 credits)

CPSC 458: Data Mining & Predictive Analysis* (3 credits)
CPSC 459: Introduction to Big Data* (3 credits)
ENGL/PRWR 333: Digital Rhetoric & Writing* (3 credits)
ENGL/PRWR 339: New Media, Story, Change* (3 credits)
ENGL 347: Activists Writing Media* (3 credits)
ENGL 358: Rhetoric of Style* (3 credits)
MKTG 357: Integrated Marketing Communications* (3 credits)
MKTG 362: Digital Marketing* (3 credits)
MKTG 363: Marketing Analytics* (3 credits)

200-Level Program Electives – 9 credits

Select three of the following courses:
Courses with a prerequisite are bolded and include an asterisk (*).
COMM 212: Intro. To Mass Communication (3 credits)
COMM 243: Social Games and Communication* (3 credits)
COMM 245: New Media & Communication* (3 credits)
CPSC 220: Object-Oriented Multimedia Programming* (3 credits)
PRST 210: Entrepreneurship (3 credits)
PRWR 216: Writing for Public Relations* (3 credits)
PRWR 321: Information Design (3 credits)

Additional Program Electives – 6 credits

Select two of the following courses:
ARTH 27: History of Animation, Game Art, & Interactive Media (3 credits)
CODS 160: Historical Survey of Graphic Design A (3 credits)
CODS 161: Historical Survey of Graphic Design B (3 credits)
CPSC 105: Data Visualization (3 credits)
CPSC 120: Intro. To Creative Graphic Coding (3 credits)
CPSC 122: Client-side Web Development (3 credits)
CPSC 125: Discrete Math for Comp I (3 credits)
PRWR 120: Technical Writing & Communication (3 credits)

University Electives – 33 credits

If both MKTG courses are taken in the Required Core section, the second course will be placed in the SMTS Major Electives section; similarly, if any additional ethics course is taken in the Ethics section, it will be placed in the SMTS Major Electives section.

Program Plan Code: BS_SOMS
Effective Date: Spring 2023

Art Minor Requirements

The Art minor allows students to explore a sampling of art approaches and media, from traditional to digital. Students take 6-12 credits in foundation 0-100 level courses and 6-12 credits in upper level 200-300 level courses for a combination of 18 credits for the minor. Upper-level courses exist in ceramics, drawing, painting, photography, printmaking,
sculpture, and textiles.

Student Learning Objectives:

1. Demonstrate competency with the elements and principles of visual art.
2. Demonstrate technical proficiency in the production of art.
3. Create a professional presentation of artwork.

Note that all students must achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. Art minor program requirements: 18 credits. The final GPA requirement for Art Minor is 2.0.

Art Minor Core Courses

000/100-Level ART, FINE, or ARTH Courses – 6 to 12 credits

Choose 6 to 12 credits with a maximum of 3 credits in ARTH

FINE 014 Elements of Drawing for Non Majors (3 credits)
FINE 015 Drawing I (3 credits)
ART 031 2D Design (3 credits)
FINE 016 Drawing II (3 credits)
ART 032 3D Design (3 credits)
ART 061 Intro to Ceramics for Non Majors (3 credits)
ART 141 Intro to Textiles & Material Studies (3 credits)
ART 142 Intro to Weaving (3 credits)
ART 161 Intro to Ceramics (3 credits)
ART 182 Intro to Time Based Media (3 credits)
FINE 151 Intro to Life Drawing (3 credits)
FINE 111 Intro to Painting (3 credits)
FINE 141 Intro to Printmaking (3 credits)
FINE 161 Intro to Photo Darkroom (3 credits)
FINE 162 Intro to Photo Digital (3 credits)
FINE 171 Intro to Sculpture (3 credits)
ARTH 024 *or* 124 Art History A: Prehistory to 1200 CE (3 credits)
ARTH 25 *or* 0125 Art History B: (3 credits)
ARTH 026 *or* 126 Art History C: 1850–today (3 credits)

200/300-Level ART, FINE, FAST Courses – 6 to 12 credits

Choose 6-12 credits in upper-level 200/300-level courses after taking the necessary pre-requisite courses. Upper-level courses exist in ceramics, drawing, painting, photography, printmaking, sculpture, and textiles.

FAST 230 Works on Paper Studio (repeatable) (3 credits each)
FAST 310 Painting Studio (repeatable) (3 credits each)
FAST 320 Drawing Studio (repeatable) (3 credits each)
FAST 370 Sculpture Studio (repeatable) (3 credits each)
FAST 380 Lithography Studio (repeatable) (3 credits each)

FAST 340 Printmaking Studio (repeatable) (3 credits each)
FINE 329 Topics in Drawing (3 credits each)
FINE 307 Visual Journal (3 credits)
FINE 328 Renaissance Drawing Materials (3 credits)
FINE 337 Themes and Practices in Photo (3 credits)
FINE 380 Independent Study: Art Studio (3 credits)
ART 392 Field Experience in Art (3 credits)
FINE 307 Visual Journal (3 credits)
FINE 328 Renaissance Drawing Materials (3 credits)
ART 360 Ceramics Studio (repeatable) (3 credits)
ART 361-364 Ceramics Studio Courses (3 credits each)
ART 340 Weaving, Textiles, & Material Studies Studio (repeatable) (3 credits)
ART 392 Field Experience in Art (3 credits)

Program Plan Code: STAR
Effective Date: Fall 2023

Art History Minor Requirements

The Art History minor enhances degrees awarded for the Bachelor of Fine Arts in various visual arts programs, the Bachelor of Science in Art Education and it complements bachelor's degrees in related disciplines in humanities and social sciences, such as literature, history, anthropology, psychology and others. Students explore social and cultural history through the lens of visual arts, reaching from the prehistoric to the global contemporary.

Student Learning Objectives

1. Critically evaluate cultural artifacts according to the principles of Formal Analysis.
2. Employ the language of Art History to communicate effectively.
3. Apply diverse critical methodologies to the analysis of cultural artifacts.
4. Execute a professional-quality art historical research project.

Note that all students much achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. Art History program requirements: 18 credits. The final GPA requirement for Program Name is 2.0. Art History minor may not be taken by Art History majors.

Required Art History Minor Core Courses – 9 credits

ARTH 024 *or* 124 Art History A: Prehistory to 1200 CE (3 credits)
ARTH 025 *or* 125 Art History B: 1200–1850 (3 credits)
ARTH 026 *or* 126 Art History C: 1850–today (3 credits)

Art History Electives– 6 to 9 credits

Complete 6-9 credits of any 300-level ARTH courses, excluding ARTH 390 Internship in Art History.
ARTH 302 Early Christian and Byzantine Art (3 credits)
ARTH 303 Art of Ancient Greece and Rome (3 credits)
ARTH 304 Renaissance Art (3 credits)
ARTH 305 Medieval Art: Carolingian to High Gothic (3 credits)
ARTH 306 Art of Northern Europe: 1350–1580 (3 credits)
ARTH 307 European Art: 1580–1780 (3 credits)
ARTH 308 European Art: 1780–1880 (3 credits)
ARTH 309 Art Since 1950 (3 credits)
ARTH 318 Picturing Gender (3 credits)
ARTH 319 Arts of the Islamic World (3 credits)
ARTH 320 Early Modern Villas and Gardens (3 credits)
ARTH 321 The History of Photography (3 credits)
ARTH 322 Visualizing Food and Empire (3 credits)
ARTH 324 Contemporary African-American Art (3 credits)
ARTH 325 Contemporary African Art and the Diaspora (3 credits)
ARTH 326 Latin American and Caribbean Art (3 credits)
ARTH 334 American Art (3 credits)
ARTH 336 Paragon: Rivalry in the Arts (3 credits)
ARTH 337 Ancient Egypt: Art, Exploration, and Afterlife (3 credits)
ARTH 338 European Modernism: 1880–1940 (3 credits)
ARTH 339 Independent Studies in the History of Art (3 credits)
ARTH 340 Pompeii and Ravenna: Bookends of the Roman Empire (3 credits)
ARTH 341 Beautiful and Useful: The Functional Arts and Their World (3 credits)

ARTH 343 Early Modern Italy: Beyond Painting, Sculpture, and Architecture (3 credits)
ARTH 344 ‘La Dolce Vita’: Italian Art and Culture (3 credits)
ARTH 345 Crosscurrents in Italian and Northern Renaissance Art (3 credits)
ARTH 350 Baroque Art in Italy, France and Spain between 1590 and 1700 (3 credits)
ARTH 351 Baroque Art in The Dutch Republic, Flanders, and England between 1590 and 1700 (3 credits)
ARTH 364 Art and Sport (3 credits)
ARTH 365 Cut and Paste: A History of Collage (3 credits)
ARTH 367 Contemporary British Art (3 credits)
ARTH 370 Art Today: The Next Decade (3 credits)
ARTH 380 Seminar in Art History (3 credits)
ARTH 385 Selected Topics in Art History (3 credits)
ARTH 390 Internship in Art History (3 credits)
ARTH 395 Honors Independent Study/Thesis (3 credits)

Visual Culture Electives – 0 to 3 credits

Select 0-3 credits of Visual Culture courses from below
ARTH 027 History of Animation, Game Art, and Interactive Media (3 credits)
ARCR 211 Women in the Arts (3 credits)
ARCR 241 Color: Perception, Properties, & Production (3 credits)
ARCR 300 Visual Culture: Critical Practice (3 credits)
CODS 160 Historical Survey of Graphic Design A (3 credits)
CODS 161 Historical Survey of Graphic Design B (3 credits)
CTME 206 Masterpieces in Film History (3 credits)

Program Plan Code: ARHI
Effective Date: Spring 2022

Audio Engineering Minor Program Requirements

The Audio Engineering Minor serves the needs of musicians and non-musicians alike who wish to learn more about the vast area of the commercial music industry. The field of audio engineering has the unique capacity to engage students with a concrete knowledge base of technical proficiency for recording, editing and mastering musical performances while using critical assessment skills to evaluate usage decisions with current hardware and software.

Note that all students much achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. Program requirement: 18 credits.

Minors MUST reflect a minimum of 6 credits of advanced standing coursework in the minor. Advanced standing coursework are courses 141 or higher

Required Audio Engineering Minor Core Courses – 12 credits

Take each of the following courses:
MUSC 121 Fundamentals of Music Business (3 credits)
MUSC 292 Audio Engineering I (3 credits)
MUSC 296 Live Audio Production (3 credits)
MUSC 315 Audio Engineering II (3 credits)

Elective Courses– 6 credits

Select two of the following courses:
MUSC 020 Basic Concepts and Skills of Music (3 credits)
MUSC 080 Introduction to Music Production and Songwriting (3 credits)
MUSC 129 Recording Technology Survey (3 credits)
MUSC 199 Songwriting (3 credits)
MUSC 205 Physical Properties of Sound (3 credits)
MUSC 294 Sound Design (3 credits)
CTME 025 Video Production for Non-majors *or* CTME 055 Fundamentals of Video Production (only open to CTMP majors) (3 credits)
PRST 100: Introduction to Business for the Non-business Major *or* PRST 210: Introduction to Entrepreneurship (3 credits)

Program Plan Code: AUEN
Effective Date: Spring 2025

Audio Production Certificate Requirements

The Audio Production Certificate is a 6-credit model designed to provide students with the skills needed to enter the professional media field or hone the skills of those already working in the field. The Audio Production Certificate teaches sound recording, mixing, and mastering from the introductory to the mastery level.

Program Requirements: 6 credits. Students must earn a "C" or higher in all required courses. *Cinema, Television, and Media Production majors and minors are not eligible for this certificate.*

Cinema, Television, & Media Production Certificate Core Courses – 6 credits

No CTME courses may be substituted.
CTME 50 Audio Production (3 credits)
CTME 364 Advanced Audio (3 credits)

Program Plan Code: CERT_AUPR
Effective Semester: Winter 2023

Cinema, Media, and Television Production Minor Program Requirements

Students majoring in other programs have the opportunity to learn a variety of skills in the Cinema, Television and Media Production minor, gaining knowledge in the production and theory of cinema, television, and media. As many fields require more media production skills expanding into online territories, a minor in Cinema, Television, and Media Production will gives students the upper hand with a modern set of valuable skills.

Program Requirements: 21 credits. The final GPA requirement for Cinema, Media, and Television Production Minor is 2.0.

Required Core Courses – 12 credits

CTME 50 Audio Production (3 credits)
CTME 55 Fundamentals of Studio Production (3 credits)
CTME 70 Scriptwriting for CTM (3 credits)
CTME 130 Media Theory and Aesthetics (3 credits)

Elective Credits – 9 credits

Students must select 3 courses from the following:
CTME 10 Introduction to Cinema, Television, and Media (3 credits) (*see notes*)
CTME 160 Cinematography (3 credits) (*see notes*)
CTME 205 Narrative Video Production (3 credits)
CTME 206 Masterpieces in Film History (3 credits)
CTME 211 Post-9/11 American Cinema
CTME 218 Studio Production Practicum (3 credits)
CTME 220 Media Law and Ethics in the Digital Landscape (3 credits)
CTME 262 American Independent Cinema (3 credits)
CTME 263 Cult Cinema
CTME/CODS 271 Graphics for Television (3 credits)
CTME 325 Comedy Writing and Production for Sitcoms and Screen Media (3 credits)
CTME 326 Laughing Matters: The Evolution of Comedy Through Cinema, TV, and Beyond (3 credits)
CTME 350 Documentary (3 credits)
CTME 365 Video Post-Production (3 credits)
CTME 369 Field/Post-Production Practicum (3 credits)
CTME 370 Selected Topics in Cinema, Television, and Media Production (3 credits)
CTME 379 Independent Study in Cinema, Television, and Media Production (3 credits)

Notes:

1. *Academic Minors MUST reflect a minimum of 6 credits of advanced standing coursework in the minor. Advanced standing coursework are courses 200 or higher.*
2. *In order to be cleared for graduation all students must earn a "C" or higher in all "required" and "elective" CTME courses.*
3. *Courses may not include CTME 375, CTME 380, or CTME 390.*

Program Plan Code: CTMP
Effective Date: Spring 2019

Cinematography Certificate Requirements

The Cinematography Certificate includes classes in cinematography, cinema lighting and advanced cinematography. Classes in this certificate support camera methods, industry standard equipment, production design, and lighting techniques resulting professional-looking productions, from business commercials to short films. This certificate introduces students to the step-by-step process of cinematography that will be useful in a broad scope of industries and workplaces.

Program Requirements: 9 credits. Students must earn a "C" or higher in all required courses.

Cinematography Certificate Core Courses – 9 credits

No CTME courses may be substituted.
CTME 140 Lighting (3 credits)
CTME 160 Cinematography (3 credits)
CTME 360 Advanced Cinematography (3 credits)

Program Plan Code: CERT_CINE
Effective Semester: Fall 2023

Cinematography Certificate Check Sheet

Student Name: Student ID Number:

This check sheet provides a mechanism for students and advisors to keep track of a student's progress in the program. Please refer to the program requirements for more details regarding options.

Note that all students must achieve 9 credits.

Cinematography Certificate Core Courses - 9 credits

CTME 140 Lighting	3 credits	Grade:
CTME 160 Cinematography	3 credits	Grade:
CTME 360 Advanced Cinematography	3 credits	Grade:
Total Credits	9 total credits	

Program Plan Code: CERT_CINE
Effective Semester: Fall 2023

Communication Studies Minor Requirements

Our communication studies minor teaches you to create inspiring messaging with options to focus on interpersonal communication, rhetoric and civic engagement, media studies, and performance and culture, all preparing you to apply communication concepts to a range of disciplines.

Student Learning Objectives

1. Develop formal and informal oral presentations within varied contexts.
2. Compose written communication appropriate for specific contexts.
3. Apply communication concepts to the praxis of communication.
4. Create research projects guided by communication theory.
5. Analyze communication norms through diverse points of view.

Program Requirements: 18 credits. The final GPA requirement for Communication Studies Minor is 2.0.

Required Communication Core Course – 3 credits

COMM 140 Introduction to Communication (3 credits)

Communication Elective Courses – 15 credits

Select any 2 COMM courses except COMM 10. Select 3 COMM courses at 200-level or above.
COMM XXX (3 credits)
COMM XXX (3 credits)
COMM 200-level or above (3 credits)
COMM 200-level or above (3 credits)
COMM 200-level or above (3 credits)

Program Plan Code: COST
Effective Date: Fall 2011

Digital Video Production Certificate Requirements

The Digital Video Production certificate includes classes in audio production, cinematography and post-production. Classes in this certificate support producing a professional-looking video, from business commercials to short films. This certificate introduces students to the step-by-step process of video production that will be useful in a broad scope of industries and workplaces.

Program Requirements: 9 credits. Students must earn a "C" or higher in all required courses.

Digital Video Production Certificate Core Courses – 9 credits

No CTME courses may be substituted.
CTME 50 Audio Production (3 credits)
CTME 160 Cinematography (3 credits)
CTME 180 Post-Production (3 credits)

Program Plan Code: CERT_DGVP
Effective Semester: Fall 2022

Global Communication Certificate Requirements

The certificate equips participants with global communication skills in international media, global public relations, public diplomacy, and intercultural communication**.** Specifically, the certificate teaches participants to tailor media messages to different international audiences, design public diplomacy campaigns and communicate effectively across diverse cultures.

Program requirements: 9 credits.

Required Global Communication Certificate Core Courses – 9 credits

COMM 315 International Communication (3 credits)
COMM 230 Global Public Relations & Public Diplomacy (3 credits)
COMM 213 Communication Between Cultures (3 credits)

Program Plan Code: CERT_GLCO
Effective Semester: Spring 2024

Jazz Minor Program Requirements

The Jazz Minor allows students to develop an evolving skill set for the modern musical marketplace. The minor will focus on refining performance and improvisational skills on their principal instrument, creating contemporary arrangements and compositions for both classroom and personal use, developing techniques for rehearsing small and large jazz ensembles, understanding the contemporary music marketplace, and researching historical perspectives in order to recognize forms, genres, performers and composers in jazz history.

Note that all students much achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. Program requirements: 18 credits.

Minors MUST reflect a minimum of 6 credits of advanced standing coursework in the minor. Advanced Standing coursework are courses 141 or higher.

Required Core Courses – 10 credits

MUSC 225 Jazz: Its History and Influence (3 credits)
MUSC 226 Jazz Improvisation (2 credits)
MUSC 305 The Professional Jazz Musician (1 credit)
MUSC 308 Jazz and Commercial Arranging (2 credits)
MUSC 309 Advanced Jazz Improvisation (2 credits)

Ensemble Instruction – 6 credits

An audition with the Ensemble Director is required
MUPF 275 (Jazz Combo) (1 credit)
MUPF 275 (Jazz Combo) (1 credit)
MUPF 289 (Large Jazz Ensemble) (1 credit)
MUPF 289 (Large Jazz Ensemble) (1 credit)
MUPF 289 (Large Jazz Ensemble) (1 credit)
MUPF 289 (Large Jazz Ensemble) (1 credit)

Private Instruction – 2 credits

Credits from jazz private lessons offered by the Music Department
MUPF (1 credit)
MUPF (1 credit)

Program Plan Code: JAZZ
Effective Date: Spring 2015

Leadership Minor Requirements

The leadership minor takes an interdisciplinary approach and allows students to draw from a variety of disciplines to study the context, skill, and process of leadership.

Program Requirements: 18 credits. The final GPA requirement for Minor in Leadership is 2.0.

Required Leadership Core Courses – 6 credits

PRST 232 Practical Leadership (3 credits) – *Required Prerequisite: ENGR 23, 24, 25, or COMP 100*
COMM 350 Leadership: A Communication Perspective (3 credits) – *Required Prerequisite: COMM 10*

Restricted Electives – 12 credits

Select one course from each of the four (4) categories and three (3) of the choices must be in different disciplines, PHIL, POLI, COMM, PSYC, ANTH, or SOCI

Category A: Critical Thinking/Ethics – 3 credits

Select one of the following courses
PHIL 15 Critical Thinking (3 credits)
PHIL 40 Introduction to Ethics (3 credits)
PHIL 80 Business Ethics (3 credits)
POLI 441 Managerial Leadership and Ethics (3 credits)

Category B: Group Dynamics – 3 credits

Select one of the following courses:
COMM 215 Small Group Communication (3 credits) – *Required Prerequisite: COMM 10*
COMM 274 Organization Communication (3 credits) – *Required Prerequisite: COMM 10*
PSYC 260 Psychology and Human Communication (3 credits) – *Required Prerequisite: PSYC 11*
PSYC 336 Diversity in Organizations (3 credits) – Required Prerequisites: PSYC 11 and PSYC/SOCI/POLI 200, MATH 140, or BUSN 120 with a grade of C or better

Category C: Organizational Leadership – 3 credits

Select one of the following courses:
POLI 115 Public Administration (3 credits)
ANTH/SOCI 227 Work and Workplaces (3 credits)
SOCI 270 Sociology of Organizations (3 credits)
PSYC 220 Industrial/Organizational Psychology (3 credits) – *Required Prerequisite: PSYC 11*

Category D: Applied Leadership – 3 credits

Select one of the following courses:
POLI 225 Planning and Decision Making (3 credits)
COMM 105 Business and Professional Presentations (3 credits) – *Required Prerequisite: COMM 10*
COMM 375 Communication Training and Development (3 credits) – *Required Prerequisite: COMM 10*

Program Plan Code: LEAD
Effective Date: Spring 2016

Music Minor Program Requirements

Students majoring in most programs at Kutztown University may elect a minor in music. A minor in music may be especially valuable to those who seek degrees in fields that are related to or make use of music. Some of these fields include business, communication studies, library science, psychology, anthropology, art, and languages.

Student Learning Objectives:

1. Perform with competence as soloist and ensemble members.
2. Identify, define, and engage the elements of music in sound and notation.
3. Describe current practices and historical trends in music.

Note that all students much achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. Program requirements: 18 credits.

Academic minors MUST reflect a minimum of 6 credits of advanced standing coursework in the major. Advanced standing coursework are courses 141 or higher.

Required Music Minor Core Courses – 12 credits

Classroom Instruction

MUSC 010 Introduction to Music Literature (3 credits)
MUSC 101 Aural Skills I (2 credits)
MUSC 102 Harmony and Theory I (3 credits) *MUSC 020 Basic Concepts and Skills of Music or its equivalent, is a prerequisite for MUSC 102. MUSC 020 may be used as a Music Elective.*

Ensemble Instruction

Take credits from any Department of Music ensembles.
An audition with the Ensemble Director is required.
See course catalogue for list of offerings
MUPF (1 credit)
MUPF (1 credit)

Private Instruction

Take credits from among any private lessons offered by the Department of Music or Voice Class.
A C or better is required in these courses.
MUPF (1 credit)
MUPF (1 credit)

Elective Courses – 6 credits

With the guidance of a music advisor, select six credits from any MUSC or MUPF course.
Do not select MUS 223, 229, 311, 312, 380, or 391

Program Plan Code: MUSC
Effective Date: Fall 2014

Music History Minor Program Requirements

The Music History Minor allows students who may not have a music background to take a series of music literature and music history courses that will broaden their perspective of music in a variety of settings. Core courses provide a background in European classical music, music in non-Western cultures, and popular music styles in the United States. Elective courses provide opportunities to explore specific areas, such as jazz, film music, musical theater, women in music, and more.

Note that all students much achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. Program requirements: 18 credits.

Minors MUST reflect a minimum of 6 credits of advanced standing coursework in the minor. Advanced standing coursework are courses 141 or higher.

Required Music Minor Core Courses – 9 credits

MUSC 010 Introduction to Music - *Music majors may substitute MUS 312* - (3 credits)
MUSC 106 History of Rock and Roll (3 credits)
MUSC 108 Introduction to World Music (3 credits)

Elective Courses – 9 credits

Select three of the following courses
MUSC 113 Introduction to Film Music (3 credits)
MUSC 209 Women in Music (3 credits)
MUSC 215 American Music (3 credits)
MUSC 217 The Music of Poetry (3 credits)
MUSC 220 Modern Music Since 1900 (3 credits)
MUSC 225 Jazz: Its History and Influence (3 credits)
MUSC 228 History of American Musical Theater (3 credits)
MUSC 318 Symphonic Repertoire (3 credits)

Optional Elective Courses – 3 credits

As a substitute for one of the elective courses above, students may substitute three hours of private or ensemble instruction
Ensemble Instruction
MUPF # (1 credit)
MUSC # (1 credit)
MUSC # (1 credit)
Private Instruction
MUPF # (1 credit)
MUPF # (1 credit)
MUPF # (1 credit)

Program Plan Code: MUSH
Effective Date: Spring 2015

Musical Theatre Minor Requirements

Students majoring in most programs at Kutztown University may elect a minor in musical theatre, a program requiring 18 semester hours. The musical theatre minor is designed to provide students with practical and theoretical experiences in musical theatre, with specific study in acting, voice production and history. The musical theatre minor will help prepare students to pursue lifetime activities onstage.

Note that all students much achieve 120 undergraduate credits and a minimum 2.0 overall GPA to graduate. Program requirements: 18 credits.

Minors MUST reflect a minimum of 6 credits of advanced standing coursework in the minor. Advanced standing coursework are courses 141 or higher.

Musical Theater Required Core Courses – 15 credits

COMM 103 Introduction to Acting (3 credits)
MUSC 114 Musical Theatre Performance (3 credits)
MUSC 228 The History of American Musical Theatre (3 credits)
MUSC 020 Basic Concepts and Skills of Music *or* MUSC 102 Harmony & Theory I (3 credits)
MUSC 079 Voice Class I *and*
Option A
MUPF 239 Applied Voice (*2 semesters at 1 credit each*)
Option B
MUSC 179 Voice Class II (1 credit) *and* MUPF 239 Applied Voice (1 credit)

Elective Courses – 3 credits

Select a total of three credits, chosen from these options:
MUPF 235 Vocal Ensemble (*repeatable for credit*) (1 credit)
MUPF 283 University Choir (*repeatable for credit*) (1 credit)
MUPF 296 Musical Theatre Workshop (*repeatable for credit*) (1 credit)
COMM 211 Production and Performance for Young Audiences (3 credit)
MUSC 391 Field Experience in Music (3 credit)

Program Plan Code: MUTR
Effective Date: Spring 2020

Performance and Storytelling Minor Requirements

The performance and storytelling minor includes courses in theatre, acting, performance of literature, women writers in performance, and electives from other areas of communication.

Program Requirements: 18 credits. The final GPA requirement for Performance and Storytelling Minor is 2.0.

Required Performance and Storytelling Core Courses – 9 credits

COMM 102 Introduction to Theatre (3 credits)
COMM 201 Storytelling 1 *or* COMM 103 Introduction to Acting (3 credits)
COMM 216 Performance of Literature *or* COMM/WGST 237 Women Writers in Performance (3 credits)

Performance and Storytelling Elective Courses – 9 credits

COMM 103 Introduction to Acting (3 credits)
COMM 151 Voices and Diction (3 credits)
COMM 201 Storytelling 1 (3 credits)
COMM 210 Production and Performance for Young Audiences (3 credits)
COMM 216 Performance of Literature
COMM/MUSC 217 Music and the Spoken Word (3 credits)
COMM 225 Advanced Solo Performance of Texts (3 credits)
COMM/WGST 237 Women Writers in Performance (3 credits)
COMM 250 Latino/a Performance (3 credits)
COMM 301 Performance and Culture (3 credits)
COMM 320 Group Performance (3 credits)
COMM 370 Independent Study Communication (3 credits only; *must be performance or storytelling centered)*

Program Plan Code: PRFS
Effective Date: Fall 2017

Post-Production Certificate Requirements

The Post-Production Certificate includes classes in post-production, graphics for digital media and advanced post-production. Classes in this certificate support editing techniques, color management, visual effects and collaborative workflows resulting in delivery of productions in corporate video to short films. This certificate introduces students to the step-by-step process of post-production that will be useful in a broad scope of industries and workplaces.

Program Requirements: 9 credits. Students must earn a "C" or higher in all required courses.

Post-Production Certificate Core Courses – 9 credits

No CTME courses may be substituted.
CTME 180 Post-Production (3 credits)
CTME 271 Graphics for Digital Media (3 credits)
CTME 366 Advanced Post-Production (3 credits)

Program Plan Code: CERT_POPD
Effective Semester: Fall 2023

Professional Studies in Music Certificate Requirements

The Professional Studies in Music certificate program was created to address the needs of students who have an undergraduate degree in music but would benefit from an additional year of study before pursuing a Master's degree or embarking on their musical career. Comprising 12 credits taken over two semesters, the program would offer students from the US and abroad the opportunity to refine their focus and develop their skills to the fullest extent.

Courses would include private lessons, chamber music and conducting, as well as electives in music history, audio engineering, and music education, or other subjects that might not have been covered during an undergraduate program of study.

Note that all students much achieve 12 credits.

Required Professional Music Core Courses – 6 credits

A grade of C or better is required for all coursework
MUPF 4xx Private Lessons (1 credit)
MUPF 4xx Private Lessons (1 credit)
MUPF 430 Chamber Ensemble (1credit)
MUPF 430 Chamber Ensemble (1 credit)
MUSC 326 Advanced Conducting (1 credit)
MUSC 302 The Modern Private Music Teacher (1credit)
or MUSC 304 The Professional Private Music Teacher (1credit)
or MUSC 305 The Professional Jazz Musician (1credit)

Elective Professional Music Courses – 6 credits

A maximum of two private lessons in a single semester is allowed
A grade of C or better is required for all coursework
Any MUSC *or* MUPF *or* MUED (1-3 credits)
Any MUSC *or* MUPF *or* MUED (1-3 credits)
Any MUSC *or* MUPF *or* MUED (1-3 credits)
Any MUSC *or* MUPF *or* MUED (1-3 credits)
Any MUSC *or* MUPF *or* MUED (1-3 credits)
Any MUSC *or* MUPF *or* MUED (1-3 credits)
Any MUSC *or* MUPF *or* MUED (1-3 credits)

Program Plan Code: CERT_PSMU
Effective Semester: Spring 2024

Social Media Analytics Certificate Requirements

The social media analytics certificate focuses on both descriptive and predictive analytics and is for those individuals looking to gain key insights from social media data. The certificate allows working professionals to complete the curriculum on campus or online. Complete the curriculum on Kutztown's campus and employ the Social Media Analytics Strategic Hub (a one-of-a-kind learning space) or take courses 100% online.

Program requirements: 9 credits

Required Social Media Analytics Core Courses – 9 credits

SMS 101Introduction to Social Media Theory and Strategy
SMS 314 Social Media Analytics
SMS 316 Advanced Social Media Analytics

Program Plan Code: CERT_SMAN
Effective Semester: Fall 2023

Social Media Analytics Certificate Check Sheet

Student Name: Student ID Number:

This check sheet provides a mechanism for students and advisors to keep track of a student's progress in the program. Please refer to the program requirements for more details regarding options.

Program requirements: 9 credits.

Social Media Analytics Core Courses - 9 credits

SMS 101 Intro to Social Media Theory and Strategy	3 credits	Grade:
SMS 314 Social Media Analytics	3 credits	Grade:
SMS 316 Advanced Social Media Analytics	3 credits	Grade:
Total Credits	9 total credits	

Program Plan Code: CERT_SMS
Effective Semester: Fall 2023

Social Media Strategies Certificate Requirements

The certificate in Social Media Strategies (SMS) is industry-driven and introduces students to each area of the interdisciplinary SMS program at KU. Curriculum focuses on content creation, data analytics, ethics, branding, and e-commerce.

Program requirements: 12 credits

Required Social Media Strategies Certificate Core Courses – 12 credits

STMS 101 Intro to Social Media Theory & Strategy (3 credits)
COST/ENGL 314 Social Media Analytics (3 credits)
PRWR 250 Writing for Social Media (3 credits)
MKTG 210 Principles of Marketing (3 credits)

Program Plan Code: CERT_SOMS
Effective Semester: Spring 2020

Social Media Strategies Certificate Check Sheet

Student Name: Student ID Number:

This check sheet provides a mechanism for students and advisors to keep track of a student's progress in the program. Please refer to the program requirements for more details regarding options.

Program requirements: 12 credits.

Required Social Media Strategies Certificate Core Courses - 12 credits

SMTS 101 Intro to Social Media Theory & Strategy	3 credits	Grade:
COMM/ENGL 314 Social Media Analytics	3 credits	Grade:
PRWR 250 Writing for Social Media	3 credits	Grade:
MKTG 210 Principles of Marketing	3 credits	Grade:
Total Credits	12 total credits	

Program Plan Code: CERT_SOMS
Effective Semester: Spring 2020

Social Media Theory & Strategy Minor Requirements

The minor in Social Media Theory & Strategy (SOMS), is a one-of-a-kind program combining Business, English, and Communication Studies. Through this minor, you will discover creative ways social media expertise is applied to meet strategic business objectives with digital marketing techniques that boos sales, create brand loyalty, and promote social change.

Student Learning Objectives

1. Analyze and recommend appropriate social media marketing communication options.
2. Design effective social media content strategies.
3. Construct high-quality social media projects in multiple modes.
4. Analyze and interpret patterns and trends in social media data.
5. Apply social media content and structures based on ethical and theoretical approaches.
6. Appraise the benefits and drawbacks of specific social media approaches and platforms.

Program Requirements: 18 credits. The final GPA requirement for the Minor in Social Media Theory & Strategy is 2.0.

Required Social Media Theory & Strategy Core Courses – 9 credits

SMTS 101 Intro to Social Media Theory and Strategy (3 credits)
MKTG 210 Principles of Marketing (3 credits)
PRWR 250 Writing for Social Media (3 credits)

Social Media Theory & Strategy Electives – 9 credits

Take 3 courses. At least one of the courses must be at 200-level or above. Courses with an asterisk and in bold have prerequisites.

ARTH 27 History of Animation, Game Art, and Interactive Media (3 credits)
CODS 160 Historical Survey of Graphic Design A (3 credits)
CODS 161 Historical Survey of Graphic Design B (3 credits)
COMM 212 Intro to Mass Communication (3 credits)
***COMM 243 Social Games and Communication** (3 credits)
***COMM 245 New Media and Communication** (3 credits)
***COMM 305 Theories of Emerging Media** (3 credits)
COMM 307 Rhetoric of Visual Media
CPSC 105 Data Visualization (3 credits)
CPSC 120 Intro to Creative Graphic Coding (3 credits)
CPSC 122 Client-side Web Development (3 credits)
ENGL 347 Activists Writing Media (3 credits)
***ENGL/PRWR 333 Digital Rhetoric and Writing** (3 credits)
***ENGL/PRWR 339 New Media, Story, Change** (3 credits)
MKTG 351 Media Concepts and Planning (3 credits)
MKTG 362 Digital Marketing (3 credits)
MKTG 363 Marketing Analytics (3 credits)
PRST 210 Entrepreneurship (3 credits)
PRWR 120 Technical Writing and Communication (3 credits)
***SMTS XXX Any SMTS prefix course (except 380 and 390)** (3 credits)
***SMTS/ENGL 314 Social Media Analytics** (3 credits)
***CPSC 220 Object-Oriented Multimedia Programming** (3 credits)

Program Plan Code: SOMS
Effective Date: Spring 2023

Strategic Communication Certificate Requirements

The Strategic Communication Certificate is a 9-credit module designed to equip participants with modern marketing and public relations skills necessary to successfully enter and navigate the world of strategic organizational communication. Specifically, the Certificate teaches the practical application of PR techniques and processes, integrated marketing practices, and crisis communication and management strategies.

Program requirements: 9 credits.

Required Strategic Communication Certificate Core Courses – 9 credits

COMM 241 Public Relations: Process and Techniques (3 credits)
COMM 311 Crisis Communication in Public Relations (3 credits)
COMM 319 Integrated Marketing Communication Concepts and Practices (3 credits)

Program Plan Code: CERT_STCO
Effective Semester: Fall 2023

Television Production Certificate Requirements

The Television Production certificate brings the live aspect into video production, with classes in studio production, digital media graphics and live event production. Students participate in television studio and control room environments creating real-world, hands-on productions of live sports events, music performances and ceremonies. They also learn to design and place broadcast graphics.

Program Requirements: 12 credits. Students must earn a "C" or higher in all required courses.

Television Production Certificate Core Courses – 12 credits

No CTME courses may be substituted.
CTME 55 Fundamentals of Studio Production (3 credits)
CTME 218 Studio Production Practicum (3 credits)
CTME/CODS 271 Graphics for Television (3 credits)
CTME 375 Live Event Production (3 credits)

Program Plan Code: CERT_CTVR
Effective Semester: Fall 2020

Course Descriptions

Accounting

ACCT 121: Financial Accounting

Accounting has been called "the language of business." Accordingly, this course emphasizes the provision of relevant and reliable information used by investors, creditors and managers in making financial and business decisions. Areas of emphasis include the basic concepts and principles of financial accounting, the accounting cycle, financial statement preparation, information systems and processing, and internal control. Recognition, measurement, and classification of assets, liabilities, revenues and expenses are examined and the alternative forms of business organization are covered. BSBA majors only.

ACCT 122: Managerial Accounting

The course is a study of the development and use of accounting information and its importance to management functions. Areas of emphasis include planning and control of operations, evaluation of performance at different levels within the organization, financial analysis, cost systems, budgeting, and decision-making. A computer project is required using spreadsheet software. BSBA majors only.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ACCT 305: Cost Accounting and Data Analytics

This course introduces students to methods and tools used in business organizations in the areas of financial planning, controlling and decision making. While different approaches to measuring cost of products and services is a central focus of the course, the course integrates planning and controlling by exposing students to information, financial analysis, and data analytics needed to support decision making. The course also provides thorough treatment of cost analysis for both manufacturing and a wide range of service industries.

ACCT 306: Advanced Cost Accounting

The course builds on and expands topics introduced in ACCT 305, Cost Accounting. The managerial emphasis is continued and the subject area expanded to cover further issues in cost allocation and product costing and to introduce new topics, such as linear programming, just-in-time inventories, capital budgeting, economic order quantity, transfer pricing, and performance measurement.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ACCT 312: Accounting Information Systems

This course is designed to introduce accounting majors to a variety of transaction processing systems, such as accounts payable, inventory, and accounts receivable. Emphasis will be placed on the inputs, processing, outputs, databases, and internal controls associated with each system studied as well as the interrelationships among the systems. How to establish and follow audit trails through the system will also be covered. The first two steps in the structured systems development cycle, namely Systems Survey and Systems Analysis, will be emphasized. Developing systems via prototyping and the application of artificial intelligence in accounting systems are topics included in the course. This course is designed for accounting majors, other business majors may be admitted with permission of the dean.

ACCT 317: Tax Accounting I

This course introduces the fundamentals of taxation, the types of taxes, the structure of the tax system, and how taxes are applied to various entities. It is an in-depth study of the income taxation of individuals and provisions applicable to all tax return filers. Topics include gross income, exclusions, deductions, losses, adjustments, credits, property transactions, capital gains and losses, as well as business expenses, depreciation, cost recovery, amortization, and depletion, and the determination of the regular tax and the alternative minimum tax. Tax research and the practical compliance aspects of individual tax return

preparation are covered. While the focus is on Federal taxes, state tax implications are also studied, including multi-state tax situations. accounting periods and methods and the alternative minimum tax.

ACCT 318: Tax Accounting II

This course is a continuation of ACCT 317 and is an in-depth study of the Federal income taxation of regular corporations and flow-through entities (partnerships, S Corporations, limited liability corporations). Coverage also includes estate and gift taxes, multistate corporate taxation and taxation of international transactions. In addition to conceptual matters, the practical compliance aspects of tax return preparation, as well as effective tax planning techniques will be covered.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ACCT 321: Intermediate Accounting I

A study of current financial accounting theory and practice, this course builds on the fundamental concepts covered in the introductory financial and managerial accounting courses and develops a more professional level of accounting analysis. Coverage includes the development of accounting standards: including International Financial Reporting Standards, the conceptual framework of financial accounting, the accounting process, financial statements, time value of money, cash, receivables, inventories, property plant and equipment, intangible assets, current liabilities and contingencies. Students develop analytical skills and the ability to research accounting issues. The course also encourages the development of computer, oral, and technical writing skills.

ACCT 322: Intermediate Accounting II

A study of current financial accounting theory and practice, this course covers Intermediate Accounting topics beyond the scope of Intermediate Accounting I. Coverage includes accounting and financial statement presentation for: Long-term Liabilities; Stockholder's Equity; Dilutive Securities and Earnings per Share; Investments in Securities; Revenue Recognition; Income Taxes, Pensions and Postretirement Benefits; and Leases; Accounting Changes and Error Analysis; and the Statement of Cash Flows; and Full Disclosure in Financial Reporting. The course emphasizes conceptual understanding as well as the development of the technical skills of accounting and the development of computer and oral and written communication skills.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ACCT 323: Advanced Accounting

This course covers theory and application of advanced accounting topics including business combinations (mergers, acquisitions, and consolidations), consolidated financial statements, interim and segment reporting, partnerships, derivative instruments, and foreign operations.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ACCT 325: Not-For-Profit and Governmental Accounting

Accounting and financial and budgetary reporting for governments and nonprofit organizations (NP&G) are based on distinctive concepts, standards, and procedures designed to accommodate their environments and the needs of their financial report users. This course focuses on the aforementioned concepts, standards, and procedures applicable to (1) state and local governments including counties, cities, and school districts, as well as townships, other special districts, and public authorities; (2) nonprofit universities, hospitals, voluntary health and welfare organizations. Financial management evaluation procedures and accountability considerations peculiar to NP&G organizations are emphasized throughout the course.

ACCT 330: Auditing Practice and Standards

This course is an introduction to audit theory, practice and ethics. It integrates the accounting, ethical, legal and auditing responsibilities of the Certified Public Accountant. Topics covered include the various forms of audit reports, professional

ethics, legal liability of the accountant, the audit process, risk analysis, internal controls, the nature of evidential matter, audit procedures, and an introduction to audit related statistical applications. Also, the content, meaning and impact of the Sarbanes/Oxley Act and the role of the Public Company Accounting Oversight Board (PCAOB) are covered. A computerized audit case study, which provides students the experience of performing a simulated audit engagement has been integrated as a key component of the course.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ACCT 335: Forensic Accounting

This course provides students an understanding on the different types of fraud using various theories and techniques. The topics covered include an overview of fraud, the nature of fraud, motivational factors, and the ways to combat fraud. Financial statement fraud, fraud triangle, and other fraudulent behaviors will also be covered. Further, topics on fraud prevention, fraud detection, and fraud resolution will also be covered. The course will also cover areas related to data-driven fraud detection tools and techniques, objectives, costs involved in implementing those tools, and the resulting benefits from implementing those tools. In addition, the course will highlight good corporate governance practices due to the use of fraud prevention, detection tools and techniques.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ACCT 380: Senior Seminar in Accounting

This course focuses integrating students' knowledge in accounting with business principles and current issues, with particular emphasis on the role of accounting in contemporary society. ACCT 380 integrates topical matter from various fields of accounting with strong emphasis on professional responsibilities. The course also addresses topics that are not covered in depth elsewhere in the accounting curriculum.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ACCT 395: Honors Thesis in Accounting

Completion of the honors thesis is a requirement for the KU Honors Program. This course enables the honors student to conduct a research project under the direction of a faculty member from the Accounting Discipline. The student and faculty member will prepare a research proposal. A student can apply for 3-6 credits (s.h.). The proposal and number of credits must be approved by the discipline.

Alumni Studies

ALST 100: Alumni Seminar

The Alumni Seminar provides Kutztown University alumni with lifelong learning opportunities. In an online setting, alumni work closely with professors and peers to explore a particular topic in depth, refine knowledge of areas previously acquired while an undergraduate, acquire new skills related to university programming or developments in the related subject field, or participate in critical discourse relevant to engaged citizenry. Skills include those in substantive reading, critical thinking, writing, speaking, ethical analysis and reasoning, active and collaborative learning, academic research, or the use of technology. Alumni retain access to university resources, enriching their awareness of, and access to continued educational experiences. The specific topic of the seminar varies with the academic passion and expertise of the instructor. Alumni Seminar is open to all alumni and community members. It is not open to current Kutztown University undergraduate and graduate students. The course carries no prerequisites.

ALST 101: Alumni Seminar

The Alumni Seminar provides Kutztown University alumni with lifelong learning opportunities. In an online setting, alumni work

closely with professors and peers to explore a particular topic in depth, refine knowledge of areas previously acquired while an undergraduate, acquire new skills related to university programming or developments in the related subject field, or participate in critical discourse relevant to engaged citizenry. Skills include those in substantive reading, critical thinking, writing, speaking, ethical analysis and reasoning, active and collaborative learning, academic research, or the use of technology. Alumni retain access to university resources, enriching their awareness of, and access to continued educational experiences. The specific topic of the seminar varies with the academic passion and expertise of the instructor. Alumni Seminar is open to all alumni and community members. It is not open to current Kutztown University undergraduate and graduate students. The course carries no prerequisites.

ALST 102: Alumni Seminar

The Alumni Seminar provides Kutztown University alumni with lifelong learning opportunities. In an online setting, alumni work closely with professors and peers to explore a particular topic in depth, refine knowledge of areas previously acquired while an undergraduate, acquire new skills related to university programming or developments in the related subject field, or participate in critical discourse relevant to engaged citizenry. Skills include those in substantive reading, critical thinking, writing, speaking, ethical analysis and reasoning, active and collaborative learning, academic research, or the use of technology. Alumni retain access to university resources, enriching their awareness of, and access to continued educational experiences. The specific topic of the seminar varies with the academic passion and expertise of the instructor. Alumni Seminar is open to all alumni and community members. It is not open to current Kutztown University undergraduate and graduate students. The course carries no prerequisites.

Animated Arts

ANIA 141: Introduction to Visual Storytelling

Students study approaches to storytelling and their application in visual narrative. Students will analyze historical examples of visual narratives and imagery related to character design, learn pre-production for character design and will develop concept art and character sheets.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ANIA 148: Game Design and Prototyping

Students will explore the concept of play and how it works in building game strategies. This course covers foundation game design and workflow from inception to execution. Students will develop, plan, realize and propose their game concepts as well as make and play-test game prototypes. Three additional hours per week of outside class work is expected.

ANIA 171: Intro to 3D Modeling and Rendering

This course is an introduction to software associated with the design of three-dimensional objects in virtual space. Students in this class will learn to use three dimensional modeling and rendering software to develop their ideas, visualize those ideas as three-dimensional forms, and present their ideas to others. Students will develop 3D drawings defined by the professor and based on their own body of work. A minimum of 3 hours of work outside of class is required per week. Open to all students in the College of Visual and Performing Arts except Music, Music Education, and Communication Studies.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ANIA 231: Intro to 2D Animation

and learn how to execute it, starting from conception to its final delivery. Basic production techniques, project planning, and linear versus non-linear narrative are all fundamental components covered in this course. Students will be introduced to and become proficient in using a variety of state of the art animation programs. Students will also learn how to plan and create

storyboards to organize their animation ideas effectively. Prior experience with Photoshop software is required. A minimum of 3 hours of work outside of class is required per week.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ANIA 240: Introduction to 3D Animation

This course provides an introductory overview of 3D Animation. Students will learn how to execute a 3D Animation project from concept to final delivery and will become proficient in a variety of contemporary animation software programs. Students will also learn the theory and history of animation within the context of a popular art form that transcends culture and language.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ANIA 271: 3D Prototyping

This course provides a digital fabrication foundation for all majors in College of Visual and Performing Arts. In this course, students will complete a series of projects exploring 3D modeling, 3D scanning technologies, and experimental approaches to digital model generation. Simultaneously, digital models will be made physical through additive and subtractive fabrication technologies including 3D printing, CNC milling, and laser cutting. Students will be introduced to art works, artists working with the medium, and application of this technology in commercial industry. A minimum of 3 hours of work outside of class is required per week.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ANIA 302: Digital Futures

This course introduces students to how human beings use digital interactive images to communicate, affect socio-political divides, establish identity and construct gender. Persuasive technological illusions of motion and space and advances in interface technologies bring us closer full sensory computing, the course will investigate these technologies and their potential for our globalized information society.

ANIA 303: Senior Seminar

"ANIA 303: Senior Seminar" connects the artistic production techniques and practices students have developed with professional preparations all students must be exposed to before heading out into the industry world. This course will foster the development of a cohesive portfolio of work and/or a professional show reel of animated excerpts. Additionally it will prepare students with professional tools and mindsets to achieve better outcomes in application pools and in early-stage career positions. This includes organizing a resume and cover letter, going through additional application processes, performing and evaluating peers in mock interviews, and preparing a final group exhibition of work. Class time will be dedicated to lectures, demonstrations, field trips, consultations, and presentations in a studio situation.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ANIA 341: Visual Storytelling Studio

"Visual Storytelling Studio" is an intermediate and advanced drawing course for in-depth study of approaches to storytelling and their application in their visual narrative. Students will analyze historical examples of visual narratives and imagery related to character design, learn pre-production for character design and will develop concept art and character sheets. Representative areas of inquiry include: digital drawing and designing; storyboarding language and approaches; anatomy and the figure; color theory; material investigations; developing artistic style; and others. Within each umbrella topic, a range of techniques, concepts, and subject matter will be explored. Students will become more fully fluent in the aesthetic concepts associated with a specific topic and develop methods of presentation based on professional practices. Primary emphasis is on the development of an individual direction within the context of historical and contemporary techniques, ideas and images in concept art. This class is repeatable. Each time a student repeats the class they will be expected to further develop their technical expertise and produce a professional cohesive body of artwork. A minimum of 3 hours of work outside of class is required per week. This course is repeatable up to 6 times for a total of 18 credits, and can be taken for a total of six credits per semester.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ANIA 351: 3D Modeling and Rendering Studio

This course is an advanced use of 3D sculpting, texturing and rendering software to develop character and object designs. Students in this class will learn advanced modeling, sculpting, 3D digital painting/texturing, uv mapping, and rendering techniques to develop their ideas and present their ideas to others. Students will develop 3D drawings defined by the professor and based on their own body of work. Each time a student repeats the class they will be expected to further develop their technical expertise and a professional cohesive body of artwork. A minimum of 3 hours of work outside of class is required per week.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ANIA 361: Animation Studio

This course provides intermediate-level study in animation for students emerging from introductory levels. Students will develop a project or series of projects and execute it to acceptable professional standards. Students will be introduced to intermediate and advanced level production techniques, project organization, and linear versus non-linear narratives. Students will develop proficiency using a variety of animation techniques and programs. The use of storyboards, animatics, special effects, audio components, and a variety of postprocessing approaches will be necessary. This class is repeatable and will cover special topics including stop motion animation, lip syncing, rigging, among others. Each time a student repeats the class they will be expected to further develop their technical expertise and produce a professional cohesive body of artwork. A minimum of 3 hours of work outside of class is required per week. This course is repeatable up to 6 times for a total of 18 credits, and can be taken for a total of six credits per semester.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ANIA 376: Independent Study: Animated Arts

Independent Study involves individual pursuit and self-determination in an aspect of Animated Arts not being offered in program coursework.

ANIA 377: Independent Study: Animated Arts

Independent Study involves individual pursuit and self-determination in an aspect of Animated Arts not being offered in program coursework.

ANIA 378: Independent Study: Animated Arts

Independent Study involves individual pursuit and self-determination in an aspect of Animated Arts not being offered in program coursework.

ANIA 379: Independent Study: Animated Arts

Independent Study involves individual pursuit and self-determination in an aspect of Animated Arts not being offered in program coursework.

ANIA 390: Internship in Animated Arts

This course provides an opportunity for the student to experience the practice of Animated Arts course material in a professional setting. The student will complete 40 hours per academic credit, up to 6 credits, working in a professional setting where Animated Arts program content is practiced. The specific nature of the businesses will vary. Possible professional applications include businesses that specialize in animation, motion graphics, game development, digital marketing, as well as other businesses or organizations that do work related to the ANIA curriculum. This course may be repeated. 1 to 6 s.h. (40 contact hours per s.h.) of variable credit, repeatable in the same semester.

Anthropology

ANTH 10: Cultural Anthropology

An introduction to the cross-cultural study of human behavior with emphasis on non-Western cultures. Selected ethnographic material as well as general theories of technology, social, political, religious, family, and economic organization will be examined.

ANTH 20: Physical Anthropology

An introduction to the fossil record and biological variation of human and non-human primates and the mechanisms involved. Biological and socio-cultural factors are interrelated in explaining the evolution and variation of man.

ANTH 30: Introduction to Archaeology

This course provides an introduction to archaeological methods and techniques, including site surveying, excavation and recording, classification and description, dating, and data interpretation. These techniques will be illustrated through the consideration of archeological sites from around the world. We will also consider current issues in archaeology.

ANTH 40: Language and Culture

This course provides a general introduction to linguistic anthropology, one of the four subfields of anthropology. This course will orient students to language as cultural resource and practice. The course will introduce students to the structural, contextual, and pragmatic features of language through an exploration of non-Indo-European and Indo-European linguistic anthropological analyses.

ANTH 100: Freshman Seminar in Anthropology

This course will introduce Freshmen students to the study of anthropology and to the academic expectations for a college student. The instructor will describe his/her passion for the topic and use that as the basis for communicating important anthropological concepts. Students will conduct their own research projects that will include developing the skills necessary for researching and writing an academic paper. Students will become active learners through inquiry, analysis, discovery, reflection, presentation and action. The experiences of Freshmen students will be incorporated into the class and discussed in terms of anthropological concepts.

ANTH 101: North American Indians

The comparative ethnology of non-literate tribes of North and Central America as they existed at Spanish contact times.

ANTH 105: Classical Archaeology

This course deals with the archaeology of the three great civilizations of the ancient Mediterranean: Egypt, Greece and Rome. As an archaeology course, it seeks to reconstruct daily life more through artefactual remains than through historical documents. Archaeological theories of the origins of farming and of state formation are discussed and applied to these three cultures. In addition, the course covers specific examples of archaeological theory and technique such as those used in regional archaeology, underwater archaeology and bioarchaeology.

ANTH 106: History and Culture of Turkey

Spanning two continents, Turkeys stands as a crossroads of some of the most important historical and cultural trends in the world. This course will explore the cultural history and current developments in turkey, through readings, lectures and study abroad experience in Turkey itself. Students will gain knowledge of the multiple historical influences on the development of Turkey by visiting major architectural, historical and archeological sites in various parts of the country. Students will also have an opportunity to experience and observe modern Turkish culture through lectures, participation in events, and visits to important Turkish institutions. This course will serve as a basis for a study abroad program in Turkey.

ANTH 114: Women and Religion

This course explores the complex involvement of women in the many religions of the world. Students will investigate textual and/or oral religious traditions regarding women and their places in the cosmos. Students will also explore texts written by women or practices devoted to or performed by women. The course will emphasize cultural and spiritual diversity in women's lives, as well as issues of religious empowerment, piety, leadership, scriptural interpretation, and theoretical questions involving gender, spirituality, the body, and social, ethnic, and racial differences.

ANTH 117: European Cultures

This course presents a survey of the cultural diversity of Europe, examining majority populations, ethnic/linguistic minorities and post-colonial immigrants. Particular focus will be on contemporary social and cultural changes brought about by both European integration and increased immigration of peoples from the former colonies.

ANTH 118: Anthropology of London

Since its founding in the First Century by the Romans at the northern frontier of their empire, London has been a vibrant and diverse population center. Utilizing an anthropological lens, this course explores London from its prehistoric origins through its current existence as a multicultural and global city. Combining readings, lectures and a study abroad experience in London, students will gain knowledge of the cultural history and contemporary ethnography of London. Field trips will include visits to important prehistoric and historical sites, as well as explore London's contemporary diverse neighborhoods. This course will serve as a basis for a study abroad course in London.

ANTH 131: New World Archaeology

This course will deal with the peopling of the New World, rise of the high cultures, and the development of the Eastern Peoples to white contact times.

ANTH 135: Pennsylvania German Cultural Traditions

This course is a survey of Pennsylvania German cultural traditions. The course examines the cultural traditions and practices of Anabaptist and Church Pennsylvania Germans, both in the past and in the present. These traditions and practices are studied in the context of various theories about culture, cultural pluralism, traditionalism, assimilation, and modernization. Students conduct their own research projects in neighboring communities and collect information about Pennsylvania German culture and society.

ANTH 138: Caribbean Cultures

Although it is a relatively small region, the Caribbean is a richly diverse place; this diversity is the result of the settlement and colonization of the region by people from all over the world. To understand the diversity of the contemporary Caribbean, we will spend the first half of the course examining the history of the Caribbean from its first prehistoric inhabitants to the mid 20th century, concentrating on the dynamics of colonialism as they affected the development of culture in the Caribbean. In the second half of the course, we will examine the diversity of peoples and cultures that inhabit the region today, particularly focusing on the relationship that music has played in the development of Jamaican popular culture.

ANTH 145: The Anthropology of Frauds and Fantastic Claims

Questions dealing with the mysterious, paranormal, or supernatural have long been answered by offering fantastic explanations-explanations that invoke the occult, paranormal, mystical, and miraculous. For their part, professional scientists typically regard such fantastic explanations as pseudoscience (i.e., "fake science"). Yet pseudoscience has enjoyed renewed interest from an increasingly science-averse audience, especially in America. In this course, students will be challenged to develop the critical thinking skills necessary to evaluate alternative interpretations of evidence through an examination of archaeological, historic, and contemporary examples of pseudoscience (e.g., the search for Bigfoot; ancient aliens; climate change denial). By honing the principles of critical thinking, students will be provided the necessary skills to evaluate any claim for themselves, in preparation for informed engagement with the world around them.

ANTH 154: Medicine, Health and Culture

This course is designed to combine anthropological knowledge and skills with public health problems and activities. Emphasis will be placed on the relationship between chronic disease and behavioral characteristics of the population under study. Ethnographic material will be drawn from a world-wide survey of various ethnic and national groups.

ANTH 165: The Muslim Middle East

Islam is one of the largest and most influential religions in the world and has found a home in a wide variety of social and cultural settings. To understand the roots and diversity of Muslim cultures in the contemporary world, we will spend the first half of the course exploring the origins of Islam in the Arabian Peninsula, its expansion into Eurasia and Africa, and its articulation in different historical contexts, concentrating on the accretion of local traditions into Muslim practices and beliefs. In the second half of the course, we will examine a number of social issues that are currently the focus of much debate within the contemporary Muslim world, issues such as women and Islam, family institutions, the implementation of Muslim law, the "honor and shame" ethic, and the use of violence for religious ends.

ANTH 180: The Pacific and Australia

A survey of the cultures of Polynesia, Micronesia, and Melanesia, including Australia in historical and contemporary perspectives. Discussion of the peopling of Oceania with resultant cultural and physical diversity. Particular emphasis on the kinship structure of selected cultures.

ANTH 190: Human Cultural Diversity and Adaptations in Pennsylvania

This course will examine Human adaptations in Pennsylvania and the Northeastern region of the United States from the earliest Native American settlements to the post-industrial present. The course will examine the Paleo-Indian, archaic and Woodlands adaptations of Native Americans and then consider European adaptations to the same environment from the early agricultural colonizers through the modern post-industrial society. Some of the present-day subcultures in Pennsylvania will also be considered.

ANTH 201: Archaeological Theory and Technique

This course provides training in archaeological theory, methodology, and lab techniques through reading, lecture, and practical analysis of archaeological materials.

ANTH 202: Research Methods in Physical Anthropology

This course provides training in the techniques of physical anthropology through reading, lecture and practical analysis of anthropological materials.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ANTH 212: Shamans, Witches and Magic

This course introduces students to the infinitely diverse ways in which groups express religious ideas - in the process rendering the familiar strange and the strange familiar. This course will examine universal and culture-specific aspects of religion, focusing primarily on "traditional" (i.e., non-scriptural) religions in order to explore some fundamental features common to all systems of religion. The course will also investigate new developments in religious belief and practice in a globalizing world.

ANTH 213: World Religions

This course will examine the great "World Religions" Judaism, Christianity, Islam, Hinduism, Buddhism, and East Asian Religions in terms of their historical developments and contemporary manifestations. The course will cover basic techniques of

scriptural exegesis, explore the historical roots and expansion of each religion, and examine how the religions have diversified in the face of cultural and political developments locally and globally. Special focus will be given to religious issues that are involved in major geo-political conflicts, such as the attacks of September 11, 2001, the rise of fundamentalism around the world, and the conflicts in the Middle East and South Asia.

ANTH 215: Genders Across Cultures

This course will explain some of the main areas of inquiry in the anthropological study of gender and sexuality, examining the historical development of anthropological theories of gender, from pre-feminist perspectives to the postmodern era. Students will then explore special topics and case studies in the anthropology of gender, drawing on material from different societies.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ANTH 218: Culture and Consumption

In every society, what is consumed, how things are consumed and by whom things are consumed carries socio-cultural meaning. The consumption and display of goods mark social identity and social status. This course will examine consumption in a broad range of societies, with a particular focus on the changing patterns of consumption and the meaning of consumption that is brought about by the globalization of consumerism.

ANTH 220: Economic Anthropology

The course examines the economic institutions and the technology of various non-Western societies. Patterns of production and distribution and their cultural underpinnings are compared with one another and, implicitly, with Western industrial economies.

ANTH 224: The Anthropology of Death and Dying

A survey of the on-going cultures of death and dying current in present-day Western society. Emphasis is on interaction with dying and grieving persons of all ages. Topics include the disaster syndrome, nursing homes, hospice, suicide, and funeral rituals.

ANTH 226: Anthropology and Education

This course is an introduction into anthropological approaches to learning and socialization. The course will survey anthropological findings about learning, both in American culture and in non-Western cultures. Both formal and informal methods of education will be examined. The course will also examine issues involving education, schools and cultural diversity in the present-day American education system.

ANTH 227: Work and Workplaces

Moving beyond viewing work as purely economic activity, this course examines the social and cultural aspects of work and workplaces. Non-industrial and industrial work will be examined in cross-cultural settings, focusing on the role of work in affecting identity, status and meaning. Particular emphasis will be placed on work in the contemporary global economy in both industrialized and post-industrialized countries. Course readings will be drawn from ethnographic studies carried out by both anthropologists and sociologists.

ANTH 232: Marriage and the Family in Cross-Cultural Perspective

This course examines the forms taken by marriages and families in various world societies. The following questions will be addressed: What aspects of marriage and family are the same for all humans, and what aspects are variable? What factors account for major cross-cultural differences in the organization of marriage and the family? Why are some features the same (or nearly so) all over? Is there a biosocial base? How are marriage and family relationships used as metaphors in organizing other aspects of social life?

ANTH 235: Pennsylvania Archaeology

This course provides a comprehensive overview of the Pennsylvania archaeology, from the very first peopling of the Commonwealth through the industrial age. Topics covered will include the first peopling of Pennsylvania, the rise of complex hunting-gathering societies, the adaptation of peoples to maize agriculture, and the archaeology of European contact.

ANTH 236: Writing Culture: Ethnographic Research Methods

Students learn methods of anthropological field research. This course introduces students to basic issues concerning ethnographic research and description. Students learn qualitative research methods, use these methods to gather information and then report on their findings.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ANTH 239: Historical Archaeology

The world of today was shaped by compelling historical forces (e.g., colonialism, industrialization, mass cultural migration) that have played out over the last few hundred years. In this course, students learn how historical archaeologists integrate documentary sources and artifacts to examine the impacts of these large-scale processes in various regional and cultural contexts. In so doing, this course provides historical context for thinking about issues of vital concern today (e.g., multiculturalism, the effect of exploration and settlement on native peoples and environments, racism, ethnicity, gender roles, social inequality, consumerism, the rise of the global mass market). Thus, this course illustrates how historical archaeologists make sense of a past that is still unfolding in the present.

ANTH 241: Race And Ethnicity

The sources and consequences of prejudice and discrimination; minorities in the social structure; strategies and programs to prevent and control inter-group tensions and conflicts.

ANTH 242: Museums, Festivals and Cultural Events

This class introduces students to anthropological approaches to museums, festivals and other organizations and activities that exhibit culture, archeology, ethnicity, and folklife. The course will examine how museums, festivals and other cultural events are organized, developed and managed. The course will also examine how these organizations and events are shaped by different interests, including those that are academic, commercial, political and indigenous. Examples will be drawn from many different cultures and subcultures in the United States and elseware. Students will participate in the museums, festivals and cultural events in the region surrounding Kutztown University.

ANTH 245: Language and Identity

This course provides an in-depth examination of the relationship between language, culture and identity. Students in this course will encounter the various ways that language is a resource used by speakers to shape, recreate and resist identities with in cultural contexts. Specific and interrelated linguistic anthropological topics to be examined include gender, sexual, ethnic, racial, national, transnational, socioeconomic and religious identities.

ANTH 246: Globalization and Development

This course surveys the social causes and consequences of underdevelopment in Third World societies. One of its basic premises is that development and underdevelopment must be defined in terms of quality of life as well as strictly economic indicators. A prominent (but not exclusive) focus is the problem of world hunger. This issue is used as a gateway to other significant development related issues (e.g. population, industrialization, urbanization, rural development).

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ANTH 254: Medical Anthropology

This course is designed to combine anthropological knowledge and skills with public health problems and activities. Emphasis will be placed on the relationship between chronic disease and behavioral characteristics of the population under study. Ethnographic material will be drawn from a world-wide survey of various ethnic and national groups.

ANTH 258: Forensic Anthropology

This course is designed to combine anthropological knowledge and skills that will allow students to identify and classify human skeletal remains for legal and medical purposes. Special consideration will be given to osteological knowledge, various measuring techniques, observational skills, determination of age, sex and race, and any possible criminal wrong-doing.

ANTH 260: Applied and Practicing Anthropology

This course presents a survey of the various ways that cultural anthropology is utilized to solve problems in public, not-for-profit, non-governmental and private sector organizations and settings. The course also serves as a vehicle for students to explore their own career interests and the opportunities that exist for individuals with training in anthropology.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ANTH 262: Hate Across Cultures

This course provides a comprehensive examination of hate and hate practices in cultures around the world, focusing first on a global scale, then on the national front and finally at the local level. Topics covered include the origin of hate, hate as a cultural construct, hate practices of individuals and organized groups, and the legacy of hate.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ANTH 263: Archaeological Field Methods

This course will consist of surveying and evaluating local archaeological sites. This will be followed by excavation, classification, description, and analysis of the sites. Material will be returned to campus, cleaned, and prepared for study. This will allow students to participate in original scientific research.

ANTH 264: Advanced Archaeological Field Methods

This course provides intensive and advanced field experience in archaeological excavation and analysis of local archaeological sites. Through experiential learning, students will gain knowledge of how archaeological materials are recovered, processed, analyzed and interpreted. The course must be taken in the same semester as ANTH 320.

ANTH 271: Studies in Physical Anthropology

Studies in Physical Anthropology

ANTH 272: Human Heredity

Molecular, Mendelian, populational and behavioral genetics of humans are studied from both a lecture and a problem-solving view.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ANTH 273: Primate Studies

This course covers non-human primate anatomy, taxonomy, distribution, adaption, and behavior as related to the human species.

ANTH 274: Human Origins

The anatomical and behavioral evolution of Homo sapiens and its antecedents from the Oligocene to the Holocene is studied with emphasis upon the evolutionary basis of developments and the functional significance of changes. Extensive use is made of cast materials.

ANTH 276: Studies in Physical Anthropology

Studies in Physical Anthropology

ANTH 277: Studies in Physical Anthropology

Studies in Physical Anthropology

ANTH 278: Studies in Physical Anthropology

Studies in Physical Anthropology

ANTH 279: Studies in Physical Anthropology

Studies in Physical Anthropology

ANTH 285: Millenarian Movements

A cross cultural analysis of millenarian movements - cults and/or groups of cultural reform whose intent is to achieve a "millennium" or future period of great happiness, universal love, or other dramatic climax. Special emphasis is on the cultural conditions under which such groups tend to arise, on group leadership, and on techniques of recruiting and maintaining group membership.

ANTH 290: Culture and Personality

The course is designed as an interdisciplinary survey of the field of culture and personality. The key problem involves investigating the concepts of culture and personality and the nature of the relationship between them. May be taken as ANTH 290 or PSYC 290.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ANTH 360: History and Theory of Anthropology

Various schools of anthropological thought are studied for their contributions to the development of current anthropological theory and practice.

ANTH 370: Readings in Anthropology

Students preparing for advanced study in anthropology may undertake guided readings and research. Arrangements as to the program and supervising departmental faculty must be completed prior to registration.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ANTH 371: Selected Topics In Anthropology

The format of the course will typically be lecture and discussion. Selection of topics will vary, depending upon the needs of eligible students, and the expertise of available faculty.

ANTH 379: Independent Study

Before registering the student is required to consult with the faculty member in the discipline to be studied who will supervise the independent study. May be repeated for credit.

ANTH 380: Senior Seminar in Anthropology

This course consists of readings and discussions in the area of the individual student's interest in preparation for the comprehensive examination in Anthropology. Required of all Liberal Arts students concentrating in Anthropology.

ANTH 390: Internship in Anthropology

The student is placed in an anthropological work situation in which supervised practical vocational experience can be acquired. Course credit will be determined prior to enrollment and will be based on the character and extent of the work-study program. Interested students should apply through their advisors. This course may be repeated for a maximum total of 12 sh.

ANTH 391: Internship in Anthropology

The student is placed in an anthropological work situation in which supervised practical vocational experience can be acquired. Course credit will be determined prior to enrollment and will be based on the character and extent of the work-study program. Interested students should apply through their advisors. This course may be repeated for a maximum total of 12 sh.

ANTH 395: Honors Independent Study/Thesis

Honors Independent Study/Thesis

ANTH 398: Honors Supplementary Research

Supplementary research conducted by an Honors student in an upper-division (or 300 or 400-level) course in which the student is enrolled. The research is related to a topic in the course, but in addition to the standard requirements of the course, the research should exhibit advanced inquiry or investigation into the topic. The Honors student earns 1, 2, or 3 credits in addition to the credits for the course itself. The number of additional credits depends on the amount and intensity of the supplementary research. Each department in the College of Liberal Arts and Sciences has a specific course number which uses the departmental prefix, but all courses will use a common number (398). The course title will read "Honors Supplementary Research" and will have a variable credit value from 1 to 3 credits, e.g. ENGL 398 Honors Supplementary Research.

Applied Digital Arts

APDA 250: Advanced Animation Techniques I

This course provides an overview of a range of advanced animation techniques, with particular focus on 3D character rigging and animation. Students will gain an overview of methods and materials used in the creation of armature-rigged characters for interactive environments.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

APDA 260: Advanced Animation Techniques II

This course provides an advanced overview of 2D and 3D animation for film. Advanced Animation Techniques II will concentrate on short-form video from project concept and pre-production to final delivery. Students will increase their proficiency in a variety of animation programs.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

APDA 320: Digital Team Process

Students study digital team process by creating original digital-media projects. Team based development in design feasibility, production workflows, user interface/user experience, and asset creation will be examined. Students will work as a team on projects which can include animation, game or interactive media, and present a completed project or working prototype.

APDA 342: Visual Storytelling Studio II

"Visual Storytelling Studio II" is an advanced drawing course for in-depth study of approaches to storytelling and their application in their visual narrative. Students will analyze historical examples of visual narratives and imagery related to character design, learn pre-production for character design and will develop concept art and character sheets. Representative

areas of inquiry include: digital drawing and designing; storyboarding language and approaches; title pages and typography; anatomy and the figure; color theory; material investigations; developing artistic style; and others. Within each umbrella topic, a range of techniques, concepts, and subject matter will be explored. Students will become more fully fluent in the aesthetic concepts associated with a specific topic and develop methods of presentation based on professional practices. Primary emphasis is on the development of an individual direction within the context of historical and contemporary techniques, ideas and images in concept art.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

APDA 343: Visual Storytelling Studio III

"Visual Storytelling Studio III" is an advanced drawing course for in-depth study of approaches to storytelling and their application in their visual narrative. Students will analyze historical examples of visual narratives and imagery related to character design, learn pre-production for character design and will develop concept art and character sheets. Representative areas of inquiry include: digital drawing and designing; storyboarding language and approaches; title pages and typography; anatomy and the figure; color theory; material investigations; developing artistic style; and others. Within each umbrella topic, a range of techniques, concepts, and subject matter will be explored. Students will become more fully fluent in the aesthetic concepts associated with a specific topic and develop methods of presentation based on professional practices. Primary emphasis is on the development of an individual direction within the context of historical and contemporary techniques, ideas and images in concept art.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

APDA 344: Visual Storytelling Studio IV

'Visual Storytelling Studio IV" is an advanced drawing course for in-depth study of approaches to storytelling and their application in their visual narrative. Students will analyze historical examples of visual narratives and imagery related to character design, learn pre-production for character design and will develop concept art and character sheets. Representative areas of inquiry include: digital drawing and designing; storyboarding language and approaches; title pages and typography; anatomy and the figure; color theory; material investigations; developing artistic style; and others. Within each umbrella topic, a range of techniques, concepts, and subject matter will be explored. Students will become more fully fluent in the aesthetic concepts associated with a specific topic and develop methods of presentation based on professional practices. Primary emphasis is on the development of an individual direction within the context of historical and contemporary techniques, ideas and images in concept art.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

APDA 345: Visual Storytelling Studio V

"Visual Storytelling Studio V" is an advanced drawing course for in-depth study of approaches to storytelling and their application in their visual narrative. Students will analyze historical examples of visual narratives and imagery related to character design, learn pre-production for character design and will develop concept art and character sheets. Representative areas of inquiry include: digital drawing and designing; storyboarding language and approaches; title pages and typography; anatomy and the figure; color theory; material investigations; developing artistic style; and others. Within each umbrella topic, a range of techniques, concepts, and subject matter will be explored. Students will become more fully fluent in the aesthetic concepts associated with a specific topic and develop methods of presentation based on professional practices. Primary emphasis is on the development of an individual direction within the context of historical and contemporary techniques, ideas and images in concept art.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

APDA 352: 3D Modeling and Rendering Studio II

This course is the second in a series of advanced courses utilizing 3D sculpting, texturing and rendering software to develop character and object designs. Students in this class will learn advanced sculpting, 3D digital painting/texturing, uv mapping, and rendering techniques to develop their ideas and present their ideas to others. Students will develop 3D drawings defined by

the professor and based on their own body of work. A minimum of 3 hours of work outside of class is required per week.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

APDA 353: 3D Modeling and Rendering Studio Ill

This course is the third in a series of advanced courses utilizing 3D sculpting, texturing and rendering software to develop character and object designs. Students in this class will learn advanced sculpting, 3D digital painting/texturing, uv mapping, and rendering techniques to develop their ideas and present their ideas to others. Students will develop 3D drawings defined by the professor and based on their own body of work. A minimum of 3 hours of work outside of class is required per week.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

APDA 354: 3D Modeling and Rendering Studio IV

This course is the fourth in a series of advanced courses utilizing 3D sculpting, texturing and rendering software to develop character and object designs. Students in this class will learn advanced sculpting, 3D digital painting/texturing, uv mapping, and rendering techniques to develop their ideas and present their ideas to others. Students will develop 30 drawings defined by the professor and based on their own body of work. A minimum of 3 hours of work outside of class is required per week.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

APDA 355: 3D Modeling and Rendering Studio V

This course is the fifth in a series of advanced courses utilizing 3D sculpting, texturing and rendering software to develop character and object designs. Students in this class will learn advanced sculpting, 3D digital painting/texturing, uv mapping, and rendering techniques to develop their ideas and present their ideas to others. Students will develop 3D drawings defined by the professor and based on their own body of work. A minimum of 3 hours of work outside of class is required per week.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

APDA 362: Animation Studio II

This course provides intermediate-level study in digital animation. Students will develop a project and execute it to acceptable professional standards. Intermediate-level production techniques, project organization, and linear versus non-linear narrative will be integral to coursework. Students will further develop their proficiency based on prior study using a variety of animation techniques and programs. The use of storyboards, animatics, special effects, audio components, and a variety of post-processing approaches will be necessary. A minimum of 3 hours of work outside of class is required per week.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

APDA 363: Animation Studio III

This course provides intermediate-through-advanced-level study in digital animation. Students will develop a project and execute it to high standards. Intermediate and eventually advanced production techniques, project organization, and linear versus non-linear narrative will be integral to coursework. Students will develop reinforcement-level and eventually mastery-level proficiency using a variety of animation techniques and programs. The use of storyboards, animatics, special effects, audio components, and a variety of post-processing approaches will be necessary. A minimum of 3 hours of work outside of class is required per week.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

APDA 364: Animation Studio IV

This course provides advanced mastery-level study in digital animation. Students will develop a high quality project and

execute it to the highest professional standards. Advanced production techniques, project organization, and linear versus non-linear narrative will be integral to coursework. Students will develop mastery-level proficiency using a variety of animation techniques and programs. The use of storyboards, animatics, special effects, audio components, and a variety of post-processing approaches will be necessary. A minimum of 3 hours of work outside of class is required per week.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

APDA 365: Animation Studio V

This capstone studio course provides advanced mastery-level study in digital animation. Students will develop their highest quality project and execute it to their highest professional abilities. Advanced production techniques, project organization, and linear versus non-linear narrative will be integral to coursework. Students will develop mastery-level proficiency using a variety of animation techniques and programs. The use of storyboards, animatics, special effects, audio components, and a variety of post-processing approaches will be necessary. A minimum of 3 hours of work outside of class is required per week.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

APDA 370: Senior Project I

Students will integrate skills and knowledge from previous course work to create a two-semester long, individual or team capstone project. In Senior Project I, students will develop a project concept, and generate elements needed in pre-production. These include concept and narrative, visual design, pre-production schedule and asset creation.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

APDA 380: Senior Project II

Students will integrate skills and knowledge from previous course work to create a two-semester long, individual or team capstone project. In Senior Project II students will do production and post production phases for the capstone project. Production and post-production may include, animation, cinematography, prototyping, working with developers, play testing, sound design, and final delivery.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

APDA 385: Selected Topics in Applied Digital Arts

This course will provide opportunities for students to investigate specialized areas of study within the field of Applied Digital Arts on an as needed basis. Topics will cover processes, techniques, or concepts not covered or only superficially addressed in regular course offerings.

Arabic

ARAB 11: Elementary Arabic I

This course in Arabic is the entry elementary level language course for beginners and will provide students with the beginning skills in listening, speaking, reading and writing the Arabic language basic on the peoples and cultures of the Arabic-speaking world.

ARAB 12: Elementary Arabic II

This course in Arabic is the second semester (elementary II) level language course for beginners and will provide students with the beginning skills in listening, speaking, reading and writing the Arabic language basic on the peoples and cultures of the

Arabic-speaking world.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

Art Criticism

ARCR 15: Art, Design, and Visual Culture

This course is a survey of the manner in which the visual arts are an influential aspect of the lives of everyone. Design is explored in terms of theory, historical and cultural foundations, materials, and practical design in the environment. Field trips and guest presentations will supplement lecture-visual instruction. Student assignments may be satisfied by both academic and/or studio performance. This course should enable both art students and non-art students to discover together the ways in which designs evolve, the influence of design on their everyday lives, and the importance of art in helping people enjoy a fuller life. The course is designed as a general education humanities elective.

ARCR 105: Aesthetic Experience in the Arts

This course is designed to acquaint the student with the skills and attitudes needed to understand and cope with aesthetic experience, which is assumed to be a natural component of all human experience. In acquiring such skills and attitudes, the student will gain some general understanding of some aesthetic issues but, and more importantly, the student will be able to respond more effectively to aesthetic experiences. To acquire these skills and attitudes, the student will practice, personally and individually, confronting a wide-range of aesthetic phenomena. This course may be selected under humanities or free electives.

ARCR 200: Visual Culture: Critical Theory

This course provides an introduction to those critical theories and practices that have framed 20th century understandings of visual art, design, and visual culture. Students will read a variety of texts, such as critical theories, biographies, historical essays, and case studies. Students will also interpret a variety of artifacts drawn from the visual arts. Ideas gained from these readings and interpretations will be applied to a wide range of 20th century images, objects, and performances. Students will become conversant with the critical theories and practices presented and will use this knowledge to develop informed opinions through their own writing about visual culture.

ARCR 211: Women in the Arts

This course will provide an overview of women's creative achievements, experiences and status in the visual arts. The focus of this course is on gender; however, issues relating to the intersections of gender with race, class, national origin, ethnicity, age, and sexual orientation will also be discussed. As well, the course will explore the portrayal of women and the way in which cultural definitions of gender shape women's aesthetic expression.

ARCR 241: Color: Perception, Properties, and Production

This course will provide an understanding of color through a broad range of disciplines including the arts, sciences, and humanities. Students can expect to examine the use of color through dyes, paints, and projected technologies, interpret the ways that color has been used to communicate in nature and culture, study biological and psychological aspects of color perception, enjoy the use of color in the production of images, objects, performance, environments and experiences, and understand the physical properties of color. Students will be introduced to the unique contributions of specific cultures, ethnic, religious groups and individuals to our understanding and interpretation of color. This course will be taught in lecture/discussion format.

ARCR 261: Survey of Crafts

This course is a survey of the crafts beginning with origins, historical impact, craft guilds, craft movements, and resurgence of crafts in contemporary society. Emphasis will be placed on four basic craft areas: clay, fibers, metal, and wood, with an overview of other significant crafts. This course may be taken by non-craft majors and used as a general education elective.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ARCR 300: Visual Culture: Critical Practice

This course aims to expand student awareness of the proliferation and pervasiveness of imagery, artifacts, and events in contemporary visual culture. It also seeks to engage students in the critique of images, artifacts, cultural sites, and public spheres. Students are encouraged to use critical strategies to reflect on the relationship of contemporary visual culture to the construction of identity, the richness of global cultures, and the integrity of human-made environments. The course is writing-intensive, emphasizing the need for students to clearly articulate their ideas, using models from disciplines engaged in similar critiques.

ARCR 342: Criticism in Art

This course is an advanced criticism course based on the fundamental principles introduced in ARCR105 Aesthetic Experience in the Arts. The visual arts provide the main focus of the course, although other art forms may also be considered to a lesser extent. Students study methods of criticism and the aesthetic theories upon which those methods are based. The writings of contemporary critics are analyzed and compared. Students develop their critical skills as they study original art works. This course may be selected under humanities.

Art Education

ARED 132: Art in Alternative Settings

This course introduces and examines educational theories and practices as they are implemented in alternative education settings such as non-school settings (e.g. correctional settings, retirement centers), non-traditional or non-public school settings (e.g. cyber school, charter schools), alternative arts venues, museums, non-profit organizations and community based groups. Course topics include exploration of effective pedagogy for teaching art to diverse communities and cultures and investigation into the development, role and value of museums, contemporary community-based organizations and alternative art venues in relationship to art education. A range of issues, strategies, perspectives and theories associated with teaching in alternative sites will be explored through reflection responses, critical/reading responses, field experiences, and seminar discussions.

ARED 210: Learning in the Visual Arts: Childhood

This course explores learning in the visual arts focusing on childhood (Pre-K-elementary). This course provides learners with an introduction to teaching visual arts (fine art, design, craft) and visual culture in Pre-K-elementary settings. Learners in this class will investigate curriculum planning, individual and social development, instructional strategies, as well as theoretical issues in art education. The class will be conducted within a studio framework and will include observations, presentations, discussions, and performance-based activities.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ARED 236: The Arts and Pre-K 4 Education

This course provides Pre-K through Gr4 Teacher Candidates with concepts and skills central to the visual and performing arts (Visual Art, Music, Theater, and Dance). Candidate will learn how to construct developmentally appropriate learning experiences in the arts for Pre-K through 4 students and how to integrate these experiences with other subjects. (3 s.h., 4 c.h.)

ARED 301: Art Education Field Experience

This course is a practical orientation to the teaching of art in a multi-cultural society through being an aide to an art teacher in a school situation. Students have opportunities to experience the adaptation of media and techniques for instruction in the classroom. Seminars, workshops, and individual conferences with the college instructor accompany the experience of the art

classroom assistantship. Students are responsible for their own transportation. Students are expected to fulfill all the course requirements assigned in relationship to the number of credit hours earned.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ARED 310: Learning in the Visual Arts: Adolescence

This course provides learners with an introduction to teaching visual arts (fine art, design, craft) and visual culture to adolescent populations. Learners in this class will investigate curriculum planning, instructional strategies, the learning environment as well as contemporary, historical, and theoretical issues in art education. Emphasis will be placed on exploring teacher identity and professionalism in the field. Also, this course will investigate the emotional, physical, social and cognitive development of adolescent student experiences with the lens of difference through representation. The class will be conducted within a framework that will include presentations, discussions, and performance-based activities.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ARED 330: Studio Thinking

Studio instruction is a central feature of art education classes in schools, museums, and community settings. In this course, students will be introduced to a wide range of strategies teachers employ to engage their students in studio thinking (Fine Arts, Crafts, Design). Students will investigate developmentally appropriate strategies used to demonstrate, facilitate, and critique artwork. Students in this class will be introduced to a range of issues, strategies, and perspectives associated with studio teaching methods.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ARED 331: Designing for Disabilities in Art Education Settings

The art classroom is a unique community with specialized learning and its own set of unique challenges. Students will gain expertise in understanding their roles and responsibilities as advocates and teachers of students with disabilities. This course will provide the opportunity to apply information such as: definitions, theories, and laws about working with students with disabilities, into practice within the setting of the art classroom. In addition, they will gain first-hand experience working with students with disabilities, conducting needs assessments, and designing and/or adapting curriculum and tools to make arts learning accessible to all students.

ARED 335: Integrated Curriculum in the Art Classroom

This course introduces and examines the history, theories, goals, and practices for integrating diverse disciplines with art education curriculum. The course offers exploration of meaningful, natural, and significant interdisciplinary of cross-disciplinary connections between art and no-art subjects. Through reflective responses, critical/reading responses, field experience, and seminar discussions the students will learn how to develop substantive connections between the arts and other subject areas and explore a range of issues, strategies, theories, and resources associated with making interdisciplinary connections for teaching an integrated art curriculum.

ARED 370: Selected Topics In Art Education

Students in this course will have the opportunity to explore special topics, issues, and teaching practices related to art education. Under this prefix, different topics, which provide distinctive learning experiences, will be offered periodically. The specific topic(s) offered for each semester will be listed in the schedule. Instruction will be lecture/seminar. Repeatable up to 9 s.h. A minimum of 3 hours of work outside of class is required per week.

ARED 377: Independent Study: Studio I

An opportunity is provided to pursue an interest in an area of study that represents a particular independent challenge in art education. This study is expected to diverge from normal course requirements. (Repeatable up to 16 semester hours.) Students

are expected to fulfill all the course requirements assigned in relationship to the number of credit hours earned.

ARED 379: Independent Study: Studio III

An opportunity is provided to pursue an interest in an area of study that represents a particular independent challenge in art education. This study is expected to diverge from normal course requirements. (Repeatable up to 16 semester hours.) Students are expected to fulfill all the course requirements assigned in relationship to the number of credit hours earned.

ARED 390: Clinical Experience and Practicum I

Student teaching is the culminating experience of the undergraduate Art Education program. It provides the student teacher with opportunities to observe professional art teachers on the advanced level and to participate instructionally in the art education programs of the schools. The student teaching semester is divided into two segments, one at the elementary level (K-6) and the other at the secondary level. These are interchange-able with the expectation of continued development of classroom management, teaching strategies, and instructional expertise. The student teacher is expected to plan and teach on both levels. The Practicum is a seminar, scheduled concurrently with Student Teaching; during the seminar, students discuss with the University supervisor teaching strategies, classroom management, application of theoretical models, and other pre-professional concerns.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ARED 391: Clinical Experience and Practicum II

Student teaching is the culminating experience of the undergraduate Art Education program. It provides the student teacher with opportunities to observe professional art teachers on the advanced level and to participate instructionally in the art education programs of the schools. The student teaching semester is divided into two segments, one at the elementary level (K-6) and the other at the secondary level. These are interchange-able with the expectation of continued development of classroom management, teaching strategies, and instructional expertise. The student teacher is expected to plan and teach on both levels. The Practicum is a seminar, scheduled concurrently with Student Teaching; during the seminar, students discuss with the University supervisor teaching strategies, classroom management, application of theoretical models, and other pre-professional concerns.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ARED 392: Field Experience in Art Education

This course is designed to provide the student with educational opportunities outside the normal academic program that cannot be gained through the more traditional course structure. By serving as apprentices, interns, aides, or assistants in a variety of settings ranging from public institutions to private industries, businesses, and studios, the student will be able to augment and extend his or her educational experiences to achieve specific personal professional career objectives. Variable credit 1 to 16 semester hours. Minimum of two hours field experience per week or thirty hours per semester for each academic credit hour.

ARED 395: Honors Independent Study/Thesis

Honors Independent Study/Thesis

ARED 399: Senior Exhibition

Student exhibition is a requirement for graduation. All BS in Art Education degree candidates participate in a Spring Semester Senior show the year that that are graduating. December graduates will show in the Spring semester prior to graduation. Participation in a Senior Show is defined as showing at least one piece/documentation/record within the confines of the display area being used for the exhibition (usually the Sharadin Art Gallery). Showing work in alternate spaces on campus, and not in the Senior Show, will not satisfy the graduation requirement.

ARED 401: Learning in the Visual Arts: Childhood

This course provides learners with an introduction to teaching visual arts (fine art, design, craft) and visual culture in grades PreK-5 elementary settings. Learners in this class will investigate curriculum planning, individual and social development, instructional strategies, as well as historical and theoretical issues in art education. Learner activities will include narrative account, observation of elementary teaching settings, studio and critical response activities, and the design of curriculum plans and instructional materials appropriate for art and visual culture in elementary settings. The class will be conducted within a studio framework and will include presentations, discussions and performance-based activities. ARED 401 and ARED 420 are co-requisites and should be taken simultaneously.

ARED 420: Learning in the Visual Arts: Adolescence

This course provides learners with an introduction to teaching the visual arts (fine art, design, craft) and visual culture to adolescent populations. Learners in this class will investigate curriculum planning, individual and social development in the arts, instructional strategies, as well as historical and theoretical issues in art education. Learner activities will include observation of and interaction with adolescent learners, studio and critical response activities, and the design of curriculum plans and instructional materials appropriate for art and visual culture to adolescents. The class will be conducted within a studio framework and will include presentations, discussions and performance-based activities. ARED 401 and ARED 420 are co-requisites and should be taken simultaneously.

ARED 430: Studio Thinking

Studio instruction is a central feature of art education classes in PreK through 12 settings. In this course, students will be introduced to a wide range of strategies teachers employ to engage their students in studio thinking (Fine Arts, Crafts, Design). Students will investigate developmentally appropriate strategies used to demonstrate, facilitate, and critique artwork. Students in this class will be introduced to a range of issues, strategies, and perspectives associated with studio teaching methods.

ARED 440: Visual Culture: Critical Practice and Pedagogy

This course aims to expand the student awareness of the proliferation and pervasiveness of imagery, artifacts, and events in art and visual culture, and provides an introduction to those critical theories and practices that have framed 20th century understandings of visual art, design, and visual culture. Students are encouraged to use critical strategies to reflect on the relationship of contemporary art and visual culture to the construction of identity, the richness of global cultures, and the integrity of human-made environments. The course is writing-intensive, emphasizing the need for students to clearly articulate their ideas, using models from disciplines engaged in similar critiques.

ARED 450: Best Practices in Art Education

This course is a study of exemplary teaching in art education. Case studies and model teaching will introduce students to instructional strategies practiced by experienced teachers in noteworthy K-12 art programs. Through lecture/discussion, students will examine how these practices relate to the style and personality of teachers, state and local standards, and the context of specific schools involved in the case studies. An emphasis will be placed upon specific teaching contexts and their applicability to other situations. 1-3 c.h., 1-3 s.h. Repeatable up to 9 s.h.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ARED 475: Art Education Field Experience

This course is a practical orientation to the teaching of art in a multicultural society through being an aide to an art teacher in a school situation. Students have opportunities to experience the adaptation of media and techniques for instruction in the classroom. Seminars, workshops, and individual conferences with the college instructor accompany the experience of the art classroom assistantship. Students are responsible for their own transportation. Students are expected to fulfill all the course requirements assigned in relationship to the number of credit hours. A minimum of 6 hours of work outside of the class is required per week.

ARED 476: Art Education Internship I

This internship provides candidates already teaching art in private and charter schools with clinical experience in order to earn PA Visual Arts Certification PreK-12 while on the job. An internship provides the teacher candidate with opportunities to participate instructionally as the art teacher of record at their own school while being mentored by an experienced classroom teacher and university supervisor. The internship is the first of two internships taken in sequence that will provide the teacher candidate mentorship and supervision for an entire school year.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ARED 477: Art Education Internship II

This internship provides candidates already teaching art in private and charter schools with clinical experience in order to earn PA Visual Arts Certification PreK-12 while on the job. An internship provides the teacher candidate with opportunities to participate instructionally as the art teacher of record at their own school while being mentored by an experienced classroom teacher and university supervisor. The internship is the second of two internships taken in sequence that will provide the teacher candidate mentorship and supervision for an entire school year.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ARED 490: Clinical Experience and Practicum I

Student teaching is the culminating experience of the Art Education certification program. It provides the student teacher with opportunities to observe professional art teachers on the advanced level and to participate instructionally in the art education programs of the schools. The student teaching semester is divided into two segments, one at the elementary level (K-6) and the other at the secondary level. These are interchangeable with the expectation of continued development of classroom management, teaching strategies, and instructional expertise. The student teacher is expected to plan and teach on both levels. The Practicum is a seminar, scheduled concurrently with the Clinical Experience; during the seminar, students discuss with the university supervisor teaching strategies, classroom management, application of theoretical models, and other pre-professional concerns.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ARED 491: Clinical Experience and Practicum II

Student teaching is the culminating experience of the Art Education certification program. It provides the student teacher with opportunities to observe professional art teachers on the advanced level and to participate instructionally in the art education programs of the schools. The student teaching semester is divided into two segments, one at the elementary level (K-6) and the other at the secondary level. These are interchangeable with the expectation of continued development of classroom management, teaching strategies, and instructional expertise. The student teacher is expected to plan and teach on both levels. The Practicum is a seminar, scheduled concurrently with the Clinical Experience; during the seminar, students discuss with the university supervisor teaching strategies, classroom management, application of theoretical models, and other pre-professional concerns.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

Art

ART 10: Experiencing Art

In this course, students who are non-art majors will be introduced to a variety of orientations used to create an understanding of fine arts, design, and crafts. These include: media, techniques, motivations, design, conceptual development processes, and aesthetic traditions. The course also emphasizes studying art critically and historically and forming educated opinions about works of art.

ART 20: Two-Dimensional Visual Literacy

Design implies order, arrangement, and plan. The student will study how design elements and principles influence perception and personal expression. Analysis of historical and contemporary art, together with exploration in various media and techniques, should give the student experience in conceptualizing, visualizing, and executing two-dimensional designs. A minimum of 3 hours of work outside of class is required per week.

ART 31: Two-Dimensional Design

Design implies order, arrangement, and plan. The student will study how design elements and principles influence perception and personal expression. Analysis of historical and contemporary art, together with exploration in various media and techniques, should give the student experience in conceptualizing, visualizing and executing two-dimensional designs. A minimum of 3 hours of work outside of class is required per week.

ART 32: Three-Dimensional Design

Studio involvement includes a continuum of experiences typical of the evolvement of the concepts of three-dimensional sculpture/design as manifested in history. Constructive experiences with a great variety of materials are designed to develop relationships of two- and three-dimensional design and then identify concepts that are unique to three-dimensional design. The role of light will be explored as it affects elements: edge, shape, color as a change agent from the illusions of two-dimensional surface to the reality of three-dimensional space through the principles of emphasis, continuity and balance, other natural phenomena, such as touch, motion, kinesthetic and some applications will be explored. A minimum of 3 hours of work outside of class is required per week.

ART 41: Introduction to Textiles and Material Studies for Non-Art Majors

Introduction to fabric processes design for non-majors. This course is a General Education elective to permit students with little or no art background to enrich their education through the study of textiles without having to compete with students planning to become professional artists or craftpersons. Basic structures of fabrics include single- and multi-element constructions of various processes of surface embellishment and dying. Ancient and modern techniques are studied. A minimum of 3 hours of work outside of class is required per week.

ART 42: Introduction to Weaving for Non-Art Majors

Introduction to the technique of weaving for non majors. This course is a General Education elective to permit students with little or no art background to enrich their education through the study of weaving without having to compete with students planning to become professional artists or craftpersons. Introductory and basic weaving techniques are developed through the use of the four-harness loom, as well as simple weaving devices.

ART 62: Introduction to Ceramics for Non-Art Majors

This course is a basic introduction to the clay medium: fire, earth and water for Non Majors. This course is a General Education elective to permit students with little or no art background to enrich their education through the study of ceramics without having to compete with students planning to become professional artists or craftpersons. The manipulative techniques of pinch, coil, slab and wheel are emphasized. Activities reflect an awareness of traditional as well as contemporary approaches to ceramics.

ART 110: Modern Art

Interpretation of the modern movement in art and their relation to contemporary culture. Emphasis is placed on the historical background and its influence on the evaluation of 20th century art.

ART 132: Material Color

This course will introduce the fundamental skills and techniques of utilizing color in art making on Three Dimensional Surfaces. This course is an elective that introduces the use of color in the production of art and utilitarian objects.
In addition to the basic and traditional techniques, the student will explore an experimental approach with a contemporary direction emphasizing aesthetics, conceptual, formal concerns with an emphasis on digital fabrication techniques.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ART 141: Introduction to Textiles and Material Studies

Basic structures of non-loom fabrics include major single- and multi-element constructions and various processes of surface embellishment. Ancient and modern techniques are studied. A minimum of 3 hours of work outside of class is required per week.

ART 142: Introduction to Weaving

Basic weaving techniques are developed through the use of the four-harness loom, as well as simple weaving devices. A minimum of 3 hours of work outside of class is required per week.

ART 155: Communication Techniques for Schools

Two and three Dimensional graphic experiences in visual communication based on exploration of contemporary form, content, mechanics of production. Design experiences are directed toward a significant application in a scholastic situation. For art education majors only

ART 161: Introduction to Ceramics

This course is a basic introduction to the clay medium; fire, earth, and water. The manipulative techniques of pinch, coil, slab, and wheel will be emphasized. Activities will reflect an awareness of traditional as well as contemporary approaches to ceramics. A minimum of 3 hours of work outside of class is required per week.

ART 182: Introduction to Time-Based Media

This course provides an introduction to the creation of images through computer-based technologies. During the course students will not only learn the use and basic capabilities of both still and time-based digital image-making equipment and software, they will also explore the unique ways in which computers facilitate artistic expression. Students will be introduced to art works, artists, alternative-viewing sites, cyber communities, aesthetics and criticism related to digital art. They will also consider digital tools as part of a continuum of technological innovation in the visual arts. This course serves as an introduction to digital media and prepares students for advanced digital art courses and other courses requiring a basic familiarity with these media. A minimum of 3 hours of work outside of class is required per week. (6 c.h., 3 s.h.)

ART 251: Sound Art

This course provides a foundational exploration of digital sound and sound art. During the course, students will learn to use field recording audio equipment and software, as well as explore the unique ways in which sound facilitates artistic expression. This course is project-based, focusing on the creation of experimental sound compositions and the spatialization of sound. Students will also learn to work with sound as a medium in visual arts. They will also be introduced to the history of electronic music and how to analysis important works from its cannon. A minimum of 3 hours of work outside of class is required per week.

ART 270: Installations

This is a studio and workshop based course that takes a hybrid approach to traditional art practices. Drawing, painting, sculpture, performance, sound, light, movement, as well as unconventional materials and processes will be explored and combined in a variety of ways in the creation of installation artworks. The significance and role of the site and the social-cultural context in which these pieces exist will be emphasized. Students will work both individually and collaboratively as they research and investigate the possibilities of each project. Historical and contemporary examples of installation art will be viewed and discussed. There will be field trips to galleries and museums to see installation art-works. A minimum of 3 hours of work outside of class is required per week. (6 c.h., 3 s.h.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ART 271: 3D Prototyping

This course provides a digital fabrication foundation for all majors in College of Visual and Performing Arts. In this course,

students will complete a series of projects exploring 3D modeling, 3D scanning technologies, and experimental approaches to digital model generation. Simultaneously, digital models will be made physical through additive and subtractive fabrication technologies including 3D printing, CNC milling, and laser cutting. Students will be introduced to art works, artists working with the medium, and application of this technology in commercial industry. A minimum of 3 hours of work outside of class is required per week.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ART 320: Introduction to Material Culture Conservation

This course provides an introduction to the conservation of material culture, which includes craft, objects, archives, and buildings. Conservators study, assess, plan, and implement approaches to preserving material culture. This includes approaches to treating the effects of deterioration from natural and man-made causes. Students in this course will explore conservation theory and will demonstrate their understanding through a series of projects associated with the Pennsylvania German Cultural Heritage Center and other local and regional museums and galleries. Students will complete restoration projects drawn from this site. A minimum of 3 hours of work outside of class is required per week.

ART 331: Animation Studio I

This course provides advanced study in digital animation. Students will develop a project and learn how to execute it, starting from conception to final delivery. Advanced production techniques, project planning, and linear versus non-linear narrative using interactive buttons will be covered in this class. Students will become proficient in using a variety of state of the art animation programs. Students will also learn how to plan and create storyboards to organize their animation ideas effectively. A minimum of 3 hours or work outside of class is required per week.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ART 332: Animation Studio II

This course provides advanced study in digital animation. Students will develop a project and learn how to execute it, starting from conception to final delivery. Advanced production techniques, project planning, and linear versus non-linear narrative using interactive buttons will be covered in this class. Students will become proficient in using a variety of state of the art animation programs. Students will also learn how to plan and create storyboards to organize their animation ideas effectively. A minimum of 3 hours or work outside of class is required per week.

ART 340: Weaving, Textiles and Materials Studies Studio

Individual studio experiences in weaving, textile construction, non-loom fiber, and material studies offer the advanced student an opportunity to pursue interests in complex two- and three-dimensional forms. The course allows the student to enrich their skills in weaving and textiles techniques using advanced equipment, while allowing them to concentrate in areas of special interest. Production problems for the professional fiber artist are considered. Students are expected to fulfill all the course requirements assigned in relationship to the number of credit hours earned. This course is repeatable up to six (6) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of this Studio course. Students will develop their personal imagery, critical and creative capabilities, and technical skills through the creation of finished works of art. They will also increase their knowledge of relevant processes and techniques, while developing their understanding of contemporary and historical weaving and textiles movements. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of 3 hours of work outside of class is required per week.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ART 351: 3D Animation Studio I

This course provides advanced work in the development of 3D animation. Students will develop a project and learn how to execute it, starting from conception to its final presentation. Production techniques, project planning, and linear versus non-

linear narrative are all components covered in this course. Students will become proficient in using 3D animation software. Students will also learn how to plan and create storyboards to organize their animation ideas effectively. Prior experience with computer aided modeling and rendering is required. A minimum of 4 hours of work outside of class is required per week. Open to all students in Electronic Media and the College of Visual and Performing Arts except Music, Music Education, and Communication Studies.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ART 352: 3D Animation Studio II

This course provides advanced work in the development of 3D animation. Students will develop a project and learn how to execute it, starting from conception to its final presentation. Production techniques, project planning, and linear versus non-linear narrative are all components covered in this course. Students will become proficient in using 3D animation software. Students will also learn how to plan and create storyboards to organize their animation ideas effectively. Prior experience with computer aided modeling and rendering is required. A minimum of 4 hours of work outside of class is required per week. Open to all students in Electronic Media and the College of Visual and Performing Arts except Music, Music Education, and Communication Studies.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ART 353: 3D Animation Studio III

This course provides advanced work in the development of 3D animation. Students will develop a project and learn how to execute it, starting from conception to its final presentation. Production techniques, project planning, and linear versus non-linear narrative are all components covered in this course. Students will become proficient in using 3D animation software. Students will also learn how to plan and create storyboards to organize their animation ideas effectively. Prior experience with computer aided modeling and rendering is required. A minimum of 4 hours of work outside of class is required per week. Open to all students in Electronic Media and the College of Visual and Performing Arts except Music, Music Education, and Communication Studies.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ART 360: Ceramics Studio

Further advanced study of the ceramic medium is undertaken with an emphasis on concentration in areas of the student's choice. Coursework includes research and experimentation which culminate in the resolution of both technical and conceptual concerns. Technical and conceptual concerns will be addressed in a demonstration/lecture seminar format. (Repeatable up to 15 s.h. with a 6 s.h. maximum per semester.) Students are expected to fulfill all the course requirements assigned in relationship to the number of credit hours earned. This course is repeatable up to five (5) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Craft Studios. Students will develop their personal imagery, critical and creative capabilities, and technical ability. They will also increase their knowledge of relevant processes, techniques, and their understanding of the work of contemporary and historical crafts and craft movements. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of 3 hours of work outside of class is required per week. (6 c.h., 3 s.h.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ART 361: Ceramics Studio: Raw Materials

Grounded in scientific methodology that is applied in creative ways, this course will empower students with the technical understandings of clays, slips, glazes, and firing processes needed to create unique works of art. Within a multidisciplinary approach to the study of ceramic raw materials, students will explore a range of media and surfaces, using geology and chemistry to formulate and modify clay bodies, decorating and casting slips, and glazes. Students will use different types of kilns and firing cycles to test their formulations. They will learn traditional systematic testing processes while also developing their own unique modes of experimentation. The end result will be a palette of materials and colors that are expressive of the student's aesthetic intentions.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ART 362: Ceramics Studio: Tableware

Using advanced wheel throwing techniques, students in this course will develop distinctive and expressive tableware and kitchenware. A study of food culture theory and historical and contemporary examples will generate dialogue, frame inquiries, and provide context. Tableware and kitchenware can affect human behavior, convey meaning, and generate significance within contemporary culture. Students will develop skills in throwing related sets, increasing their scale on the wheel, making complex pieces, and altering thrown forms. In order to personalize their style and convey meaning, students will study surface design techniques such as using decorating slips, printing techniques, washes, glazes, lusters, and post-firing. Technical experimentation with raw materials and practical experience with kilns and firing will round out the experience. Students will produce sets of tableware, service sets, kitchen ware, and food storage vessels. The course will culminate in a performance-based experience that involves the pots with food, along with written artist statements and a digital portfolio of professional quality images.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ART 363: Ceramics Studio: Sculpture

This course provides further instruction in building sculptural forms using clay, and focuses on hand building techniques. Students will develop contemporary and relevant ceramic sculpture by engaging in individualized inquiry and investigating historical and current examples. Additive modeling, reductive carving, pinching and pulling, building from bits, slab construction, and basic mold making will be taught. Beyond object making, students will also consider incorporating time-based media, installations, interventions, and socially engaged projects. Technical experimentation with raw materials and practical experience with kilns and firing will round out the experience. Students will produce three major sculptural projects, along with written artist statements and a digital portfolio of professional quality images.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ART 364: Ceramics Studio: Mold Making

The use of molds in ceramic art has a history that extends far back into the most ancient ceramics of early human cultures. Mold making is a tool for producing multiples, for increasing efficiency and speed of production, or for building complex forms that would be challenging to build using other techniques. This course is an introduction to various mold making materials, including raw clay, ceramic bisque, wood, foam, fabric, cardboard, silicone rubber, and plaster. We will produce prototypes and molds for use with wet clay as well as casting slips, and will cover everything from the most basic one-piece press molds on up to complex multipart plaster molds. By the end of the course, students will be literate in a range of mold making techniques, and will be using these techniques to create finished works of art.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ART 370: Selected Topics in Art Education

Students in this course will have the opportunity to explore special topics, issues, and teaching practices related to art education. Under this prefix, different topics, which provide distinctive learning experiences, will be offered periodically. The specific topic(s) offered for each semester will be listed in the schedule. Instruction will be lecture/seminar. A minimum of 3 hours of work outside of class is required per week.

ART 371: Selected Topics in Art Studio

Students in this course will have the opportunity to explore special topics, issues, and creative practices related to art, design, and visual culture. Under this prefix, different topics, which provide distinctive learning experiences, will be offered periodically. The specific topic(s) offered for each semester will be listed in the schedule. Instruction will be through art studios. A minimum of 3 hours of work outside of class is required per week. Repeatable up to 12 s.h. (6 c.h., 3 s.h.)

ART 386: Digital Sculpture

Students in this course will examine new types of digital media by learning to operate a microcontroller (which is a small computer) and dismantling objects. Students will use the microcontroller to create either an interactive or non-interactive artwork. The course includes an overview of the history of digital art and some reading is required. Students will spend time building circuits, soldering, writing programs, and using these instruments to create sound, light and motion works. Students will gain a new understanding of the psychological, social and ethical opportunities digital media offers. A minimum of 6 hours of work outside of class is required per week.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ART 390: Art Student Teaching and Practicum

Student teaching provides a full semester of observation and participation in the classroom; nine weeks at the elementary level and nine weeks at the secondary level. All aspects of teaching are experienced including planning, execution, and evaluation of art activities. Practicum gives student teachers a weekly opportunity to discuss classroom problems and accomplishments.

ART 392: Field Experience in Art

This course is designed to provide the student with educational opportunities outside the normal academic program which cannot be gained through the more traditional course structure. By serving as apprentices, interns, aides or assistants in a variety of settings ranging from public institutions to private industries, businesses and studios, the student will be able to augment and extend his or her educational experiences to achieve specific personal/professional career objectives. Variable credits 1 to 16 semester hours. Minimum of two hours field experience per week or thirty hours per semester for each academic credit hour.

ART 395: Honors Independent Study/Thesis

Honors Independent Study/Thesis

Art History

ARTH 24: Art History A: Prehistory to 1200 CE

The course content will include the historical development of painting, sculpture, architecture, and craft arts from the earliest art through the Middle Ages. The course will incorporate examples from across the globe. Emphasis will be placed on cultural, economic, religious, and philosophical factors and their relationship to art. The course will be taught in discussion/lecture format.

ARTH 25: Art History B

The course content will include the historical development in art of painting, sculpture, architecture, and craft arts from 1300 through Realism. The major artists, movements and styles of painting, sculpture, architecture and photography from this time period will be introduced. Emphasis will be the study of art as it is shaped by its cultural, economic, religious, and philosophical context. This class is designed to fulfill a general education requirement and is a large format lecture course. This course will present an overview of art historical developments from 1300 through the mid-nineteenth century. Materials in this class will be presented in a global manner, which will combat traditional art historical constructions of a separation between the "West" and the "Rest."

ARTH 26: Art History C: 1850-Today

This course will investigate the historical development of art across the globe, beginning in the mid-nineteenth century and continuing to the present day. Major artists, trends, movements, and styles will be included, covering the modern, postmodern, and contemporary worlds. Students will be introduced to the methods of art history as an academic discipline, and work across diverse artistic mediums will be considered, with emphasis on the cultural, social, economic, political, and philosophical developments that shape the production and reception of art.

ARTH 27: History of Animation, Game Art, and Interactive Media

This course introduces students to the history of animation, game art, and interactive media. Technological developments in, and critical debates about, these media will be situated within cultural, social, and artistic contexts, affording a multifaceted study of visual culture in the twentieth and twenty-first centuries.

ARTH 124: Art History A: Prehistory to 1200 CE

The course content will include the historical development of painting, sculpture, architecture, and craft arts from the earliest art through the Middle Ages. The course will incorporate examples from across the globe. Emphasis will be placed on cultural, economic, religious, and philosophical factors and their relationship to art. This is a writing intensive course that necessitates a small format. It is designed for visual arts majors in order to meet standards developed by the National Association of Schools of Art and Design (NASAD) to develop essential skills relevant to those entering the arts professions. Other students interested in this art history course may also register for the course. The course will be taught in discussion/lecture format.

ARTH 125: Art History B

The course content will include the historical development in Western art of painting, sculpture, architecture, and craft arts from 1300 through Realism. The major artists, movements and styles of painting, sculpture, architecture and photography from this time period will be introduced. Emphasis will be the study of art as it is shaped by its cultural, economic, religious, and philosophical context. This is a writing intensive, discussion-based course. It is designed to fulfill a general education requirement and is a large format lecture course. This course will present an overview of art historical developments from 1300 through the mid-nineteenth century. Materials in this class will be presented in a global manner, which will combat traditional art historical constructions of a separation between the "West" and the "Rest."

ARTH 126: Art History C: 1850 - Today

This course will investigate the historical development of art across the globe, beginning in the mid-nineteenth century and continuing to the present day. Major artists, trends, movements, and styles will be included, covering the modern, postmodern, and contemporary worlds. Students will be introduced to the methods of art history as an academic discipline, and work across diverse artistic mediums will be considered, with emphasis on the cultural, social, economic, political, and philosophical developments that shape the production and reception of art. This course is designed for visual arts majors in order to meet accreditation standards developed by the National Association of Schools of Art and Design (NASAD).

ARTH 128: Global Art Survey

This course will survey global art history beginning with ancient cultures through the contemporary period. Through thematic and chronological exploration of world cultures students will become familiar with major artistic trends and theoretical perspectives. This course will examine the construction, fluidity, and impact of transcultural exchanges and resulting global transformations as well as the politics of representation within art, visual and material culture.

ARTH 302: Early Christian and Byzantine Art

The study of the Christian art of western and eastern Europe, and environs, from Pentecost to the seventh century in the west up to the fifteenth century in the east.

ARTH 303: Art of Ancient Greece and Rome

The historical development of art-styles in painting, sculpture, architecture, and crafts and artistic concepts of ancient Greece and Rome from the rise of Greece to the fall of Rome.

ARTH 304: Renaissance Art

A study of Renaissance painting, architecture and sculpture with emphasis on the cultural forces which give form to the art. Concentration will be centered on Italy and the emergence of humanism.

ARTH 305: Medieval Art: Carolingian to High Gothic

This course presents a chronological development in style, iconography, and iconology of western painting, sculpture, architecture, and other art forms of this period.

ARTH 306: Art of Northern Europe: 1350-1580

The art of trans-Alpine Europe as it developed nationally during the time of the Renaissance in Italy. Particular attention is paid to that art of France, Great Britain, the Germanies, and the two Netherlands.

ARTH 307: European Art: 1580-1780

This course concerns itself with painting, sculpture, architecture, and the minor arts of Europe of the periods commonly known as the Baroque and Rococo.

ARTH 308: European Art: 1780 - 1880

This course concerns itself with painting, sculpture, architecture, and the minor arts of Europe of that period between Neo-Classicism and the end of Impressionism.

ARTH 309: Art Since 1950

This course investigates the painting, sculpture and new art forms created in the later 20th century. Major aesthetic issues, art movements, and the primary artists involved will be studied in their historical and cultural context.

ARTH 315: Modern Architecture

This course introduces students to the materials, designs, and stylistic trends of modem architecture. Architects and structures from the major movements of the period-Art Nouveau, Expressionism, De Stijl, Postmodernism and others-are studied in the context of historical, cultural, economic and political events. Other topics include urban planning and renewal projects, the effects of technology and environmental changes on architectural practices, and architectural theory.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ARTH 315: Modern Architecture

This course introduces students to the materials, designs, and stylistic trends of modem architecture. Architects and structures from the major movements of the period-Art Nouveau, Expressionism, De Stijl, Postmodernism and others-are studied in the context of historical, cultural, economic and political events. Other topics include urban planning and renewal projects, the effects of technology and environmental changes on architectural practices, and architectural theory.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ARTH 318: Picturing Gender

This course investigates the role of art in shaping a culture's understanding of gender. Drawing upon themes from a variety of historical eras from the ancient world through the 19th century in Europe and the United States, it explores how art both reflects and moulds the understanding of gender roles as they are played out across the lifespan as well as range of sexual orientations. Topics pertaining to gender such as social class, power, spirituality, sexuality, work leisure, family life and age will be addressed.

ARTH 319: Arts of the Islamic World

The aim of this course is to cultivate an appreciation of the Islamic faith and culture as expressed through the visual arts and architecture from the seventh through the seventeenth century. In addition to examining the major religious monuments of the Middle East, Asia, Europe, and Africa, we will also explore secular works from both the royal and court context and the context of everyday life, such as manuscript illumination and calligraphy, metalwork, ceramics, textiles, ivories and glass. Throughout this course, we will also consider Islam as "the other," examining the ways in which western artists, historians and travelers have interpreted Islamic art and culture.

ARTH 320: Early Modern Villas and Gardens

This course will study villas and gardens from the early modem period onward. Focus will be placed on architectural and decorative trends of villas and their recreational, utilitarian and political functions. Topics will include garden design and the elaborate fountain and sculpture displays, grottoes, garden houses and botanical collections that were an integral part of the landscape. Emphasis will be placed on villa culture in Italy, France, England and the United States.

ARTH 321: The History of Photography

This course investigates the development of photography from its inception (c. 1839) to the present. During the semester students will examine the primary photographers, techniques and aesthetic issues addressed over the last 160 years. These aspects of photography will not be viewed in isolation, but within their historical and cultural context.

ARTH 322: Visualizing Food and Empire

This course will survey the visual representations of food from a global perspective beginning with ancient cultures through the contemporary period. Food appears as a lens for understanding the formation of a modern world system including the rise of empires and a global marketplace, but also grounds us in local traditions and identities according to the environment and belief systems. This course considers the origins, influences, theories, processes, and manifestations of art connected with food, either conceptually or materialistically. In addition, this course offers a deeper understanding regarding the construction of appetites, gastronomy, consumption, and presentation in the visual and performing arts.

ARTH 323: Art and Science

This course explores the interconnected nature of science and art, starting with the ancient world and moving to the present day. Special emphasis will be placed on the ways in which science and art intertwined throughout history. Some concepts to be explored include how artists and scientists visualized the world through art, how art was used as a tool in scientific discovery, and contemporary issues with art and science such as digital visualization and artistic conservation.

ARTH 324: Contemporary African-American Art

This course investigates the history of Africa-American art from the Harlem Renaissance to present day.

ARTH 325: Contemporary African Art and the Diaspora

This course investigates contemporary art in Africa and the Diaspora. Major artistic trends from the colonial era to the present day will be explored. Emphasis will be placed on, but not limited to, the media of painting, sculpture, photography, printmaking, collage, video, and installation as practiced by African artists. Formal developments in these media will be situated within cultural, social, economic, political, and philosophic contexts, affording a multifaceted study of contemporary art by artists of African descent.

ARTH 326: Latin American and Caribbean Art

This course will survey Latin American and Caribbean Art from the colonial period to the contemporary. The course will consider the politics of representation within art, visual and material culture and incorporate themes of conquest and colonialism, nationalism, avant-garde movements, modernisms, and contemporary movements. This course looks at the development of race, class, and gender, vis-à-vis visual images, film, and new media.

ARTH 334: American Art

Aesthetic expressions in architecture, painting, sculpture, interior design, industrial arts, and crafts as experiences of the artist in each major period of American life, to the Armory Show.

ARTH 336: Paragone: Rivalry in the Arts

"Paragone" is an Italian term that means comparison. But the significance of "paragone" more closely resembles our English

word of competition. "Paragone" references the phenomenon of artistic rivalries that began in the 15th century in Italy and applied, not only to artists as they competed for commissions and patrons, but also to whole genres in which competition took place. A few examples of such are: painting vs. sculpture, art vs. poetry, Leonardo vs. Michelangelo, and Michelangelo vs. Bramante. This class considers the history of artistic rivalry beyond the Renaissance, looking at the origins of competition before the early modern period, as well as modern examples in the twentieth and twenty-first centuries. The course will investigate the way competition has both spurred and hindered artistic production throughout the ages, as well as the complicated philosophical issues that plague it. A range of media will be considered across a number of geographic and temporal localities.

ARTH 337: Ancient Egypt: Art, Exploration, and Afterlife

This course will dive into the more than 3,000-year period of Egyptian Art, starting from pre-pharaonic times around 3100 BCE until the fall of the last Pharaoh, Cleopatra, in 31 BCE. This course will also look at colonial powers in Egypt under the Greeks and Romans, as well as the French, English, and American colonial powers in the region as discoveries were made in the nineteenth and early twentieth centuries across Egypt. This class will investigate the legacy of explorers of the ancient world, as well as hieroglyphs and their decipherment, and the cultural and physical artifacts of mummies. The class will consider the afterlife of Ancient Egypt across numerous geographic and temporal localities and will examine how Egyptian art continues to have a lasting presence in the art, media, and visual culture of the twenty-first century.

ARTH 338: European Modernism: 1880 - 1940

This course investigates the painting, sculpture and architecture created in Europe in the era of early Modernism. Major aesthetic issues, art movements, and the primary artists involved will be studied in relation to their historical and cultural context.

ARTH 339: Independent Studies in the History of Art

A course for the student who desires personal and professional guidance in studying precisely defined topics in the history of art. Repeatable up to 12 s.h.

ARTH 340: Pompeii and Ravenna: Bookends of the Roman Empire

The course will investigate the art and culture of two of the ancient provincial Roman cities, Pompeii and Ravenna. Each of these sites is exceptionally rich in preserved remains and thus, each one offers a lens through which students will consider art and life at the beginning and end of the Roman Empire, respectively. Throughout the course, comparison and reference will be made first to Rome then to Constantinople, in order to consider artistic and cultural developments as they relate to trends seen in and emanating from the capital city. Emphasis will be placed on wall paintings, mosaics, and the arts, social rituals and material culture of urban daily life in the Roman Empire.

ARTH 341: Beautiful and Useful: The Functional Arts and Their World

Often, artists produced artwork that was meant to be used in a practical or decorative way. This art, often known as the decorative arts, is not traditionally considered to be as important as fine art within an art historical context. This course will look at the decorative arts from a variety of perspectives and in a global context, and will question traditional art historical narratives. Further, this course will discuss important art related concepts such as craftsmanship and materiality.

ARTH 343: Early Modern Italy: Beyond Painting, Sculpture, and Architecture

Early Modern Italians were surrounded by images, some brightly painted in oil or tempera, others carved into marble or wood. They walked through noisy and dirty streets that were lined with palaces, civic halls, and churches reflecting the latest architectural trends. But what of the materials and imagery that they encountered beyond the strict categories of painting, sculpture, and architecture? This course will flesh out the image of Renaissance and Baroque life on the peninsula by looking at the devotional, domestic, and ritual objects that filled villas, houses, bookcases, studies, and more. From the burgeoning majolica production in the peninsula, to the tapestry collections of cardinals and popes, this class will look at a wide array of meaningful objects that accompanied the paintings and sculpture for which this era is famous.

ARTH 344: 'La Dolce Vita': Italian Art and Culture

This course will investigate the paintings, sculpture, art objects, and architecture from antiquity to the present-day in the Italian peninsula. Expanding on Federico Fellini's assessment and critique of Italy as the "sweet life" (la dolce vita), and combining that with the eighteenth-century notion of the Grand Tour, in which Europe's elite visited a range of sites across the Italian peninsula as a coming-of-age experience, this class will take a holistic look at the historical influences that have led to a wide range of artistic production.

ARTH 345: Crosscurrents in Italian and Northern Renaissance Art

This course will deal with the interchange of ideas and techniques between countries south and north of the Alps during the Renaissance. It is designed to show how, in painting and printmaking, the development of visual cultures in Italy, the Low Countries and Germany was intimately connected. The material discussed will range from technical to contextual.

ARTH 350: Baroque Art in Italy, France and Spain between 1590 and 1700

This course will take a critical look and the dynamic and dramatic interplay between social, political, as well as economic institutions that contributed to the innovations in the painting, sculpture and architecture of Italy, France and Spain between 1590 and 1700. In addition to discussing the influence exerted on the period's artistic production by the sixteenth century Counter Reformation, the course will consider the various types of patronage (royal, ecclesiastic, civil) that existed during the period, as well as the role of art theory and collecting. Lectures, implemented through slide lectures, classroom discussion, and readings, will introduce references to allegorical language used by artists of the period, both within the workshop model of artistic production and overarching themes that link their works to larger cultural movements.

ARTH 351: Baroque Art in The Dutch Republic, Flanders, and England between

This course will take a critical look and the dynamic and dramatic interplay between social, political, as well as economic institutions that contributed to the innovations in the painting, sculpture and architecture outside Italy, with emphasis on the Dutch Republic, Flanders, and England between 1590 and 1700. In addition to discussing the influence exerted on the period's artistic production by the sixteenth century Counter Reformation, the course will cover such issues as patronage, the development of new subjects and allegorical language, as well as the growing numbers of women artists. Lectures, implemented through slide lectures, classroom discussion, and readings, will introduce references to allegorical language used by many seventeenth-century artists.

ARTH 364: Art and Sport

This class reconsiders the relationship between art and sport, investigating the various ways athletic competition has been represented throughout the history of art. By examining how artists portray and contest the position of sport in society, students will acquire knowledge of artworks and viewpoints frequently overlooked by art historians. A range of media will be studied to match the various meanings attached to sport across diverse cultures, with athletics providing the conceptual link for critical explorations of art, visual culture, and society.

ARTH 365: Cut and Paste: A History of Collage

This course investigates the development of collage and its many variations throughout the twentieth and twenty-first centuries including assemblage, photomontage, décollage, and digital cut and paste.

ARTH 367: Contemporary British Art

This course investigates contemporary art in England. Major artistic movements following World War II through the present day will be explored, ranging from Pop Art and Conceptualism to Punk and Neo-Expressionism. Emphasis will be placed on, but not limited to, the media of painting, sculpture, photography, printmaking, collage, video, and installation as practiced by British artists. Formal developments in these media will be situated within cultural, social, economic, political, and philosophic contexts, affording a multifaceted study of contemporary art in the United Kingdom.

ARTH 370: Art Today: The Next Decade

The avant-garde is a French term referring to those artists who are, at any time, thought to be the most advanced or at the cutting edge. This course will provide an investigation of the work, theories, attitudes and processes of avant-garde artists working today. It will consider the possible future direction of art through presentations of and dialogue with artists, critics, curators, etc. Through slide presentations, students will see a chronicle of selected artists who have made significant contributions to the contemporary art world. This pool of artists will change with the evolving art scene. Students will also study contemporary art by visiting galleries, museums and, in some cases, artists' studios, and by reading articles in major art periodicals. The students will attend presentations and meet with artists through the New Arts Program and the Visiting Artist Series. They will experience art firsthand by visits to galleries and artists' studios in New York City and/or Baltimore, Philadelphia, Allentown, Reading and Washington, D.C. The proximity of Kutztown to these centers of contemporary art offers opportunities to our students that are unique and unavailable to most university communities.

ARTH 380: Seminar in Art History

This course serves as a culmination of undergraduate study of Art History, geared primarily for students enrolled in the B.A. Major program as well as those pursuing a Minor. The seminar consists of readings, discussions, and projects designed to further students' understanding of Art History and its diverse methodologies and practices.

ARTH 385: Selected Topics in Art History

This course will provide opportunities for students to investigate specialized areas of study as the need or opportunity arises. Topics will cover cultures, periods, critical theory and/or aesthetics that are not offered or are only covered superficially in established art history courses.

ARTH 390: Internship in Art History

This course provides an opportunity for the student to experience practices and modes of inquiry pertaining to art history in a professional setting; experiences not found in the conventional classroom or on-line setting. The student will complete 40 hours per academic credits, up to 3 credits, working in a setting where art historical practices are applied. The settings will vary. Possibilities include museums, galleries, historical societies, archives or others appropriate venue. This course may be repeated.

ARTH 395: Honors Independent Study/Thesis

Honors Independent Study/Thesis

Astronomy

ASTR 16: Core to the Cosmos: Contributions of Women to Astronomy

From the edge of the cosmos to the cores of planets, the scientific discoveries of women shape our understanding of space. Using the perspective of influential women in astronomy, the course explores major astronomical and planetary science discoveries, such as the expansion of the universe, life cycles of stars, formation of the solar system, and the structure of the Earth as well as their role in space exploration and science missions. This course does not satisfy major, concomitant, or specialization requirements for Secondary Education and/or Liberal Arts Science majors or count toward major GPA for Physics majors.

ASTR 20: Introductory Astronomy

This course is a descriptive survey of the heavens, including the constellations and stars, the sun and our planetary system, the celestial sphere, our galaxy, binary and variable stars, nebulae, the elements of astrophysics, cosmogony, the history of astronomy. Weekly laboratory exercises are an integral part of the course. This course does not satisfy major, concomitant, or specialization requirements for Secondary Education Science and/or Liberal Arts Science Majors.

ASTR 26: Elements of Modern Astronomy

A non-laboratory introductory course of the study of the universe. Special emphasis will be placed on the physical properties of the planets and other members of the solar system, life in the universe, the structure and evolution of stars, and the theories concerning the origin and development of the universe. There are no prerequisites, but this course is not open to students who have taken ASTR 020-021 or its equivalent. This course does not satisfy the laboratory course requirement for physical sciences under general education.

ASTR 30: Mission To The Planets

More than 50 spacecraft missions have left the Earth's surface in search of answers about the formation of our solar system, our neighboring planets, our moon, and our own planet. These missions illustrate the application of the scientific method in vivid detail as scientists struggled to refine their questions (hypothesis) and obtain the data to test them; then learned to refine the hypothesis and then repeated the process. This course covers the physical, chemical, and geological nature of the planets and their atmospheres; similarities and differences between the Earth and other planets using manned and unmanned space probes and how they have shaped our understanding of the planets. Laboratory experiments illustrate the scientific method and complex decision making required in developing space missions.

ASTR 40: Honors Astronomy; The History of Astronomical Discovery

This course will investigate the significant early astronomical observations, measurements and discoveries which are the foundation of our knowledge of the Universe. During this course each student will, either individually or in small groups, investigate the work of astronomers who have made a contribution to our understanding of the nature of the Universe. During the laboratory portion of this course the student or group will, with the aid of the instructor, devise a method to duplicate the original observation or measurement and lead the class through a "rediscovery" of the nature of our Universe. This may require considerable time spent outside of the regular class time. It will also require the students to become familiar with the use of basic astronomical instruments and observational techniques. They will become proficient with the use of the telescope and collecting telescopic data.

ASTR 42: Stars, Galaxies, and Black Holes

This course is a descriptive study of stars, galaxies, and black holes. Included in this course are an introduction to the observation and analysis of starlight and an introduction to orbital mechanics and gravity. Stellar evolution is covered in detail, as are the classification of galaxies and the observation and characterization of black holes. A selected series of lectures and hands-on projects will be done using the planetarium and the on-campus observatory. This course does not satisfy major, concomitant, or specialization requirements for Secondary Education and/or Liberal Arts Science majors nor count toward major GPA for Physics majors.

ASTR 140: Planetary Science

This course provides an introduction to the observational and quantitative techniques used to understand the characteristics, origin, and evolution of our Solar System. Topics include the formation and evolution of planets, asteroids, comets, moons, and rings. In laboratory exercises, students will use data from NASA and other missions to explore the dynamic evolution of our Solar System.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ASTR 142: Stellar and Galactic Astronomy

This course is a survey of stars and stellar systems including the sun as a star, stellar properties and distances, binary stars, variable stars, star clusters, stellar evolution, galaxies and the universe. Some concepts of astrophysics, radio astronomy and cosmology are introduced. There will be several planetarium and telescopic observation sessions. Actual data acquired at national and local observatories, including the Kutztown University Observatory, will be incorporated into laboratory exercises.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ASTR 205: Planetary Surface Processes

This course examines the physics of processes that break solid rock into transportable materials and the physical and chemical mechanisms behind the movement and deposition of that material on planetary surfaces. Using quantitative analysis, laboratory, remote sensing, field experiments, and qualitative assessment, this course links the physical and chemical weathering of planetary surfaces, including the fundamentals of fluid flow, sediment transport, erosion, and deposition to processes ranging from microscopic to mountain building. A laboratory course, planetary surface processes focuses on collecting and using actual data sets and applying them to the sedimentary, tectonic, and atmospheric history of a planet.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ASTR 240: The Planetarium

This course introduces students to the planetarium, its operation, and its maintenance. The student will learn the operation of the digital planetarium projection system and the computer scripting program used to create planetarium presentations. Also covered in this course are methods of digital image, video, and audio manipulation.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ASTR 242: Exoplanets

This course is a survey of exoplanets, planetary systems, and the solar system as a planetary system. Fundamental concepts in astrophysics concerning the solar system, planetary system formation and evolution, and exoplanet detection and characterization are introduced. There will be several planetarium and telescopic observing sessions. Actual data acquired at national and local observatories, including the Kutztown University Observatory, will be incorporated into laboratory exercises, as will the professional reduction, analysis, and communication of astronomical data. Participants in the course may have the opportunity to contribute to the discovery and/or characterization of new exoplanets.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ASTR 250: Advances in Planetary Science

Using a seminar-style approach, the course focuses on a specific, current topic in planetary science by reading and discussing upper-level academic literature such as peer-reviewed papers and book review chapters. Topics will be selected to correspond with current advances in planetary science and focus on topics where new data or analysis illuminates our understanding of solar system processes. New missions, in particular, provide opportunities to examine topics from multiple perspectives. Examples include, but are not limited to, Kuiper Belt Objects, lunar formation, ring dynamics, astrobiology, and asteroids.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ASTR 340: Introduction to Astrophysics

This course is concerned primarily with a study of the physical processes taking place in stars and nebulae and with methods of interpreting the spectra of these objects. Among the topics discussed will be the radiation laws, atomic spectra, ionization and excitation laws, classification of stellar spectra, model stellar atmospheres, structure and evolution of stars and cosmic radio waves.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ASTR 342: Astrophysics

This course explores the physics of astronomical phenomena, from processes within our Solar System to the creation and evolution of stars, galaxies, and the Universe. The course is designed for physics majors and other science majors with strong interest in astronomy, physics, and mathematics. This course takes a mathematically rigorous approach of applying basic

principles of physics to astronomy, and therefore also provides a foundation for more advanced (undergraduate and graduate level) coursework in astrophysics.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ASTR 350: Practical Astronomy

This course is concerned with a study of the techniques required in making and reducing astronomical observations. The positional aspects of astronomy will be covered in detail. This course will also focus attention on methods modern data collection, reduction, and analysis using CCD detector systems, and on the various types of telescopes. The students will be required to carry out observing projects using the Kutztown University's on campus telescope and the remote robotic telescopes located in New Mexico and South Australia.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ASTR 370: Research in Astronomy

This course will involve an individual research program on a specialized topic in astronomy and will require either library research, observational work using Kutztown University's on campus telescopes and/or remote robotic telescopes, computer simulations, the planetarium, or a combination of these. The results of such work might be published. This course may be repeated for credit.

ASTR 395: Honors Independent Study/Thesis

Honors Independent Study/Thesis.

Biology

BIOL 10: Introduction to Biology

This course is designed to provide students with an introduction to basic concepts within biology to enable them to critically evaluate biological information related to issues that will impact their lives and many facets of our society. Basic concepts related to the areas of health, biotechnology, genetics, biodiversity, the environment, ethics, and evolution will be covered. This course is designed to provide students with hands-on experience examining biological systems, with an emphasis on the processes of scientific inquiry and the analysis of relevant data. This is a lecture/laboratory course intended for the general education of non-science majors, and is not applicable to biology major programs.

BIOL 12: Introduction to Biology: Human Biology

This course is designed to provide the student with an introduction to organ systems and basic concepts within human biology to enable them to critically evaluate biological information related to issues that will impact their lives and many facets of our society. Basic concepts related to areas of health and disease, biotechnology, genetics and inheritance, bioethics, anatomy, physiology, behavior, and evolution will be covered. This course is designed to provide students with hands-on experience examining human biological systems, with an emphasis on the processes of scientific inquiry and the analysis of relevant data. This is a lecture/laboratory course intended for the general education of non-science majors, and is not applicable to biology major programs.

BIOL 21: Kitchen and Backyard Biology

Biology is the science of life. It affects all of us in a plethora of ways each and every day. Informed decisions about the food we eat, the medical treatments we are offered, the health and safety of our local environment, how genetic information passes from one generation to the next, and many other concerns require a fundamental understanding of biology. This course will provide non-major students with a foundation in biological concepts to enable them to evaluate the biological information related to their everyday lives. In addition, students will consider the ethical implications that come with some of the innovations in

biotechnology. This course involves hands-on experiences, with an emphasis on the processes of scientific inquiry and the analysis and interpretation of biological data. The lab portion of the course will require some basic lab materials available at a local grocery store. It will also require students to venture out into their local environment in order to observe and collect data. This lecture/laboratory course is intended to be offered in an online format for the general education of non-science majors, and is not applicable to biology major programs.

BIOL 45: Evolution of Sex

Why do we have sex, and what are its consequences? Most animals reproduce entirely through sex, and almost all living things have some way to mix and match their genes. We will study the evolutionary reasons for sex, its mechanisms, and its effects. We will also address the complications of human sex. This is a lecture course intended for the general education of non-science majors, and is not applicable to biology major programs and biology major GPA.

BIOL 50: Window to the Oceans

This is a course in marine biology designed for the non-science major. Students will be introduced to the major groups of marine organisms, diverse coastal habitats, adaptations and distribution of organisms within marine habitats, and the potential for human impact on marine organisms and the environment. Current discoveries and "hot topics" within the field of marine biology will also be discussed. Laboratory work will include hands-on experience with sampling methods and equipment from both shore-based and boat-based platforms, general identification of marine plants and animals, and first-hand observation of different coastal habitats, their residents and unique adaptations. This course will be taught at the Marine Science Consortium in Wallops Island, VA. (3 s.h., 4 c.h.; this course is also offered with the MRSC prefix.)

BIOL 60: Introduction to Ecology

Ecology is the scientific study of the interactions among living organisms, and between organisms and their environments. Students will explore basic ecological patterns and processes that affect populations, communities, and ecosystems, and apply the principles of ecology to understanding selected global and local environmental problems. Laboratory and field sessions will emphasize scientific inquiry as well as ecological principles and techniques. This course will provide a viable option for non-science majors to explore their interest in ecology, while fulfilling their general education biology lab science requirement.

BIOL 104: Principles of Biology

This course provides students with an introduction to the biological principles and functional aspects of biology that will serve as a foundation for understanding the biology of plants and animals. The concepts covered in this course include the scientific method, cellular structures and processes, genetics, evolution, and biodiversity. This class meets for three hours of lecture and three hours of laboratory per week.

BIOL 106: Introduction to Zoology

This course contains an introduction to the principles of zoology. It places emphasis on the topics of evolution, ecology, animal diversity and comparative characteristics of selected phyla in the kingdoms Protista and Animalia. There are three hours of lecture and three hours of laboratory per week.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 108: Introduction to Botany

This course is an introduction to the concepts of botany. Emphasis is placed on structure, function, plant diversity, and plant ecology. Topics include plant cellular structure, anatomy and morphology of stems, roots and leaves, transport processes, photosynthesis and respiration, plant growth and development, plant biotechnology, plant diversity, economic botany, and plant ecology. There are three hours of lecture and three hours of laboratory per week.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 111: Forensic Biology

This course is an introduction to the basic methodology and theory of forensic science focusing on techniques currently used by practitioners to recover, preserve, and analyze biological evidence from a crime scene. The course will examine the ethics of handling evidence, issues of quality control, and the interpretation of various types of biological evidence for the legal system. Students will learn, through the examination of relevant case studies, the value of evidence based on microbiological and molecular analyses (DNA profiling), anatomic and clinical pathologies, and the role of plant and animal materials in forensic studies. This course does not count as biology with a lab and is not applicable for science majors.

BIOL 120: Anatomy and Physiology I

A systematic approach to the integrated study of human structure and function. Emphasis is placed on organization of the body, cells and tissues, integumentary system, skeletal system, muscular system, nervous system and special senses. This course is recommended for nursing and allied health students. Three hours of lecture and two hours of laboratory per week.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 122: Anatomy and Physiology II

A continuation of Anatomy and Physiology I. A systematic approach to the integrated study of human structure and function. Emphasis is placed on the endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary and reproductive systems. This course is recommended for nursing and allied health students. Three hours of lecture and two hours of laboratory per week.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 125: Exploring Biodiversity

This course provides students with a theoretical and experiential overview of biological diversity. Topical themes of this course include the human connections to biodiversity, benefits of biodiversity, spatial patterns and biological scales of biodiversity, historic and contemporary threats to biodiversity, local to global trends of extinction and endangerment, data collection and analysis techniques, and site-specific management practices to conserve or restore biodiversity. In addition, students will be asked to consider and devise solutions to conservation issues within a sociopolitical context. This lecture course will have an extensive field-based (outdoor) component. Field trips will be conducted during lecture time and on weekends. This face-to-face course is intended for the general education of non-majors and is not applicable to biology major programs or biology major GPA accounting.

BIOL 130: Environmental Issues: Global Perspectives

An exploration of human interactions with other organisms and the environment on a global scale. Major topics will include: human impacts on ecosystems, biodiversity loss, human population dynamics, food security, natural resources, climate change, and environmental deterioration. The paradigm for the course is the integration of science, technology, and society. This is a lecture course that is intended for the general education of non-science majors, and is not applicable to biology major programs.

BIOL 140: Biology and Society

The application of the principles of biology to the human as a social organism. The relevant biological aspects of genetics, behavior, anatomy, physiology and disease in the context of today's world will be stressed. The paradigm for the course is the integration of science, technology and society. This is a lecture course that is intended for the general education of non-science majors, and is not applicable to biology major programs and biology major GPA.

BIOL 146: Basic Nutrition and Diet Therapy

Introduction to nutrients, vitamins, and minerals. Normal metabolism of each is traced from ingestion through elimination. Modifications in food consistency and in dietary content to maintain and restore health or control disease processes are identified. Relation of food intake and laboratory studies is also included. (Not applicable to biology major programs.)

BIOL 160: Introduction to Microbiology

A general introductory study of microorganisms with special emphasis on human microflora and disease. Laboratory studies include methods of culturing and identifying representative forms.

BIOL 170: Pandemics and Infectious Diseases

This is a lecture course that is intended for the general education of non-science majors and is not applicable to biology majors' programs and biology major GPA. Infectious diseases caused by infectious agents, such as bacteria and viruses, have wreaked havoc across the globe throughout time. Infectious diseases not only affect those who are sick but also puts stress on society as a whole. In this course, the progression of disease from incubation to convalescence for many different historically significant diseases will be examined. While studying the biology of these diseases, we will also delve into how these specific pathogens impacted society during their most significant outbreaks. For example, during a tuberculosis outbreak, spitting was made illegal in many US cities. There will also be lab-style activities during the lecture that will be used to discuss disease transmission, spread of disease, hand washing significance, and antibiotic resistance. Upon completion of the course, students will be able to discuss the impact of infectious diseases and be well prepared to conquer the next major historical pandemic.

BIOL 216: Genetics

This is a sophomore-level introduction to the principles of heredity intended to serve as a gateway to more advanced work in molecular, cellular, and evolutionary biology. Topics include classic Mendelian genetics, gene interactions, genetic recombination, chromosome structure mapping, DNA structure and replication, mechanisms of gene expression, genetics of bacteria and viruses, gene and chromosome mutations, inheritance of extra-nuclear genes, and evolutionary genetics. There are two hours of lecture and three hours of laboratory per week.

BIOL 218: Vertebrate Biology

An introduction to the biology of vertebrates that explores evolutionary relationships, morphology and physiology, behavior and ecology, systematic and taxonomy. The laboratory examines vertebrate morphology and taxonomy through specimen review, dissection, and field trips. Field trips will be conducted during lab time and on weekends.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 220: Plant Anatomy

A descriptive study of the anatomy of seed plants. Morphological aspects, detailed ontogeny, and the relation between structures and function are utilized to enhance the understanding of plant structures and their variabilities.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 222: Environmental Biology

An introduction to the causes and symptoms of environmental deterioration. The effect of ecological perturbations on ecosystems especially the biota. Field experiences are an integral part of the course.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 224: Applied Environmental Microbiology

This is an introductory microbiology course emphasizing prokaryotic functional anatomy, metabolism, and genetics. Principles of diseases and a basic introduction to immunology are included which provide a background for an overview of a variety of common diseases. Applied and environmental aspects of food, soil, and water microbiology are stressed in both the lecture and the laboratory. The laboratory is an integral portion of the course and emphasizes laboratory techniques, physiological testing, food and water analysis, and identification of unknowns.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 226: Marine Biology

A study of the major groups of marine organisms, their adaptations and distribution within the marine environment. Laboratory work will include methods of sampling, identification, experimental manipulations, and a weekend field trip.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 230: Taxonomy of Vascular Plants

This course covers the distinguishing features and economic importance of the principle groups of vascular plants. It also covers terminology associated with systematic botany, the historical development of systematic botany including different systems of plant classification, and provides students with practical experience in the identification of selected vascular plants of the region. Each student is required to preserve, mount, and identify a collection of plants. Some of the required field trips may require additional out-of-class time. A one day or overnight weekend field trip may be required in this class.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 232: Plant Physiology

Introduction to physiological activities in plants, including water relations and solute absorption, translocation, growth and development. Laboratory experiments are designed to demonstrate physiological activities in plants and introduce basic techniques used in plant physiological research.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 235: General Physiology

This course provides an integrated study of struch1re and function within the Animal Kingdom. Comparisons will examine differences in structure and regulation with consideration for cellular and molecular physiology, but with an emphasis on the integration of physiological systems at the level of tissues, organs, and whole organisms. Major body systems including muscular, nervous, endocrine, urinary, cardiovascular, respiratory, digestive, and reproductive will be examined under normal conditions, and in response to stressors and disease to understand function and regulation in the pursuit of homeostasis.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 236: Introduction to Plant Pathology

A study of plant diseases incited by bacteria, viruses, and fungi are considered in lectures, laboratory exercises, and field trips. Special emphasis is placed on descriptions, diagnosis and controls of the more important plant pathogens.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 242: Ecosystem Ecology

Principles and concepts pertaining to the ecosystem. Introduction to local terrestrial and aquatic habits. Consideration will include pertinent problems of wildlife management and conservation. Each student is required to participate in field trips and to complete a paper on some aspect of the field study.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 244: Ecology

This course provides an introduction to important general concepts in ecology and to the empirical methods ecologists use to study the interactions between organisms and both living and non-living components of the environment. This course involves evaluating ecological processes that influence individuals, populations, communities, and ecosystems. Ecological concepts will

be introduced primarily through study of organisms living in terrestrial and freshwater environments. The laboratory portion of the course will introduce students to collection and analysis of quantitative data obtained through empirical methods. A one day or overnight weekend field trip may be required in this class.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 246: Diet and Disease

Diet and human health are intricately linked. This course introduces students to the study of nutrition and how poor diets can lead to common diseases and disorders, focusing on those most prevalent in the United States. Topics include the structure and function of the six essential nutrients; the digestion, absorption, and metabolic pathways of the energy-providing nutrients; nutrient food sources and dietary guidelines; the relationship between diet and human health; and dietary needs throughout the lifespan. Students will also utilize available tools to analyze their own dietary intake.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 250: Microtechnique

Principles of microscopy, methods of preparing animal and plant materials for microscopic examination, and the interpretation of microscopic preparations are considered. Studies and practical experiences including preparing whole mounts, clearing, sectioning, differential staining, and microphotography.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 252: Cellular Physiology and Metabolism

This course examines how living things function at the cellular and molecular level, particularly how organisms obtain and utilize energy to sustain themselves. Emphasis will be placed on the structure and metabolism of carbohydrates, lipids, and nitrogen-containing biomolecules, such as proteins, amino acids, nucleic acids and nucleotides. Energy transducing cellular processes, such as glycolysis, the citric acid cycle, electron transport system, oxidative phosphorylation, gluconeogenesis, and the pentose phosphate pathway, will be covered in detail. The interrelationships of the metabolism of carbohydrates, lipids, proteins, amino acids, and other nitrogen-containing biomolecules will be emphasized.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 255: Introduction to Bioinformatics

Bioinformatics is an interdisciplinary field that combines biology, computer science, mathematics and statistics to analyze and interpret biological data. This course is an introduction to basic concepts, methods and tools used in bioinformatics. Topics include bioinformatics databases, DNA sequence analysis, genomics, and phylogenetics.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 256: Anatomy and Physiology I

This course provides a systematic approach to the integrated study of human structure and function at the level of cells, tissues, organs, organ systems, and the organism. Emphasis will be placed on organization of the body, cells and tissues, integumentary system, skeletal system, muscular system, nervous system, endocrine system, and special senses. This course is required for allied health students. Three hours of lecture and three hours of laboratory per week. Weekend field trips may be required in the course.

BIOL 257: Anatomy and Physiology II

A continuation of Anatomy and Physiology I. This course provides a systematic approach to the integrated study of human structure and function at the level of cells, tissues, organs, organ systems, and the organism. Emphasis will be placed on

cardiovascular, lymphatic, respiratory, digestive, urinary and reproductive systems. This course is required for allied health students. Three hours of lecture and three hours of laboratory per week. Weekend field trips may be required in the course.

BIOL 260: Marine Invertebrates

A study of the life history, habits, origin, development, physiology, anatomy and taxonomy of the main phyla of invertebrates. A phylogenetic sequence is followed to show interrelationships among the phyla. Special emphasis is given to the Atlantic marine invertebrates. Laboratory and field work deal with collection, preservation, and identification of local species.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 264: Comparative Anatomy of the Vertebrates

A comparative study of the diversity of morphological structures and organ systems in the major groups of vertebrates. Lecture emphasis is placed on vertebrate phylogeny, morphology, and evolution with respect to function. The laboratory involves an in-depth examination of the comparative morphology of the dogfish shark and domestic cat.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 265: DNA & RNA Technology

This course covers DNA and RNA techniques that are commonly used in the biotechnology and pharmaceutical industries. The course emphasizes developing practical hands-on skills for purifying, modifying, editing, and quantifying DNA and RNA. The techniques covered include purification of DNA and RNA from cells and tissues, PCR (polymerase chain reaction) and real time/quantitative PCR, recombinant DNA engineering, using software for analyzing and comparing DNA sequences. Examples of real-world applications of the techniques will be examined.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 266: Cell Biology Technology

This course covers cell biology techniques that are commonly used in the biotechnology and pharmaceutical industries. The course emphasizes developing practical hands-on skills that include sample preparation, instrument calibration and use, and data analysis. The techniques include maintenance of cell cultures, cell microscopy, cell transfection, carrying out cell reporter assays, and cell flow cytometry. Examples of real-world applications of the techniques will be examined.

BIOL 267: Protein Technology

This course covers basic techniques in protein analysis as found in the biotechnology and pharmaceutical industry. The techniques include ELISA (enzyme-linked immunosorbent assay), Western blot with image quantification, and peptide identification by LC-MS (liquid chromatography mass spectrometry), proteomic analysis of MS datasets, and purification of proteins by chromatographic methods. The course emphasizes developing practical hands-on skills that include sample preparation, instrument calibration and use, and data analysis. Examples of real-world applications of the techniques will be examined.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 268: Regulation and Practices in the Biotechnology Industry

The biotechnology and pharmaceutical industries are primarily focused on producing therapeutics to treat disease. To maximize the safety, efficacy, and reliability of these therapeutics for people, workers in these industries operate in a highly standardized and regulated environment. This course covers the standard practices in these industries, including using Standard Operating Procedures (SOPs), Quality Assurance and Quality Control (QA and QC), and Validation. The course also gives an overview of government regulation and oversight, including the role of the Federal Drug Agency (FDA) in conducting inspections and audits. Case studies are used to learn about strategies for corrective actions when process and production problems arise.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 270: Research Methods

This course provides students with the foundation to conduct biological research. The course covers grant and research proposal writing, conducting primary literature searches, critiques of journal articles, research design and execution, data analysis, oral and poster research presentations, and scientific writing skills.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 299: HON: Current Topics/AIDS Research

HON: Current Topics/AIDS Research.

BIOL 302: Entomology

The biology of insects with emphasis on morphology, systematics and environmental relationships. Laboratory studies and a required insect collection are an integral part of the course.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 306: Food Microbiology

A study of microorganisms commonly encountered in food systems including pathogens, spoilage organisms, and fermentation organisms. Laboratory studies include methods of isolating, culturing, enumerating, and identifying representative forms together with methods of sampling, fermentation, and microbial destruction.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 308: Ornithology

An introduction to the biology of bird that explores the origin and evolution of birds, flight, the annual cycle of birds (e.g. migration, breeding, molt), reproductive systems, and conservation. The laboratory examines bird morphology and taxonomy, focusing on birds in the Eastern U.S., through specimen review, dissection, and field trips. Field trips will be conducted during scheduled lab time and on weekends.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 310: Biology of Cancer

The prevalence and profound impact of cancer on society has prompted intensive research, leading to numerous advances in cancer prevention, diagnosis, and treatment. Despite these efforts, cancer still poses a unique biomedical puzzle as it is now recognized that cancer is not a single disease, but a collection of disorders with many manifestations that affect every tissue in the human body. This course aims to provide a comprehensive introduction to the biology and pathology of cancer through interactive lectures and student-led discussions. There are two hours of lecture and three hours of laboratory per week.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 314: Animal Behavior

A biological approach to the study of behavior emphasizing the neural mechanisms, ecology, and evolutionary history of a wide variety of behaviors of both invertebrates and vertebrates. The major topics covered include the structure and function of nerve cells and nerve circuits, comparative sensory physiology, orientation and navigation, feeding, animal communication, learning, and social behavior. The laboratory section of the course includes observational and experimental work in both lab and field.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 316: Invertebrate Biology

The biology of freshwater, terrestrial and parasitic invertebrates. Emphasis is placed on anatomy, physiology, taxonomy, environmental relationships and importance to humans. Laboratory work is supplemented by local field trips.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 320: Physiological Ecology of Animals

This course will provide an introduction to the physiology of animals utilizing a comparative and ecological approach. The course will cover the topics of respiration, circulation, metabolism, osmoregulation, thermoregulation, locomotion, and sensory systems in the context of comparing the mechanisms and strategies utilized by animals from different habitats and phylogenetic groups. Some emphasis will be placed on organisms occupying various marine habitats, but freshwater and terrestrial animals and habitats will also be included. Laboratory investigations will examine the physiological responses of both invertebrates and vertebrates to common environmental stresses such as salt load, temperature variation, oxygen supply, and pH change. These investigations may be accomplished through measurements and observations in the field, as well as through experimental manipulations in a laboratory setting.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 322: Population and Community Ecology

This course will provide an in-depth analysis of the principles of population and community ecology. This includes population growth, dispersal, population regulation, population structure and will also include community dynamic topics such as predator-prey interactions, competition, succession, community assembly, habitat selection, and species diversity. The aforementioned patterns and processes will be considered in terms of space and time across multiple scales. The laboratory portion of the course will introduce students to the collection and analysis of quantitative data obtained through empirical methods and modeling experiment. A daylong or overnight weekend field trip may be required in this class.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 324: Plant Ecology

This course provides an introduction to plant population, physiology, and community ecology. Lectures, labs, readings, and discussions will focus on plant responses at the physiological, individual, population, and community levels to components of the living and non-living environment. The course will examine topics including plant physiological, anatomical, and reproductive responses to the physical environment, responses to intra- and interspecific competition, a survey of symbiotic relationships, and an introduction to plant conservation biology. Historic and contemporary perspectives in plant community ecology will be examined. Laboratory exercises will be field-oriented and experimental. A one day or overnight weekend field trip may be required in this class.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 326: Marine Ecology

A study of the ecology of marine organisms, the relationships of plants and animals to the physical, chemical and biological factors and their zonation and community structure. Analysis of current issues in marine ecology will also be addressed. Laboratories will include classroom investigations of population and community relationships and a MANDATORY weekend field trip to Wallops Island, VA.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 330: Histology

The microscopic study of cells, tissues and organ systems of the vertebrates. Laboratory will consist of microscopic study of

prepared tissue sections.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 331: Medical Mycology

This lecture and lab course offers students a unique opportunity to study fungi that cause diseases in humans. The course discusses taxonomy of fungi and the characteristics that make them successful and important human pathogens. The course also introduces students to the major human fungal diseases, their etiology, diagnosis and treatment. The laboratory portion of the course consists of hands-on activities that include the isolation and identification of fungi by cultural and non-cultural methods and the study and testing of antifungal agents.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 332: Aquatic Ecology

This course is designed to provide an understanding of the physical, chemical, and biological properties of freshwater ecosystems and the techniques by which scientists study those ecosystems, through a combination of lectures and lab and field exercises. Students will be required to design, conduct, and present the results of a field-based research project. The course may include an overnight weekend field trip during which students may investigate diurnal patterns in lake and/or stream systems.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 334: Medical Parasitology

The biology of parasitic protozoa, flatworms, roundworms, and arthropods of medical importance will be emphasized. The laboratory will focus on recognition and identification of selected local human parasites and those of extreme importance throughout the world.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 336: Medical Microbiology

An introduction to the concepts and clinical applications of immunology, medical bacteriology, medical mycology, medical virology, and medical parasitology. Emphasis is placed on structure, function and identification of pathogens. Emphasis is also placed on immunology mechanisms and diseases.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 338: Ecology of Marine Plankton

A study of the phytoplankton and zooplankton in marine and brackish environments. Qualitative and quantitative comparisons will be made between the planktonic population of various types of habitats in relation to primary and secondary productivity. This course will be offered summers at the Marine Science Consortium, Wallops Island, Virginia.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 340: Marine Mammals

The distribution, population size, physiology, evolution, adaptations and ecological relationships of marine mammals will be studied with an emphasis on mammals of the Atlantic Ocean. This course will stress hands-on understanding of marine mammal physiology, behavior, population dynamics and species diversity. Laboratory and field work will include an extended off-campus field trip to facilities holding and/or studying marine mammals of the NE Atlantic Ocean. In addition, the laboratory portion of this course will emphasize data collection in the field, and subsequent analysis and presentation of the data through

a required mini-research project.

BIOL 342: Herpetology

This course will provide an introduction to the biology of reptiles and amphibians. Emphasis is on evolution, comparative anatomy and physiology, ecology, life-history, diversity, and conservation of these groups. Laboratories will provide hands-on investigation of reptile and amphibian anatomy, research techniques, habitat quality, subspecies identification. Weekend field trips may be required in the course.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 344: Marine Botany

A study of marine and marine fringe plants of the Middle Atlantic Coast, their taxonomy, ecology, distribution, life histories, physiology, and economic status. Techniques of collecting, preserving, identifying and herbarium cataloging will be stressed. Exercises in plant ecology, deep core pollen analysis and marine microbiology will be included. (Same as MARSC 342: Marine Botany at Consortium, Wallops Island, Virginia.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 346: Molecular Biology

A study of the metabolism of the cell, detailing the biosynthetic pathways in regards to the production, conversion and utilization of energy. Laboratory work covers the use of laboratory equipment to reinforce the theories from lecture and familiarize the student with laboratory techniques.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 348: Biological Oceanography

The interdisciplinary study of the interactions between biological communities and the ocean environment as observed in the distribution of coastal plankton, fish and benthic invertebrates. Field studies of sample populations will be compared to quantitative environmental variables using state-of-the-art sampling equipment. Topics covered include: the effect of current transport on plankton at barrier island passes, the effect of submarine banks on fish populations, ground truth data for satellite imagery, and epibenthic population studies of nearshore and intertidal environments. This course will be offered summers at the Marine Science Consortium, Wallops Island, Virginia.

BIOL 350: Cell Biology

A comprehensive study of the cell with emphasis on how cell structure (biological molecules, biological membranes, and cellular organelles) relates to overall cell function. The laboratory is designed to investigate basic cell structure and function as well as patterns of cell growth with an emphasis on microscopy and various cell staining techniques. Both plant and mammalian cell systems will be utilized.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 352: Coral Reef Ecology

A study of coral reef types and the relationship of reef organisms to their environment. Emphasis is given to species diversity/identification, symbiosis, and effects of abiotic factors, predation, and competition on the abundance and distribution of coral reef organisms. A segment of this course involves on-site study of the biology of tropical reefs/organisms and the accumulation of species populations data usually at Roatan, Bay Islands, Honduras, but other reef locations may be used.

BIOL 354: Developmental Biology

This course is designed to correlate the major stages of development from the DNA blueprint to an organism's final structure with a focus not only on classical embryology but also on understanding how molecular mechanisms relate to development of organisms. Students will have the opportunity to discuss current issues in developmental biology including stem cell research and cell cloning. The laboratory will consist of a morphological and molecular study of growth and differentiation of the sea urchin, Drosophila, frog, chick, and human development. In a culminating activity, students will propose and carry out a short project that focuses on the effects of teratogens on development.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 356: Immunology

This course is designed to provide a current understanding of the development and function of the mammalian immune system with emphasis on cellular interactions within the human immune system. A significant component of the course will be to understand the basis of the immune system disorders. The laboratory work will provide students with an understanding of the theory and practical aspects of clinical testing and research in immunology. The course will build on the knowledge and skills acquired in Microbiology and related courses.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 357: Virology

This course provides a background in virology. Viruses will be studied across many levels of biological organization, with a special focus on molecular biology, life history strategies, epidemiology and evolution. We will also discuss cases in which viruses are valuable as medical treatments and model systems for molecular biology. Lab work will include phenotypic characterization of bacteriophages, as well as a case study on infectious disease epidemiology.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 358: Conservation Biology

This course provides students with the scientific foundation needed to understand and apply the principles of conservation biology to contemporary conservation issues. Topical themes of this course include patterns of biodiversity, human threats to biodiversity, extinction trends, and biological protection and restoration strategies. In addition, students will be asked to consider and devise solutions to theoretical conservation issues within a sociopolitical context. Field trips will be conducted during lab time and on weekends.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 360: Anatomy of Marine Chordates

A course designed to familiarize the students with the qualitative aspects of the speciation process; to lay the groundwork for understanding the basic and specialized structure of marine chordates; to trace the most obvious or important trends (and their functional significance) in the evolution of this basic structure in various vertebrate lines. The laboratories will be devoted in large part to a reasonably thorough dissection of representative marine vertebrates.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 370: Research in Biology

A course in laboratory and/or field study and library research on selected topics in Biology. A written proposal outlining the research project must be prepared utilizing established guidelines and submitted to the supervising faculty member and the Department Chairperson for approval.

BIOL 371-379: Selected Topics in Biology

Topics in the fields of biology that are of current interest will be selected for in-depth study. The course content will normally

change each time the course is offered. The course may be repeated for credit provided that the same topic is not repeated.

BIOL 380: Senior Seminar in Biology

This course is designed to provide a forum in which B.S. Biology majors may critically evaluate current trends and concepts in the biological sciences through the venue of student prepared seminars and term papers. It will also serve as a forum through which career opportunities for biologists are discussed.

BIOL 385: Research In Biology II

A course in laboratory and/or field study and library research on selected topics in Biology. A written proposal outlining the research project must be prepared utilizing established guidelines and submitted to the supervising faculty member and the Department Chairperson for approval.

BIOL 390: Internship in Biology

Supervised, practical work experience in laboratory and/or field situations. Students interested in developing an individualized professionally oriented program which that assist in future career options may structure a work-study experience with a cooperating agency or organization. A written proposal outlining the internship experience must be prepared utilizing established guidelines and submitted to the supervising faculty member and the Department Chairperson. Departmental approval of the internship is required. This course is repeatable for credit (1-6) credits per semester) but cannot be taken for more than a maximum total of 6 credits.

BIOL 395: Honors Independent Study/Thesis

Honors Independent Study/Thesis.

BIOL 398: Honors Supplementary Research

Supplementary research conducted by an Honors student in an upper-division (or 300 or 400-level) course in which the student is enrolled. The research is related to a topic in the course, but in addition to the standard requirements of the course, the research should exhibit advanced inquiry or investigation into the topic. The Honors student earns 1, 2, or 3 credits in addition to the credits for the course itself. The number of additional credits depends on the amount and intensity of the supplementary research. Each department in the College of Liberal Arts and Sciences has a specific course number which uses the departmental prefix, but all courses will use a common number (398). The course title will read "Honors Supplementary Research" and will have a variable credit value from 1 to 3 credits, e.g. ENGL 398 Honors Supplementary Research.

BIOL 435: Advanced Genetics

Current knowledge of the nature, properties, transmission, interaction and variation of hereditary materials, and their significance for the development, expression and evolution of the characteristics of organisms.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 440: Evolution

This course examines the theory of evolution by natural selection and its implications for the evolution of organisms. The course covers the history of Darwin's theory as well as modern formulations that incorporate current knowledge in genetics, molecular biology, population biology, paleontology, biogeography, and systematics. Other topics include the evolution of sexual reproduction, the evolution of behavior, the mechanisms of speciation, the main events in the history of life, and applications of evolutionary biology in agriculture and medicine.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 457: Systematic Entomology

Taxonomic characteristics of important insect families especially those of the major orders. Emphasis will be placed on species of environmental importance and those which illustrate biological concepts. (Not a field course.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 460: Cancer Biology

This course is designed to delve deeply into the molecular mechanisms of cancer biology with an emphasis on scientific discovery. Identifying the causes of cancer and the molecular changes associated with cellular transformation are important components of this course. A weekend field trip to our regional cancer center and diagnostic laboratory may be included in this course. The Cancer Biology course will build on the knowledge and skills acquired in Molecular and Cellular Biology.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BIOL 470: Selected Topics in Biology

Topics in the field of biology or the work of a biologist that are of current interest will be selected for in-depth study. The course content will normally change each time the course is offered. The course may be repeated for credit provided that the same topic is not repeated.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

Business

BUSN 1: University Studies: The First Year Seminar

University Studies: The First-Year Seminar introduces students to the critical strategies, resources, and responsibilities of a university education. The course employs substantive reading, writing, and critical thinking assignments from across the curriculum, in addition to research and fieldwork, to increase the student's ability to effectively function in the University community. The common course requirements for each UNST section are the same, though the specific focus of each individual seminar may differ.

BUSN 120: Principles of Business Statistics

This course is an introduction to statistical concepts with emphasis on their role in business decision making. The course will cover the following topics: measures of central tendency, sampling, hypothesis testing, regression and correlation analysis, and probability distributions. BSBA majors only.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BUSN 131: Legal Environment of Business

This course covers legal principles and the legal environment applicable to transactions in today's business world. Topics covered include the American legal system, alternative dispute resolution, property ownership, business ethics, torts, contracts including sales of goods, and forms of business organizations.

BUSN 171: Business Information Systems: Theory and Practice

This course provides an introduction to basic information resource management principles as well as hands-on instruction in solving business problems using spreadsheets. Topics include information systems management, networking, databases, and the role and importance of information technology in business. The course has basic to intermediate coverage of spreadsheet software. Classes are conducted in a microcomputer laboratory using a hands-on approach. BSBA majors only.

BUSN 220: Regression Analysis and Data Analytics

After a brief review of sampling, the course will cover interval estimation and hypothesis testing, including one and two sample tests. Next, topics on simple and multiple linear regression are presented, along with applications and model building. After thorough coverage of regression analysis, nonparametric methods are discussed. Excel (with a statistical add-in such as StatTools) or some other suitable statistics software package, such as Minitab or EViews, will be used in this class.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BUSN 275: Business Data Management and Information Systems

This course focuses on the use of computer applications to calculate solutions to complex business problems. This course provides hands-on instruction in solving business problems using spreadsheets and databases. The students will be introduced to databases and advanced features of spreadsheets. Students will also learn about information security, information systems, and computer ethics. The student will be asked to use the computer and modem information technology to aid in data collection, data analysis, development and presentation of common business solutions. Classes are conducted in a computer lab using a hands-on approach.

BUSN 310: Business Intelligence

Business intelligence comprises the strategies and technologies used by enterprises to transform raw data into meaningful and useful information in order to aid decision-making. This course helps students to understand the important role of business intelligence in modern organizations and shows students how to use business intelligence tools and applications to effectively transform, analyze, present and interpret results for making fact-based business decisions. Emphasis is placed on how to use business intelligence tools and applications to transform, analyze, and present data, rather than on statistical theory and calculations. Students use business intelligence software for data cleansing, organizing, analysis, and presentation.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BUSN 330: Employment Law

This course focuses upon contemporary issues in U.S. employment law. Students will study and analyze major employment laws, regulations, and legal doctrines affecting the workplace including: the employment relationship, equal employment opportunity, discrimination, sexual harassment, wage and hour laws, family and medical leave, safety and health regulations, employee privacy and surveillance protections, labor laws, and employer termination and post-termination responsibilities.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BUSN 332: Law and Regulation of Business Organizations

This course is an advanced study of law and regulation applicable to business organizations, with an emphasis on corporations. Topics covered include agency, types of business organizations, mergers and consolidations, securities law and regulation, negotiable instruments, debtors' and creditors' rights, bankruptcy, environmental law, consumer law, and antitrust. Corporate social responsibility and sustainability will be integrated where applicable.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

BUSN 371: Selected Topics in Business

This course will permit the exploration of specialized subjects that are not covered in the regular courses with the BUSN prefix. The course will emphasize a variety of current topics and contemporary issues in business which are taking place in a dynamic business environment. Students will review current literature, observe current business practices and improve their ability to analyze and express their thoughts in the topical area of study.

BUSN 379: Independent Study

The independent study allows for individualization of the curriculum to meet the specialized needs/interests of students through studies outside of the focus of existing courses. Under the direction of a faculty member, the student will investigate an

area of academic interest, to be approved by the department most closely related to the topic of study.

BUSN 380: Senior Seminar in Business Administration

Senior Seminar in Business Administration.

BUSN 390: Internship in Business

An individual work-study experience will be provided in an approved commercial or institutional organization. This experience will involve placement of a qualified student in an organizational setting which involves his/her area of interest, which provides student training and on-site learning, and which prepares the person for business practice. A student may receive three credit hours of academic credit for an internship which consists of at least 150 hours of internship involvement. Three credits per internship; maximum of two (2) internships.

BUSN 395: Honors Independent Study/Thesis

Honors Independent Study/Thesis.

Chemistry

CHEM 20: Introduction to Chemistry

An introduction to the principles of chemistry, including atomic theory, chemical reactions, chemical bonding, kinetic theory, stoichiometry, organic compounds, and nuclear reactions. The traditional topics will be related to contemporary problems. A laboratory course intended for the general education of non-science majors. This course does not satisfy major, concomitant or specialization requirements for Secondary Education Science and/or Liberal Arts Science majors.

CHEM 35: Powering Our Future: Energy, Climate Change, and Society

This course introduces our past, present, and future sources of energy and their advantages and limitation. Society's non-sustainable pattern of energy use from both a supply and environmental perspective will be discussed including the impacts of climate change. The technical, environmental, political, and societal problems associated with the eventual conversion to renewable energy resources will be investigated. A global perspective for the delicate interplay between energy and society will be gained. This course does not satisfy major, minor, or specialization requirements for Secondary Education and/or Liberal Arts Science Majors.

CHEM 45: Science on Your Plate

The foods we eat are from plants and animals and are a source of both enjoyment and life-sustaining nutrients. Understanding the composition and changes that food undergoes when prepared is important to the success of the cook, the gourmet, the dieter, and the inquisitive. This course explores the science of food: what it contains, what changes it undergoes when it's prepared and how it's experienced. Credit may not be earned for both CHEM 45 and the FYSE 100 course section The Secret Lives of Food.

CHEM 51: Introduction to Forensic Science

This course provides an introduction to the application of science to criminal investigations. It is an opportunity to learn some fundamental scientific principles as they are applied to the examination of physical evidence from crime scenes. Case studies will be presented which reflect the application of particular forensic techniques. This course does not satisfy major, concomitant, or specialization requirements for Secondary Education and/or Liberal Arts and Science majors.

CHEM 52: Introduction to Forensic Science Laboratory

This laboratory course provides students with hands-on opportunities to analyze materials commonly encountered in criminal

investigations. An array of forensic laboratory techniques, including fingerprinting, chromatography, spectroscopy, DNA analysis, and bloodstain pattern analysis will be applied to the comparison or identification of physical evidence. This laboratory course is optional, but must be taken concurrently with CHEM 051; and does not satisfy major, concomitant, or specialization requirements for Secondary Education and Science majors. CHEM 051 (without the lab) may be used to satisfy General Education Categories IV. D and V. Students opting to take the laboratory portion of the course (CHEM 052) could use it to satisfy General Education Categories IV. C or D, and V. (2 c.h., 1 s.h.)

CHEM 100: General Chemistry I

First semester (100-101) The Structure and Behavior of Matter. Emphasis is on chemical arithmetic, chemical nomenclature, atomic theory and structure, periodic classification of elements, gas laws, valence, oxidation, reduction and equation writing. Possession of a hand held electronic calculator is required. Second semester (102-103) continues the first; acids, bases, ionization, equilibrium, and rates of reaction are also studied and applied.

CHEM 102: General Chemistry II

First semester (100-101) The Structure and Behavior of Matter. Emphasis is on chemical arithmetic, chemical nomenclature, atomic theory and structure, periodic classification of elements, gas laws, valence, oxidation, reduction and equation writing. Possession of a hand held electronic calculator is required. Second semester (102-103) continues the first; acids, bases, ionization, equilibrium, and rates of reaction are also studied and applied.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CHEM 204: Fundamentals of Organic Chemistry

This is a one semester introductory course that covers the fundamental concepts and principles important in understanding the structures of organic compounds and their reactivity. The laboratory portion includes the development of basic laboratory skills necessary to isolate, synthesize and characterize organic compounds and study their behavior. This course will concentrate on the areas of organic chemistry most relevant to biology and environmental science. Not equivalent to CHEM 214/215 (A course grade of "B" or better will allow this course to be used as a prerequisite for CHEM 216/217). Does NOT satisfy course requirements for chemistry or biochemistry major or minor.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CHEM 214: Organic Chemistry I

Concepts and principles of fundamental group chemistry are used in the study of reactions of organic compounds. Naming, preparation of and properties of compounds are stressed. The correlation of theory is demonstrated as laboratory skills are developed.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CHEM 216: Organic Chemistry II

Concepts and principles of fundamental group chemistry are used in the study of reactions of organic compounds. Naming, preparation of and properties of compounds are stressed. The correlation of theory is demonstrated as laboratory skills are developed.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CHEM 220: Environmental Analysis

Qualitative and quantitative methods of analytical chemistry are explored by utilizing a "hands-on" approach applied to a variety of environmental samples. The course focuses on the basic components of each analytical technique or instrument, their range of environmental applications, their advantages and limitations, and the physical and chemical phenomena which form the basis of the analytical method. Basic sampling plans and designs are also discussed due to their complementary nature.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CHEM 230: Analytical Chemistry I

Analytical chemistry involves methods and techniques for determining the structure and composition of matter. Students in Analytical Chemistry I will attack problems of a chemical nature by learning a series of techniques that allow them to identify and quantify various components in samples. Some of the techniques involve chemical fundamentals such as stoichiometry, acid-base equilibria, and careful measurement techniques while others involve sophisticated chemical instrumentation. The lecture portion of the course will uncover the theory underlying these techniques, while the laboratory will provide an opportunity for students to address real-world analytical problems, develop their measurement skills, and gain valuable experience using analytical techniques commonly encountered in research and industry. The methods covered in this class include: gravimetric analysis, volumetric analysis (acid-base titrations), UV/Vis spectrophotometry, potentiometry, and gas and liquid chromatography.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CHEM 265: DNA & RNA Technology

This course covers DNA and RNA techniques that are commonly used in the biotechnology and pharmaceutical industries. The course emphasizes developing practical hands-on skills for purifying, modifying, editing, and quantifying DNA and RNA. The techniques covered include purification of DNA and RNA from cells and tissues, PCR (polymerase chain reaction) and real time/quantitative PCR, recombinant DNA engineering, using software for analyzing and comparing DNA sequences. Examples of real-world applications of the techniques will be examined.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CHEM 266: Cell Biology Technology

This course covers cell biology techniques that are commonly used in the biotechnology and pharmaceutical industries. The course emphasizes developing practical hands-on skills that include sample preparation, instrument calibration and use, and data analysis. The techniques include maintenance of cell cultures, cell microscopy, cell transfection, carrying out cell reporter assays, and cell flow cytometry. Examples of real-world applications of the techniques will be examined.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CHEM 267: Protein Technology

This course covers basic techniques in protein analysis as found in the biotechnology and pharmaceutical industry. The techniques include ELISA (enzyme-linked immunosorbent assay), Western blot with image quantification, and peptide identification by LC-MS (liquid chromatography mass spectrometry), proteomic analysis of MS datasets, and purification of proteins by chromatographic methods. The course emphasizes developing practical hands-on skills that include sample preparation, instrument calibration and use, and data analysis. Examples of real-world applications of the techniques will be examined.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CHEM 268: Regulation and Practices in the Biotechnology Industry

The biotechnology and pharmaceutical industries are primarily focused on producing therapeutics to treat disease. To maximize the safety, efficacy, and reliability of these therapeutics for people, workers in these industries operate in a highly standardized and regulated environment. This course covers the standard practices in these industries, including using Standard Operating Procedures (SOPs), Quality Assurance and Quality Control (QA and QC), and Validation. The course also gives an overview of government regulation and oversight, including the role of the Federal Drug Agency (FDA) in conducting inspections and audits. Case studies are used to learn about strategies for corrective actions when process and production problems arise.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CHEM 310: Biochemistry I

Biochemistry involves the study of the chemical components of living creatures-from viruses to mammals-to explain how and why chemical reactions happen. Students will learn in detail the molecular components of cells (proteins, lipids, carbohydrates, and nucleic acids) and study the concepts of protein dynamics (kinetics, specificity, and regulation). The laboratory will cover selected techniques of modern protein biochemistry.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CHEM 312: Biochemistry II

This course covers important topics that are not discussed in the first semester of biochemistry. Students will study details of cellular metabolism and its regulation and learn about the information transfer mechanisms in living cells. The laboratory will include studies of biochemical properties of lipids, carbohydrates, and RNA, and an independent research project.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CHEM 314: Physical Chemistry I

A study of the law of thermodynamics and their application to solutions and phase equilibria; chemical kinetics; electrochemistry; and an introduction to quantum chemistry (atomic and molecular structure); and statistical mechanics.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CHEM 316: Physical Chemistry II

A study of the law of thermodynamics and their application to solutions and phase equilibria; chemical kinetics; electrochemistry; and an introduction to quantum chemistry (atomic and molecular structure); and statistical mechanics.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CHEM 318: Advanced Biochemistry

The course is designed to study the various biochemical processes of photosynthetic carbon dioxide fixation in higher plants and in photo-synthesis bacteria. Also included is the effect of changing environmental conditions on photosynthesis.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CHEM 320: Advanced Inorganic Chemistry I

The application of physio-chemical principles to understanding structure and reactivity in main group and transition elements. Valence Bond, Crystal Field, VSEPR, and LCAO-MO will be applied to describe the bonding in coordination compounds. Organometallic and bio-inorganic chemistry will be treated, as will boranes, cluster and ring systems, and inorganic polymers. The laboratory will involve both synthetic and analytic techniques and interpretation of results.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CHEM 322: Advanced Inorganic Chemistry II

The application of physio-chemical principles to understanding structure and reactivity in main group and transition elements. Valence Bond, Crystal Field, VSEPR, and LCAO-MO will be applied to describe the bonding in coordination compounds. Organometallic and bio-inorganic chemistry will be treated, as will boranes, cluster and ring systems, and inorganic polymers. The laboratory will involve both synthetic and analytic techniques and interpretation of results.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CHEM 326: Advanced Organic Chemistry-Mechanisms

The study of mechanisms of organic reactions is emphasized. Modern theory viewpoints are applied to problems in organic chemistry.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CHEM 332: Biochemistry of Human Diseases and Disorders

This course discusses the underlying biochemical principles, concepts and mechanisms of human diseases and disorders in comparison to the respective conditions of health or homeostasis. Selected topics covered in this course include patho-biochemical aspects of biologically relevant elements (such as iron), molecules (such as oxygen) and compounds (such as heme) or classes of compounds (such as carbohydrates, lipids, and proteins). In addition, various diseases and disorders associated with protein folding and structuring (such as Alzheimer's Disease), the function of blood cells (such as sickle cell anemia), as well as the formation of extracellular matrix and bones (such as osteoporosis) are presented. Furthermore, biochemical events during the cell cycle, related to the development of cancer, are explored.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CHEM 336: Advanced Physical Chemistry

A course designed to treat some selected topics in physical chemistry in greater detail than is done in the introductory course. Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CHEM 340: Analytical Chemistry II

Analytical Chemistry II continues to develop students' abilities to determine what components are present in various samples and to what extent. Students build upon the foundation laid in Analytical Chemistry I to master a diverse array of analytical techniques. Detailed investigations of oxidation-reduction and complexation equilibria are applied to volumetric analyses. Instrumental techniques within the areas of Spectroscopy (Infrared, Atomic Absorption and Emission, Mass Spectrometry, and NMR), Chromatography (HPLC, GC/MS, and Ion Chromatography), and Electrochemistry (Potentiometry and Voltammetry) will be highlighted. The lecture explores the theory underlying the techniques, while the laboratory provides students with an opportunity to work with state-of-the-art chemical instrumentation to analyze a wide variety of samples.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CHEM 351: Selected Topics in Chemistry

Through individualized instruction or in small group seminars, the student will study a timely or specialized topic in chemistry. The most appropriate media of instruction will be chosen to meet the specific goals of student and instructor, and these may include faculty and guest lectures, discussion, problem sets, completion of a review paper, student oral presentations, field trips, and student projects which do not fall into the category of laboratory research. Prior to registration, the student must arrange for a faculty supervisor and obtain the permission of the Department Chairperson. May be repeated for a maximum of 6 hours credit.

CHEM 352: Selected Topics in Chemistry

Through individualized instruction or in small group seminars, the student will study a timely or specialized topic in chemistry. The most appropriate media of instruction will be chosen to meet the specific goals of student and instructor, and these may include faculty and guest lectures, discussion, problem sets, completion of a review paper, student oral presentations, field trips, and student projects which do not fall into the category of laboratory research. Prior to registration, the student must arrange for a faculty supervisor and obtain the permission of the Department Chairperson. May be repeated for a maximum of 6 hours credit.

CHEM 353: Selected Topics in Chemistry

Through individualized instruction or in small group seminars, the student will study a timely or specialized topic in chemistry. The most appropriate media of instruction will be chosen to meet the specific goals of student and instructor, and these may include faculty and guest lectures, discussion, problem sets, completion of a review paper, student oral presentations, field trips, and student projects which do not fall into the category of laboratory research. Prior to registration, the student must arrange for a faculty supervisor and obtain the permission of the Department Chairperson. May be repeated for a maximum of 6 hours credit.

CHEM 370: Research in Chemistry I

This course involves laboratory and library research on a topic of a chemical nature. The work will be supervised by a faculty member and the research topic will be acceptable to both the supervising faculty member and the student.

CHEM 371: Research in Chemistry II

This course allows a student to continue working on a project which was started in CHEM 370 or to investigate a new topic. The work will be supervised by a faculty member and the research topic will be acceptable to both the supervising faculty member and the student. (The combined credit total toward the major program for CHEM 370 and CHEM 371 will not exceed 4 semester hours. Any additional credit hours count toward free electives.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CHEM 372: Research in Chemistry III

This course allows a student to continue working on a project which was started in CHEM 370, CHEM 371, or to investigate a new topic. The work will be supervised by a faculty member and the research topic will be acceptable to both the supervising faculty member and the student. (The combined credit total toward the major program for CHEM 370 and CHEM 371, and CHEM 372 will not exceed 4 semester hours. Any additional credit hours count toward free electives.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CHEM 373: Research in Chemistry IV

This course allows a student to continue working on a project which was started in CHEM 370, CHEM 371, CHEM 372, or to investigate a new topic. The work will be supervised by a faculty member and the research topic will be acceptable to both the supervising faculty member and the student. (The combined credit total toward the major program for CHEM 370 and CHEM 371, CHEM 372, and CHEM373 will not exceed 4 semester hours. Any additional credit hours count toward free electives.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CHEM 380: Senior Seminar in Chemistry

This course consists of readings and discussions in the area of the individual student's interest in preparation for the comprehensive examination in Chemistry. Required of all Liberal Arts students majoring in chemistry.

CHEM 390: Internship in Chemistry

Supervised, practical work experience in laboratory and/or field situations. Students interested in developing an individualized vocationally oriented program which may assist in future career options may structure a work-study experience with the cooperating agency or organization. A proposal outlining the work-study experience should be submitted to the student's supervising faculty member and the department chairperson. Clock hours will be determined by the cooperating agency or organization. Semester hour credit will be based upon the proposal and scheduled clock hours, but a maximum of 4 credits may be applied toward Arts and Sciences electives. Additional credit cannot be applied to the 128 credit hour graduation requirements.

CHEM 395: Honors Independent Study/Thesis

Honors Independent Study/Thesis.

CHEM 398: Honors Supplementary Research

Supplementary research conducted by an Honors student in an upper-division (or 300 or 400-level) course in which the student is enrolled. The research is related to a topic in the course, but in addition to the standard requirements of the course, the research should exhibit advanced inquiry or investigation into the topic. The Honors student earns 1, 2, or 3 credits in addition to the credits for the course itself. The number of additional credits depends on the amount and intensity of the supplementary research. Each department in the College of Liberal Arts and Sciences has a specific course number which uses the departmental prefix, but all courses will use a common number (398). The course title will read "Honors Supplementary Research" and will have a variable credit value from 1 to 3 credits, e.g. ENGL 398 Honors Supplementary Research.

Chinese

CHIN 101: Elementary Chinese I

This course is an introduction to Mandarin Chinese, its pronunciation, basic grammar and simplified character writing system. In addition, basic aspects of Chinese culture are presented.

CHIN 102: Elementary Chinese II

This is a course for beginners to develop basic skills in pronunciation, aural comprehension, speaking, reading and writing to acquire proficiency in communicating within culturally significant contexts. Course materials emphasize cultural and social values which bring the people of China and Chinese world to the forefront.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CHIN 103: Intermediate Chinese III

This second-year course in Standard Mandarin Chinese is a continuation of Chinese 011 and 012. This course will help students build on their base of first-year Chinese to further improve their proficiency in listening, speaking, reading and writing skills in Chinese. Additionally, this course will introduce student to Chinese civilization as the background for their language learning. Taught principally in Chinese.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CHIN 104: Intermediate Chinese IV

This course is designed for students who have successfully completed CHIN 103. The course will further improve their proficiency in listening, speaking, reading and writing skills in Chinese. Additionally, this course will introduce student to Chinese civilization as the background for their language learning. Taught principally in Chinese.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CHIN 221: Chinese Culture Through Literature and Film

This course introduces students to Chinese history and culture through literature and film, focusing on the development of modern China in the 19th and 20th centuries. Topics include Confucianism and education, traditional Chinese values, the impact of the West on Chinese society and culture, China's response to Western values, globalization and the emergence of China's modern identity, China's economic growth and its role in international relations. Taught in English.

Communication Design

CODS 10: Digital Foundations

This is an introductory course that will build a solid foundation of computer technology as it relates to the Visual Arts. The course will cover basic knowledge of computer skills required to proceed with further professional growth in the arts with a focus on computer technology, terminology, and the use of software for creating digital art and related works. A minimum of 3 hours of work outside of class is required per week.

CODS 22: Introduction to Digital Design I

This course is a gateway course which will build a solid foundation of computer technology and its relationship to the Communication Design industry. It also will introduce basic knowledge of computer skills required to proceed with further professional growth in this field. Introduction to Digital Design I will concentrate on the introduction of computer technology, word processing, layout and introductory digital editing. This course may be taught either as a half-semester course or as a full semester course.

CODS 100: Graphic Design Principles and Practices

This course will introduce students to graphic design principles and practices including design thinking, ideation, conceptualization, typography and layout, and examine ways to integrate them into students' educational and future professional studies. Students will investigate the field of graphic design and the role of graphic design in visual communications including branding, advertising, presentations and other printed and digital collateral.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CODS 106: Introduction to Motion Graphics

This course builds upon foundational graphic design techniques and teaches the skills required to animate illustrations, type and design elements in a variety of forms. Motion Graphics studies the design of time-based graphics and incorporates kinetic type theories, sound usage, video and film production techniques and traditional and digital animation techniques.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CODS 115: Coding

This course will focus on HTML/CSS/JavaScript standards-based web development. Students will learn to separate content from presentation and to design effective communication that may be displayed on a variety of devices and browsers. The course will focus on current practices and accepted standards, but also explore evolving technologies. This course covers terminology, syntax, and best practices for coding websites and generating content for deployment on the world wide web. A minimum of 6 hours of work outside of class is required per week.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CODS 122: Introduction to Digital Design II

This course is an intermediate-to-advanced course which will continue to build on the concepts and skills established in CODS 022 Introduction to Digital Design I. CODS 122 Introduction to Digital Design II will augment skills required to proceed with further professional growth in the Communication Design industry as well as introduce additional and more complex material. Introduction to Digital Design II will concentrate on the creation and manipulation of both vector and raster graphic images as well as expand on the more highly-evolved editing capabilities of various layout applications. This course may be taught either as a half-semester course or as a full semester course.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CODS 130: Typography

A study of the principles of designing with type, including type history, and technological advancements. There is special emphasis on type selection, specification, and creative typographic design solutions. A minimum of 3 hours of work outside of class is required per week.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CODS 140: Introduction to Interactive Design

This course is a study of the fundamentals and practices of design as they relate to communicating idea through digital media. Students will learn to translate their digital prototypes into functional interactive experiences. Student will utilize modern web technologies to generate designs appropriate for various devices, browsers, and platforms. The course will focus on the development of interactive projects to create a rich and meaningful user experience.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CODS 141: Introduction to Design

The study and practice of techniques for representing visual ideas. A variety of tools and contemporary technology will be used in developing designs for presentation. A minimum of 3 hours of work outside of class is required per week.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CODS 147: Visual Thinking

A course in the study of idea development as it applies to the graphic communicator. A variety of idea-generating techniques are explored with emphasis upon quick visual exercises to stimulate fresh thinking. This course may be taught either as a half-semester course or as a full semester course.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CODS 151: Introduction to Illustration

This course is designed to provide the student with a knowledge of the graphic illustration techniques used in professional illustration. The materials and medias in illustration will be explored, and the student will begin to learn how to construct an illustration and which concepts will communicate most effectively.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CODS 160: Historical Survey of Graphic Design A

The historical development of graphic communications as applied through graphic design, including typography, advertising design and illustration, from pre-historic times through the 19th century. Emphasis is on the search to give visual form to ideas and concepts and to bring order and clarity to information dissemination.

CODS 161: Historical Survey of Graphic Design B

Graphic design, advertising design and illustration matured in the 20th Century into recognized professions. This course emphasizes the search to give visual form to ideas and concepts as created within these professions and to delineate how these professions bring order and clarity to information dissemination.

CODS 220: Print Media Production

A course in the study of print media reproduction processes to facilitate effective preparation of art for the various contemporary printing methods. This course may be taught either as a half-semester course or as a full semester course.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CODS 231: Advanced Typography

Students in this full-semester course will further explore the possibilities of typographic form and content as a means of visual communication. Emphasis will be placed on mastery of typographic layout and flow as well as the design of expressive typography to deliver information to a targeted audience. Students will use advanced typographic techniques to create print and digital communications tools that can include promotion materials, brochures, magazines, informational websites/interactive media, and/or educational materials, among others. The primary design element utilized will be typography. Students will learn how to assess delivery needs for an intended audience, analyze, organize and prepare extensive bodies of typographic content, as well as design print and digital media that is captivating, meaningful and appropriate to the information delivered. A minimum of 6 hours of work outside of class is required by week.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CODS 238: Graphic Design

A study of the symbolic properties of graphic elements and the interaction of type and image as applied to visual communications. A minimum of 6 hours of work outside of class is required per week.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CODS 239: Graphic Design II: Editorial Design

The study of the design and structuring of information for magazines, newspapers, newsletters and periodicals. The primary focus of the course will be on the concept and design of the publication, which could include covers, content pages, special sections or supplements, feature stories and articles. Students will learn how to analyze extensive bodies of information, assess the needs of the intended audience and design print media that is meaningful and appropriate. A minimum of 6 hours of work outside of class is required per week.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CODS 241: Advertising Design

This course is a study of the history and the fundamentals of advertising, the breakdown of roles within advertising agencies, studios, and in-house creative departments, and the function of the advertising designer in these settings. Emphasis will be placed on accurate communication of the advertiser's message through appropriate development of concepts, words and visuals which reflect strategy, positioning and brand identity. The importance of integrated media campaigns will be emphasized.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CODS 242: Advertising Design II

Advertising Design II is a continuation of the study and development of advertising. Emphasis is placed on creative solutions that are "on strategy" regardless of the media.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CODS 243: Advanced Advertising Design

Advanced Advertising is a continuation of the study and development of advertising design. Emphasis is placed on creative solutions using various types of media that are "on strategy" regardless of the media and that reflect the positioning and brand identity. This course will focus on the variations of media a campaign may encompass and the processes needed to ensure the success of the campaign.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CODS 252: Digital Illustration

Digital Illustration is the study of the fundamental building blocks of digital illustration. A variety of digital techniques and methods digital illustrators use will be explored. Concepts and compositional forms will be also addressed.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CODS 253: Illustration II

This course delineates the different markets available to the illustrator. The student will learn how to market an illustration portfolio and will continue with specific problems simulating real illustration jobs. Copyright, self promotion and pricing illustrations will also be discussed.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CODS 276: Interactive Design

The course will focus on the development of interactive projects where the user is involved in a rich and meaningful experience. Interactive Design focuses on the skills and knowledge necessary for human-centered design concepts. Focus will be on user research, web analysis, and continuous improvement. Projects will be designed and developed primarily for Internet delivery over computer devices. A minimum of 6 hours of work outside of class is required per week.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CODS 277: Interactive Design II: Multimedia

The study of design applying theories of human-computer interaction including the incorporation of static and moving visuals, sound, and language in a manner where the user is involved in a rich and meaningful experience. Interactive Design II focuses on the skills and knowledge necessary for creating content where the user's actions are answered in predictable (question and answer) and unpredictable (random events) ways; where the user is given control of the environment of the interface including selecting sounds, volume control, and playing video. Multimedia projects are designed for computer games, content contained on CD ROMs, educational kiosks, corporate presentations and for broadband web content.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CODS 278: Advanced Interactive Design

The course will focus on the development of interactive content, where the user is involved in a rich and meaningful experience. User experience focuses on the human-computer interaction of a product or service. This course focuses on building robust user experiences for the screen and beyond. Projects will explore prototyping and presentation of mobile apps, websites and wearables, as well as an introduction to augmented reality, virtual reality, projection mapping, and interactive installations.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CODS 280: Integrated Branding

Through this course, the student will create a related set of projects that comprise a unified branding system incorporating graphic design, web design and interactive design and featuring professionally rendered illustration. The semester-long project will result in an integrated suite of materials that include a brand guideline book, identity system, advertisements and mobile/web design. The "brand" will be entirely conceived and created by the student as a unique business concept. A minimum of 6 hours of work outside of class is required by week.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CODS 307: The Visual Journal: Drawing and Designing Abroad

This is an off-campus class that will be taught while traveling abroad. It is a hands-on course. Each student will complete a portfolio of artwork documenting his or her personal response to the travel experience. Through direct observation, students will explore their personal relationship with the destination, and construct a meaningful document of their travels. Students will have the opportunity to see firsthand the work of artists and designers from other cultures. The course will include guided gallery and museum visits. (This course is also offered under the following designation: FINE 307.) [6 ch 3 sh]

CODS 315: Emerging Media Campaigns

This course will be a study of the ways in which companies and non-profit organizations promote their products and causes to consumers and donors using continuously evolving forms of media. Examples that have now moved from "cutting edge" to core elements of advertising campaigns include events, product placement, social media advertising, in-game advertising, brand content, etc.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CODS 316: The Art of the Pitch

The "pitch" process is fast-paced, exciting, and sometimes chaotic. In this course, Strategists, Copywriters and Art Directors will work together to create a well-thought-out advertising campaign that, in theory, would be of the caliber to land a million-dollar account. Students will practice creating materials, writing a convincing presentation "script", working together as a team in front of an audience, and projecting confidence in their work as they present a professional-quality new business advertising pitch.

CODS 335: Interdisciplinary Team Project

With an entrepreneurial focus on creating viable products, this course will expose students to the real-world problem solving required to work with interdisciplinary teams while building a web application, mobile application, native application, or an interactive art installation piece. Students will interface with a variety of software packages, programming languages, and hardware products with the goal of creating a functional product by the end of the semester. A minimum of 6 hours of work outside of class is required per week.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CODS 346: Motion Graphics II

In Motion Graphics students create kinetic typography and synchronize animations with sounds. Motion Graphics II builds on this experience by integrating motion design with video compositing techniques and video effects. The course also covers topics related to 2D character design, rigging and animation. A minimum of 6 hours of work outside of class is required per week.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CODS 347: Interactive Spaces

This course will focus on creating rapid prototypes of reactive environments that engage a users' senses. Students will be exposed to the hardware and software required to build an interactive environment with an emphasis on storytelling, intuitive interaction, and immersive environments. Students will work with projection mapping technology to map a physical object as a complex projection surface. A minimum of 6 hours of work outside of class is required per week.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CODS 348: VR/AR/Mixed Reality

This course introduces students to the tools and techniques required to create content in virtual reality, augmented reality and mixed reality. These unique platforms are rapidly transforming the way we interact with content. Virtual reality enables designers to create completely immersive environments at very little cost. Augmented reality provides a unique way to overlay information on top of the physical world. Students will learn design principles, techniques and skills to create work in these new realities. A minimum of 6 hours of work outside of class is required per week.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CODS 349: Physical Computing

This course will focus on the study of human interaction with computers. Students will use sensors and microcontrollers to capture human interaction and write software to react to the inputs in a variety of ways. Students will focus on using digital technologies to extend human capabilities by observing and responding to physical actions. This course will also introduce users to the basics of electronics, microcontrollers, and hardware programming. A minimum of 6 hours of work outside of class is required per week.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CODS 355: User Experience

The course will focus on the development of interactive content, where the user is involved in a rich and meaningful experience. User Experience focuses on the human-computer interaction of a product or service. Through research and iterative usability testing, the course is a study of a person's perceptions of the design of a website or app's utility, ease of use, and efficiency. Projects will be designed and developed primarily for internet delivery over media devices.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CODS 356: Creative Coding

This course is an introduction to computer programming within the context of the arts. Students will build a foundation in visual programming techniques that will be applied to a series of exercises and projects. The course gives students opportunities to interface with a variety of interactive software packages, hardware input and output devices, with the goal of creating compelling interactive artwork. A minimum of 6 hours of work outside of class is required per week. This course may be taught as a half-semester or as a full semester course.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CODS 357: Typeface Design

This course is an in depth study of the issues and processes of designing Roman letterforms. The design of typefaces will be presented from both a historical and contemporary perspective. Designing letterforms for a variety of applications will be discussed. Students will develop and design a series of letterforms while considering both structure and purpose.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CODS 359: Design for the Greeting Card and Gift Industry

Design for the Greeting Card and Gift Industry prepares students in all disciplines of Communication Design to cultivate marketable skills and develop directed portfolio work for this specialized area in Communication Design. This course gives students opportunities to apply design, illustration and interactive skills in the creation of concepts and imagery for print, dimensional and digital products for the greeting card, stationary and gift industry.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CODS 361: Restaurant Graphics

Workshop subject material is concentrated and taught in a half semester. Workshop subject is taught during either the first or second half of a semester. A minimum of 6 hours of work outside of class is required per week. (6 c.h., 2 s.h.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CODS 364: Poster Design

Workshop subject material is concentrated and taught in a half semester. Workshop subject is taught during either the first or second half of a semester. A minimum of 6 hours of work outside of class is required per week. (6 c.h., 2 s.h.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CODS 366: Motion Graphics

Motion Graphics studies the design of time-based graphics and incorporates kinetic type theories, sound usage, video and film production techniques and traditional and digital animation techniques. Workshop subject material is concentrated and taught in a half semester. Workshop subjects is taught during either the first or second half of a semester. A minimum of 6 hours of work outside of class is required per week. (6 c.h., 2 s.h.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CODS 367: Package Design

Workshop subject material is concentrated and taught in a half semester. Workshop subject is taught during either the first or second half of a semester. A minimum of 6 hours of work outside of class is required per week. (6 c.h., 2 s.h.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CODS 374: Portfolio Seminar

A review of the student's communication design experiences relative to establishing a senior portfolio for professional purposes. This course is to serve as a culmination of all work done in courses taken previously. Offered in half semester unit only.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CODS 375: Selected Topics in Communication Design: Graphic D

A course permitting specialized or advanced subjects, not available in other courses, to be offered a occasion warrants. Topics may be in any aspect of graphic design, adverting design, or illustration and may require studio work, research, or travel.

CODS 377: Independent Study in Communication Design

Independent study involves individual pursuit and self-determination in Communication Design studio area not being offered by the University. Permission for up to 12 s.h. Limit 3 s.h. per semester.

CODS 378: Independent Study in Communication Design

Independent study involves individual pursuit and self-determination in Communication Design studio area not being offered by the University. Permission for up to 12 s.h. Limit 3 s.h. per semester.

CODS 379: Independent Study in Communication Design

Independent study involves individual pursuit and self-determination in Communication Design studio area not being offered by the University. Permission for up to 12 s.h. Limit 3 s.h. per semester.

CODS 380: Independent Study in Communication Design

Independent study involves individual pursuit and self-determination in Communication Design studio area not being offered by the University. Permission for up to 12 s.h. Limit 3 s.h. per semester.

CODS 381: Publication Design

This advanced level half-semester course deals with the organization and design of text-driven publications for industry, service, education and retail. Students will learn how to analyze extensive bodies of information, assess the needs of the intended audience and design print media that is meaningful and appropriate. Students will choose and combine format, layout, typography, materials, design elements and imagery to create a visual gestalt. Projects may take the form of annual reports, capabilities brochures, catalogs, books, folios, press kits or promotional brochures, among others. A minimum of 6 hours of work outside of class is required per week. (2 s.h., 6 c.h.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CODS 382: Advanced Branding

In this half-semester course, students will learn to assess the goals, initiatives, missions and values of a client and communicate the essence of their business visually through semiotics, typography, color and design. In addition to creating a corporate identity, they will learn to apply this identifier to create a brand. Students will learn about the impact of branding in which the company's visual identity is placed in various environments in ways that communicate the characteristics of the organization. A minimum of 6 hours of work outside of class is required per week.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CODS 383: Campaigns for Social Good

This half semester Senior Seminar in advertising is a continuation of the study of advertising, with emphasis on total campaigns that work to promote social good.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CODS 384: Consumer Product Campaigns

This half semester Senior Seminar in advertising is a continuum of the study of advertising with emphasis on the total campaign as it applies to consumer product advertising.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CODS 385: Content Management Systems

This course will focus on the design and development of Content Management Systems (CMS). Students will learn to use template structures to design sites with constantly changing or updated content using open-source resources built upon standards-based web design optimized for both desktop and mobile devices.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CODS 386: Web Applications

This course will focus on the design and implementation of web-based applications. Students will create functional applications for a variety of purposes such as games, educational apps, and productivity apps with a focus on visual design of content and interface. Students will use a range of current and evolving technologies for application development for desktop and mobile devices.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CODS 387: Visual Essay

This half semester course is designed to prepare students for the field of illustration. The seminar involves creation of a thematic collection of personal images in the form of a visual essay.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CODS 388: Self Promotion

This half semester course involves exploration of marketing and self-promotion strategies for success in today's illustration and design marketplace.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CODS 389: Personal Style

Students will create a unified body of work to be used as the basis for a professional illustration portfolio. Individual artistic expression will be encouraged. The process and the approach to creating a professional illustration will be explored. Students will learn of different illustration markets appropriate to their individual style.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CODS 390: Illustration for Publishing

This half-semester course is a continuation of the study of illustration beyond the introductory level, specifically the specialty focus on the marriage of image making with the written word as well as data inspired narratives. The emphasis of this course is on the continued professional development of a personal illustration style inspired by a written strategy, manuscript, article, and/or script. Strong conceptual thinking and individual artistic expression will be nurtured. Students are expected to attempt an increased level of conceptual, intellectual, technical sophistication in each successive level. Decisions concerning the effectiveness and point of view will be discussed as it relates to the content, meaning and effectiveness of their work. This course will create opportunities for print and on-line portfolio-based projects including but not limited to the areas of: publishing, visual journalism, visual reportage, self-authorship, and information graphics.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CODS 391: Illustration for Design

introductory level with a specialty focus on illustration as an integral component in the design process. While strong conceptual thinking and individual artistic expression will be nurtured, understanding consumer trends, and having a comprehensive knowledge of both historical and contemporary illustration conventions will be emphasized. Students are expected to develop an increased level of conceptual, intellectual, technical sophistication in each successive level. Decisions concerning the use of effectiveness will be discussed as it relates to the content, meaning and effectiveness of their work. This course will create opportunities for print and online portfolio-based projects including but not limited to the areas of: advertising, package design, product development, UI/UX, web content, entertainment graphics, fashion graphics, surface design, and licensing.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CODS 392: Field Experience in Communication Design

This course is designed to provide educational opportunities not provided in the University structure. Further explanation should be obtained from the Chairperson. Variable credits 1 to 16 semester hours. Non-repeatable.

CODS 394: Communication Design Internship

Internship provides the senior student concentrating in either Graphic Design, Advertising Design or Interactive Design (Illustration excluded) with professional experience in an area design firm or company design department. The experience will be 32 hours per week for half of a semester. (6 s.h., 32 c.h.)

CODS 395: Honors Independent Study/Thesis

Honors Independent Study/Thesis.

CODS 397: Self-Generated Projects

This upper-level course will introduce Communication Design students to the professional development value of self-generated projects and advocate for expanding and/or advancing skillsets appropriate to the students' goals and aspirations. Class participants will identify and investigate an individual project topic suitable for development as well as meet established benchmarks within the course structure. Each student will develop a project proposal for presentation and a workable schedule within class constraints. The final self-generated project and documentation of process will be presented for evaluation at the end of the course. A minimum of 6 hours of work outside of class is required per week. This course may be taught as a full- or half-semester course.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CODS 398: Communication Design Professional Practices

The course will focus on the professional practice and business issues in the Communication Design field. It will address the development of relevant employment and life skills necessary in finding employment in this competitive industry. Materials will be presented through professional presentations, lectures, and demonstrations. A minimum of 6 hours of work outside of class is required by week. This course may be taught as a full- or half-semester course.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CODS 399: Student Exhibition

Senior Exhibition is a requirement for graduation. All BFA in Communication Design degree candidates must participate in a Spring semester Senior Exhibition before they graduate. Summer and December graduates will exhibit work in the Spring exhibition prior to graduation. Participation in a Senior Exhibition is defined as showing at least one piece/documentation/record within the confines of the display area being used for the exhibition (usually the Miller Gallery in the Sharadin Art Building). Showing work in alternate spaces on campus, and not in the Senior Exhibition, will not satisfy the graduation requirement. (0 credits, Pass/Fail)

Communication Studies

COMM 10: Fundamentals of Oral Communication

The course introduces the theory and practice of oral communication in presentational, interpersonal, and group contexts. Students develop knowledge of, appreciation for, and the requisite skills to communicate effectively in our culturally and professionally diverse world. Students will learn to develop, organize, and prepare messages, as well as apply active and critical listening skills. This course also prepares students to understand the role of perception, ethics, beliefs, attitudes, nonverbal signals, and stereotypical language in oral communication.

COMM 102: Introduction to Theatre

This course examines the Nature, Variety, Functions, and Processes involved in creating Theatre. The course will deconstruct the components of Theatre and increase respect for Theatre practitioners: Audience, Producer, Playwright, Director, Actor, Designers, and Critic. The course will also examine the evolving nature of Theatre since its beginning and the context of its social inquiry.

COMM 103: Introduction To Acting

Acting theory and skills, with primary emphasis on Stanislavski-based techniques, are explored through exercises and

improvisations, reading, outside play attendance, writing assignments, and performances. Skills presented and developed include awareness, concentration, imagination, discipline, sense memory, emotional truth, choices, physical/vocal expressiveness, and ensemble.

COMM 105: Business and Professional Presentations

This course further develops the student's public speaking skills in business and professional situations. Through discussions, activities, and presentations, students develop advanced knowledge of principles necessary for professional and business presentations and practice their skills in presenting before an audience. Cultural sensitivity, ethical practices, and basic research skills are highlighted in accomplishing these goals.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

COMM 125: Interviewing: Communication Principles

This course focuses on the development of a working knowledge of the non-therapeutic interview process and the communication skills necessary to effectively interview. Emphasis will be on both the theory underlying the oral interaction as well as practical application and skill development related to interview preparation, verbal and non-verbal communication, use of questions, and presentation of self.

COMM 130: Interpersonal Communication

This course is an introduction to the theory and practice of interpersonal communication. It is designed to create an increased awareness and application of the concepts, skills, and strategies that are important to enable students to become interpersonally competent communicators in their personal and professional relationships.

COMM 140: Introduction to Communication Studies

This course will provide an introductory survey of the field of human communication and its subdivisions. It will cover a broad range of communication concepts and their application, such as communication in the workplace, effectively using social media, and improving interpersonal relationships. An overview of the field's key concepts and theories, including their application in everyday life is explored. Students will also be exposed to the career opportunities associated with communication studies.

COMM 151: Voice and Diction

Basic processes which underlie the production of American speech sounds, syllables and words. A study of the principles of voice, rhythm, rate, quality and stress; analysis of student's voice and articulation; ear training and self-improvement are emphasized; integration into speaking situations.

COMM 170: An Introduction to Public Relations

This course is designed as an introduction to Public Relations as conducted in business, industry, sports teams, public institutions and by political figures today. Students will examine the functions of public relations and its place within organizations and society.

COMM 201: Storytelling I

The course is designed to build beginning skills in storytelling to those who would like to use storytelling in various venues including: giving structure to personal tales, using storytelling as a teaching tool, performing for children, developing a performance showcase of stories, and improving communication skills.

COMM 205: Argumentation and Debate

The course will present an overview of current and historical thought on constructing, evaluating, and analyzing arguments, and give students practice in utilizing arguments in a debate setting. This course will balance theory and presentation focusing on the identification and analysis of different kinds of reasoning used in varying situations including intercollegiate debates, news media, political speeches and campaigns, advertising, conversation, and education.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

COMM 207: Political Communication

This course examines the power of political messages within domestic and international contexts. By analyzing the rhetorical strategies of political leaders, interest groups, and media actors, students will gain an appreciation of how political language influences domestic and international audiences. The course also focuses on tangible application of communication skills including campaign rhetoric, crisis messages, and news framing. Students will design messages for a variety of traditional and digital media formats including campaigns, press conferences, interviews, and debates. To encompass the cultural dimension of political communication, the course discusses the role of different media systems. Finally, students will explore the challenges of fake news and social media for democratic discourse.

COMM 210: Persuasion

This course covers persuasive forums from conventional public speaking to marketing, contemporary media and propaganda. Students will examine traditional, humanistic, social scientific and artistic approaches to public persuasion, from ancient to modern times. Students will demonstrate knowledge of the craft of advocacy and produce original, analytical scholarship about the practice of persuasion; developing skills in critical thinking, evidence assessment, applying persuasive technique, and effective adaptation to varied audiences and situations.

COMM 211: Production and Performance for Young Audiences

Experience in preparing and performing dramatic scripts for young theatre audiences is the focus of this course. Selecting, adapting, and mounting manageable productions, analyzing the needs of the audience, and choosing styles of performance consistent with the material provide students with practical application of theory.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

COMM 212: Introduction to Mass Communications

A study of the method and philosophy of mass communications. Historical growth of the mass media is described. Interrelationships of present forms of mass communication are linked to the underlying necessity to write, speak, and think clearly and honestly.

COMM 213: Communication between Cultures

This course focuses upon the analytic and comparative study of the human communication process as it occurs both across cultures and between people of different cultures. Communication theory is applied to how meaning is derived from behaviors at the interpersonal, group, and international settings. Subjects examined include: variations and similarities in communication across cultures; the interaction of culture with language to influence the encoding and decoding of information; and the effect of cultural variables upon peoples' ability to describe, predict and explain the message of others

COMM 214: Advanced Public Speaking

This course provides students the forum to further their skills of public expression, as well as to deepen their understanding of what makes a presentation effective and compelling to an audience. Students will undertake rigorous study of relevant theory and research, including the nature of truth and belief, communicative ethics, the nature of human motivation, and the philosophy of social proof. The course will take a critical approach, encouraging students to participate in determining the focus of their assignments, allowing individual students to develop skills relevant to their career goals.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

COMM 215: Small Group Communication

This is an introduction to the dynamics of communication in small group settings. Students will study and experience group leadership and participation with an emphasis in small group management, problem solving and effective group member participation. The course assignments will include public discussions in small groups and required group activities, some involving outside of class meetings.

COMM 216: Performance of Literature

This course focuses on studying literature through performance. Emphasis will be on learning to use vocal and physical expression to communicate the intellectual, emotional, and aesthetic dimensions of literature to the audience/ Students will develop skills in analyzing, interpreting, and performing literature as they study the communicative power of literary texts.

COMM 217: Music and the Spoken Word

This course is designed to develop and intensify the student's intellectual, emotional and aesthetic responses to the aural qualities of spoken word poetry and music through an examination of the similarities and differences between them. It combines rhythm, rhyme, music, drumming, and the power of words. Emphasis will be placed upon those works that particularly convey their meaning through aural and temporal devices.

COMM 224: Social Media Ethics

This course will explore the origins of ethical behavior and actions within the media and will look at both classical and contemporary approaches to ethical decision making and apply them to modern media practices, particularly social media. At the same time, the course will ask whether the media today are acting appropriately as regards ethical practice, and if not, why not. Not only does the course critique media practices but it will also search for suggestions that will most positively affect both the media institutions and the public with which they interact and upon which they rely for their livelihood.

COMM 230: Global Public Relations and Public Diplomacy

This course examines the process by which governmental and non-governmental organizations use public diplomacy and public relations strategies to reach and engage global audiences. Topics include the history of global public relations and public diplomacy, nation-branding, perception management, media diplomacy, public diplomacy during international crises, and soft power. Special attention is paid to communicating with non-American audiences including Europe, Africa, Latin America, and Asia. Finally, students evaluate and design public diplomacy campaigns for different foreign audiences to understand the link between production, distribution, and reception of global Public Relations and Public Diplomacy strategies.

COMM 235: Public Relations Cases and Campaigns

This course provides an in-depth approach to the development of Public Relations programs for various types of organizations and publics. The course will utilize a case study approach to analyzing and understanding the factors necessary to develop appropriate public relation programs and strategies.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

COMM 237: Women Writers in Performance

This course is designed to use performance theory and process to analyze significant literary works and key themes in women's writing. Students will use performance theory, feminist theory, and post-modern theory to engage with texts from women writers from diverse cultural and historical backgrounds. We will accomplish this through close readings, class discussions, performance workshops, and performances of texts by female authors.

COMM 240: Survey of Communication Theory

This course is designed to explore humanistic and scientific approaches to communication studies that have led to its current status as an intellectually vibrant, socially relevant area of study and practice. Students learn about the functions of communication theory, leading them to gain an appreciation of the complex, multifaceted process of communication. An understanding of how communication theories function in different contexts is essential to analyzing communication processes.

This course provides that understanding.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

COMM 241: Public Relations: Processes and Techniques

This course will build on the basic understanding of public relations and its place in society that was gained from COMM 170, Introduction to Public Relations, to explore practical application of the theory as carried out in modern PR operations. Exercises, in which students will produce working PR tools, will put a further practical perspective on the profession.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

COMM 243: Social Games and Communication

This course will provide a space in which to explore players' lived experience of social games and social gaming. Using communication theory, practice, and a research basis, this class will provide insight into the social structure of various games and genres, exploring the impact on socialization behaviors, interpersonal relationship formation and maintenance, groups and teams, and spectatorship. We will discuss the characteristics and features of popular game genres, as well as theories and concepts related to identity and identification, socialization and communication in the game space, game culture, and the broader gaming community.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

COMM 245: New Media and Communication

This course is a broad survey of how new media affect communication practices in various fields like: education, business, law, politics, and personal identity. Interactive media, like online social networking and gaming, exhibit characteristics of both mass and interpersonal communication. This complexity has transformed human communication patterns by expanding personal and professional communication possibilities. We will examine current trends and the future development of communication as the world responds to the new media.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

COMM 248: Nonverbal Communication

Students will explore some facets, principles, implications, and effects of non-verbal communication. The course will focus on non-verbal codes such as kinesics (body movement), paralanguage (vocalic communication), facial expressions and eye movement, proxemics (space), haptics (touch), and chronemics (time), and artifacts (including art and architecture but also jewelry, clothing, hairstyles, and body modification). Student presentations will highlight how communication is a "package" of symbols.

COMM 261: Introduction to Health Communication

This course is designed to introduce students to the field of health communication. It will explore health-related communication as it applies to the dissemination, interpretation, and impact of health-related messages. Students will learn about communication between health-providers and patients/clients, health education initiatives and campaigns, as well as communication dynamics in health organizations. Students will gain both knowledge and experience in the use of communication to promote individual and public health.

COMM 266: Monsters and Myth in Popular Culture

This course explores how monsters and myths are portrayed in television shows, film, fiction, video games, and other forms of popular culture. Students will learn how to analyze monsters and mythic figures such as centaurs, dragons, zombies, vampires, and aliens in relation to the concepts of gender, class, race, sexuality, and disability. The course focuses on how a culture's monsters and myths reflect political realities, social change, and cultural anxieties and fantasies.

COMM 271: Sexualities and Communication in Everyday Life

This course is an introduction to the study of sexualities and communication in everyday life. The course is designed to develop a student's ability to think critically about and analyze issues of sexualities in multiple theoretical and often overlapping-perspectives used by scholars to explore and understand sexualities in the broad field of communication.

COMM 274: Organizational Communication

This course explores communication within the context of the organization. It attempts to develop competencies in the areas of organizational communication knowledge, organizational sensitivity, communication skills that benefit communication in the organization, which contributes to organizational excellence. Specifically, the course examines the nature and structure of organizations, communication systems and channels, and the relationship of communication to how the organization functions.

COMM 285: Gender Communication

This course provides a study of gender as it influences verbal and nonverbal communication, and shows how gender communication impacts the lives and experiences of women and men. The course will explore multiple ways communication in schools, family, media and society in general creates and perpetuates gender roles.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

COMM 301: Performance and Culture

This course is an introduction to the field of performance studies. In this course, solo performance will be broadly construed to include aesthetic performance (performance art, theater, music, dance, and visual culture) and everyday presentations of self. We will study the history of the field and its relation to other fields (anthropology, theatre studies, philosophy, dance studies, feminism, political science, critical race theory, legal studies, etc.) and ask questions of how the study of performance can help us to understand contemporary questions of aesthetics, politics, and social culture. This course will place particular emphasis on political performance (in the US and abroad), queer, and minority performance.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

COMM 305: Theories of Emerging and Social Media

New forms of media provide powerful platforms for disrupting old forms of media by creating new methods of making meaning. This course examines the relationships among emerging media technologies and communication theories, with a focus on theories of new media and social media. Students will learn how to apply emerging communication theories to critically analyze how new media and social media texts create new meanings.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

COMM 307: The Rhetoric of Visual Media

This course explores the power of mediated images in culture and society. The history of images and their relationship to language and performance is examined and a definition of visual rhetoric in a variety of contexts is investigated. The relationship between visual rhetoric and digital technology will be discussed. How human beings use and interpret both still and moving images to communicate, as well as the role of images in establishing cultural identity and ideology will be considered. Finally, this course will examine the effects imagery has on an audience in terms of self identity, and self esteem.

COMM 310: The Rhetoric of Citizenship

Students will examine a collection of historical and theoretical documents, all of which contributed to important intellectual and cultural developments in the United States' experiment in democratic self-government, as well as how that political vision is impacted by the modem media industry. Based on these examinations, students will produce public statements of personal ideology and political persuasion supported by valid evidence and rational argument; developing skills in critical thinking, respectful public discourse, and productive policy debate. Students will learn how public discourse becomes a vehicle to forward political agendas, and develop the ability to discern, understand, and ultimately compose public advocacy.

COMM 311: Crisis Communication in Public Relations

Public Relations above all concerns itself with mediating conflict between an organization and its publics, including the mass media, activist groups, investors, consumers, employees, and the community. This course will introduce students to a variety of conflicts and crises and provide students with the tools necessary for effective crisis communication, in preparation for becoming crisis managers.

COMM 315: International Communication

This course introduces students to the history and theory of international communication. It examines different approaches to international communication ranging from modernization and cultural imperialism theories to cultural and critical studies. Students will compare, analyze, and critique media systems, entertainment content, infrastructures, and audiences relating to world news flows, global culture, political propaganda, and public diplomacy. To develop an understanding of these processes of international communication, students will engage with international news media as well as strategic cross-cultural media initiatives by state and non-state actors. Students will further develop skills in framing analysis.

COMM 319: Integrated Marketing Communication Concepts and Practices

This course will introduce students to the principles and applications of integrated marketing communication (IMC), a growing subdivision of traditional public relations that incorporates marketing and advertising. Students will learn the elements of IMC, the benefits of this approach, and how to incorporate IMC principles into modern professional PR practice. Through analyses of existing IMC campaigns as well as the execution of individual and group IMC projects, students will recognize the benefits of IMC, develop IMC deliverables, and gain an appreciation of IMC theory.

COMM 321: Popular Culture

This course explores how popular culture is created and reflected within a range of media and genres-including television, film, music, fiction, social networks, gaming, and digital technology. Students will learn how to explain and critique popular culture from a variety of theoretical perspectives. The course focuses on how popular culture challenges or reinforces stereotypes, creates communities, and reflects social and political realities.

COMM 327: Rhetorical Theory and Criticism

This course will present an overview of the history of rhetorical theory and methods of rhetorical criticism. It is based on an appreciation of the beauty and power of language, and an understanding that language and other symbols are the forces that create our socio-cultural reality. As speaker or audience member, we use language to shape our world and make sense of our experience within it. Through rhetorical theory, we learn how symbols function, and we evaluate symbolic acts and artifacts using rhetorical criticism. Different critical approaches help students to discover new possibilities for insight and action.

COMM 335: The Rhetoric of Literature

Cooperative investigation of the relationships between literature and rhetoric. Selected works of major literary figures will be examined with reference to their persuasive power and their ability to produce attitude change.

COMM 336: Public Relations Workshop

Students in this course will develop a comprehensive public relations and/or promotional program for a client of their choosing, which can include, but is not limited to campus organizations, non-profit philanthropies, and for-profit businesses. Student work with clients will center on public relations research, planning, and execution activities.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

COMM 337: Environmental Communication

This course explores the field of environmental communication, particularly but not exclusively from a rhetorical perspective.

Our communication about the natural world both interprets and defines it. We experience and understand the natural world through communication, through different channels, and through discourses that have evolved over time. We will explore communication about the environment, focusing on ways that corporations, governments, scientists, citizens, and others describe, persuade, and shape human interactions with the environment. This course interrogates this communication as well as the underlying assumptions that ground such communication. We will study how communication processes and perspectives influence attitudes and actions toward the social and natural world.

COMM 340: Communication Research and Writing

This course explores the study and analysis of the various processes available for conducting a systematic investigation of a topic of interest to the communication discipline and helps the student determine the appropriate tool(s) for a particular kind of inquiry, verify data, compose the results in an organized and systematic manner, and recognize the limitations of study samples and research questions. Whether testing hypotheses or exploring, describing, or solving problems, the course in communication research methods helps students understand how research is conducted and the significance of a particular project's results. It introduces students to the methods used in the field of communication studies, including qualitative, quantitative, rhetorical, performance, and mixed-methods approaches. Students will learn key terms, ethical considerations, and the principles of data collection and analysis while applying research principles in class projects.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

COMM 345: Relational Communication

This course explores communication in a variety of personal relationship types across the lifespan. Communication is situated within specific relationships, including, but not limited to dating, friendship, marriage, parent-child and other family relationships. Those relationships are situated within larger cultural contexts. Building upon core concepts in interpersonal communication, this course explores theory and research on communication in various types of close relationships and how cultural variables affect those different types of relationships.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

COMM 350: Leadership: A Communication Perspective

This course serves as an introduction to the study and practice of leadership from a communication perspective. To this end it explores communication variables involved when leaders attempt to influence members to achieve a goal. Particular focus will be on the relationship between communicating and leading. Topics include power, credibility, motivation, research on leadership traits, styles and situations, global leadership, ethics, and current models of leadership such as transformational, charismatic, and functional approaches.

COMM 353: Communication and the Art of Happiness

Communication scholarship regarding emotion indicates that there is a strong connection between our communication behaviors and our happiness, which in turn affects all areas of our lives. This course will help students to recognize and cultivate communication practices which enhance well-being, which will benefit students both personally and professionally. In this advanced seminar, students will examine and practice how communication behaviors relate to constructing happiness and wellbeing. Topics and activities are related to gratitude, forgiveness, empathy, social support, resilience, appreciation, social networks, and communicative contagion of mood—intersecting with issues of relational and organizational communication. Auxiliary readings come from a variety of disciplines, including communication, psychology, management, sociology, positive organizational scholarship, and appreciative inquiry.

COMM 360: The Digital Self

This course focuses on the ways in which people create, maintain, perform, and broadcast the self with and through digital media technologies. It examines media such as: social networking platforms, video games, augmented reality software, and wearables.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

COMM 370: Selected Topics in Communication Studies

This course will encompass extensive readings, critical evaluations and papers on selected research and theory relating to issues in Communication Studies. Selection of topics will vary depending upon the needs of eligible students. This course may be repeated for credit providing that the same topic is not repeated.

COMM 375: Communication Training and Development

This course will focus on the logistics of creating, developing, and implementing communication based training programs. Specifically included will be areas of assessing training needs, developing training need surveys and related assessments, creating and developing training materials, techniques of presentation, program evaluation, and communication consultation strategies and techniques.

COMM 379: Independent Study in Communication Studies

Before registering, the student is required to consult with the faculty member in the discipline to be studied who will supervise the independent study. May be repeated.

COMM 380: Senior Capstone Experience

This course is designed as the capstone course for Communication Studies majors, aimed at providing students with the opportunity to integrate the knowledge and skills they have acquired within the major. It will demonstrate mastery of key concepts, complete a project in a specific area of communication. The class will also provide experiences for students to exhibit competent communication skills learned during their program of study in order to prepare for a career in communication.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

COMM 387: Family Communication

Family Communication is designed to introduce students to communication in the family setting. The overall goal is to help you understand how, through communication, we develop, maintain, enhance or disturb family relationships. The course will examine the role of communication as it relates to family identities, family roles, relational maintenance, intimacy, conflict, decision-making, family stress and well-being. Students will learn verbal and nonverbal skills that can promote healthy family communication. This course will potentially be an important beginning in assessing the communication skills, that are inherent in your own family.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

COMM 390: Communication Studies Internship

Supervised professional field experience related to public relations, publicity, and/or organizational communication. Students will select from two internship options: a) public relations or b) organizational communication. Internship tasks and responsibilities will vary with participating organizations. This internship will be available to selected students majoring/minoring in Speech Communication to be taken for a maximum of 6 credits in the major and 3 credits in the minor.

COMM 395: Honors Independent Study/Thesis

Honors Independent Study/Thesis.

Composition

COMP 100: Effective Composition

Students in COMP 100 examine and practice writing in public and academic contexts. The course focuses on writing processes and provides sustained practice in critical thinking, reading, and writing demanded by academic and public writing. Student

writing and student writers are at the center of the class. Assignments challenge students to expand their approaches to revision and to experiment with a wide variety of writer's techniques. Particular attention is paid to the intersections of audience, purpose, genre, and context. That is, you will consider not only what to write, but also to whom and in what forms. You will also examine the influences that the writer's and audience's circumstances can exert on composition. The conventions of writing, which may include diction, grammar, syntax, usage, and structure, are addressed as part of the process of writing, and students may study how these conventions change with context. COMP 100 fulfills the General Education requirement for a 100-level COMP course.

COMP 101: Writing History

Students in Writing History will write about historical change over time. We will investigate and write in a variety of genres. Assignments will invite discovery and encourage personal perspective. The goal is to cultivate confidence in the writing process, to connect with real audiences, and to critically analyze rhetorical choices.

COMP 200: Research and Composition

Students in COMP 200 practice research and research writing. Assignments challenge you to revise you work and to experiment with a variety of writer's tools as you put your own voice and perspectives into conversation with those of other writers and thinkers. The course focuses on: the development of research questions; the uses of library databases, the library, and digital resources to find information and perspectives; and writing with research. Particular attention is paid to developing intellectual curiosity, assessing sources' credibility, reading academic work and studies, and practicing ethical attribution and citation. Student writers are at the center of the class. COMP 200 fulfills the General Education requirement for a 200-level COMP course.

COMP 201: Introduction to Research and Writing in History and Social Studies

The course will provide a general introduction to the nature and methods of research that students of all majors may find useful during their college career and afterwards. Students will specifically develop and improve their skills in writing, research, and communication.

COMP 202: Analytical Writing

This course develops skills in analytical writing and critical thinking through research of various topics and studying and writing upon various texts. (Topics and figures covered vary.) Analytical writing focuses on formulating a thesis, gathering information and data for it, constructing arguments, and dealing with counterarguments. Such "soft skills" are crucial for success in academic fields as well in business and personal life.

COMP 203: Introduction to Research and Writing about Society and Culture

The course will provide a general introduction to research and writing that are appropriate for the academic disciplines of anthropology and sociology, and related social sciences. The course will include how to successfully research a topic, cite sources and then compose a written research report or article about the topic in a manner that is appropriate for expressing social science concepts. Emphasis will be placed on the components of composing an article or paper with scaffolded assignments. It will be emphasized that successful writing is a process.

COMP 204: Writing with Research in the Physical Sciences

Through this course, students practice and refine their writing while learning to use research in writing through the application to topics in the Physical Sciences. The course focuses on learning to find, evaluate, and implement a wide range of scientific sources in a range of writing pieces. Students will read and write various types of scientific formats to practice implementing and refining their writing, revision, and research techniques.

Computer Science

CPSC 101: Computer Applications

This course provides an overview of essential computer concepts and file management, followed by coverage of software applications, including word processing, spreadsheets, and presentations. Students will learn current versions of these software applications.

CPSC 102: Computer Graphics

This course introduces students to designing visual compositions using image manipulation and illustration-capture software. Topics include image editing, typography and layout as well as creative design theory and critical analysis. Discussions will include the impact of visual works on ethical decision-making and biases that can be present in artistic works.

CPSC 105: Introduction to Data Visualization

Have you ever wondered how computers can make data look interesting and readily understandable? Data visualization is a computing process that can make data more understandable and approachable. Visualization can be done by people who have little experience with computers beyond browsing and using email. This course teaches students about different kinds of data visualizations and also how to create them. Reading charts, graphs, and more complex data visualizations is an important skill; knowing how to create these from data is also an important skill.

CPSC 111: Computer Forensics

This course is an introduction to the basic concepts of computer forensics. It will teach the student how to identify, preserve, recover, analyze and document data on a computer or network allegedly used to commit a crime. Topics include computer architecture, operating systems, encryption/decryption, preserve and document evidence, and analyzing computers and networks for evidence.

CPSC 120: Introduction to Creative Graphical Coding

This course is for students who want to go beyond using prepackaged software tool for editing graphical images. Students will create interactive images, videos, and multimedia compositions using a programming language specifically designed for these applications. Project include program-driven display of the basic shapes and imported images, display properties such as texture and shading, display-time image composition, generative art, interaction with user gestures, three-dimensional graphics, animation, video, and additional topics as time allows. The programming environment includes extensive language and library support for these activities, while simplifying the steps in introductory programming. There will be solo and/or team projects.

CPSC 122: Client-side Web Development

This course introduces fundamentals of client side web site development using industry standard practices and programming languages. Basic concepts, including the World Wide Web (WWW), client-server interaction, and front-end/back-end site development will be introduced. Web Page content and formatting will be covered using Hypertext Markup Language (HTML). Presentation and style management, and its separation from content, will be addressed using Cascading Style Sheets (CSS). User interactivity and site behavior will be explored using JavaScript, which will also serve to introduce fundamental programming language concepts and constructs. Issues associated with site organization, development, and management will be discussed.

CPSC 123: Introduction to Scientific Programming

This course is designed to help the student develop sound programming methodology using the modern programming languages prevalent in the scientific communities as well as scientifically oriented specialized tools and libraries; and to gain an understanding of the key concepts in computer science and to develop skills that can be applied to programming in a scientific environment. Topics include basic concepts of computer languages relating to data flow and execution flow - control constructs, functions, variables, and data structures. Additional topics will include applications to scientific problems and specialized extensions to programming language via packages. Programming assignments will be designed so that each student will write code pertinent to her scientific specialty.

CPSC 125: Discrete Math for Computing I

This course is designed to ensure that students reach the level of mathematical maturity necessary for the study of computer science and information technology. This course encompasses a study of predicate calculus, sets, functions, relations, counting techniques, discrete probability, and graph theory.

CPSC 130: Information Technology Fundamentals

This course is an introduction to the basic concepts of Information Technology (IT). This course is required for IT majors and is intended to provide for most of these students a first introduction to IT as an academic discipline. Topics include: hardware and software basics, the historical evolution of computers systems, database concepts and queries, computer networks, systems design, the IT profession and its responsibilities, and legal and ethical issues raised by IT.

CPSC 135: Computer Science I

An introduction to computer components; algorithmic design and the constructs of structured programming; elementary data types and data operations; programming in a high level language; one-and-two dimensional arrays; subroutines and top-down, modular, step-wise programming; computer solution of several numerical and non-numerical problems.

CPSC 136: Computer Science II

This course extends the topics developed in CPSC 135. Also covered are concepts of data abstraction and encapsulation as part of the object-oriented paradigm, pointers, recursion, and beginning data structures such as stacks and queues.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CPSC 150: Ethical, Legal, and Professional Impacts of the Digital Age

This course covers ethical, legal, and professional issues germane to the computer science and information technology disciplines. Students will acquire foundational knowledge sufficient to identify significant current issues that can arise for a professional in our discipline and also an ability to identify potential effects resulting from advances in digital technology. Key topics that will be covered encompass ethical, moral, and legal aspects of digital technology. The impacts of these topics on personal, social, political, and educational environments will be discussed and debated. Theoretical and practical sides of issues will be included.

CPSC 220: Object-Oriented Multimedia Programming

This course introduces students to object-oriented programming in the context of implementing multimedia systems. Object-oriented programming topics include classes, information hiding and encapsulation, delegation, several types of inheritance, mechanisms for code reuse, and design for flexible refactoring. Students will use object-oriented programming to manipulate graphical images, video streams, audio signals, physical devices containing electronic sensors and effectors, and a partial combination of these media. There will also be solo and team programming projects.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CPSC 223: Advanced Scientific Programming

This course takes students deeper into the theory of scientific programming, building on a foundation of sound programming methodology and an understanding of the modern programming languages prevalent in scientific communities and of the specialized tools and libraries. Thorough grounding in computer science principles will enable the student to gain knowledge and skill to best leverage these tools for scientific study and research. Topics include basic concepts of problem analysis and program design both from a procedural and structural standpoint -algorithm development, algorithm analysis, data structures, data storage, data analysis and data visualization. Additional topics will include applications to scientific problems.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CPSC 225: Discrete Math for Computing II

This course is the second in a two-course discrete mathematics sequence designed to ensure that computer science students

reach the level of mathematical maturity necessary for the study of computer science. This course encompasses a study of methods of formal proof, induction, counting, graphs, recursion, algorithm specification and algorithm analysis.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CPSC 235: Computer Organization and Assembly Language

This course is designed to provide an understanding of the organization of and internal execution of a program by a modern digital computer.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CPSC 237: Data Structures

This course is an examination of basic data structures used to store and manipulate data. The use of classes and library data structures to represent abstract data types is included, as well as user defined implementations, some of which are implementations of abstract data types. Analysis and evaluation of data structures and the algorithms associated with them is an integral part of this course.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CPSC 240: Fundamentals of Game Development

This introductory course explores key concepts in game development, including game development life cycle (GDLC), game programming, modem game engine and development tools, game attributes, principles of gaming, and teamwork. Particularly, preproduction and hands-on 2-D and 3-D character creation, movement, and collision will be explored in detail.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CPSC 241: Advanced Visual Basic Programming

This course is a study of some of the advanced features of Visual Basic. This study would include window design, database access and Internet programming. Under window design such topics as menus, list boxes, common dialog boxes, and multiple form interfaces will be studied. Under database access such topics as creating/opening a database and reading/writing with a database will be studied. Internet topics will include browsing, internet transfer, and winsock control.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CPSC 242: Server-side Web Development

This course is an introduction to the basic concepts of client/server scripting on the Web mainly focused on server-side scripting and backend databases. Topics will include: Web architecture, standards, and infrastructure, client/server architecture on the Web client-side cookie usage, server-side data processing, information storage, backend databases and security issues with web applications.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CPSC 243: Java Programming

This course introduces the student to event-driven, object-oriented programming using the Java programming language. The student is introduced to the design, creation, use, and communication that take place among objects. The student will learn how to develop and use graphical user interfaces to represent objects and their environments, and handle exceptions when they occur.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CPSC 252: UNIX Scripting and Administration

This course deals with the study of the UNIX operating system, particularly, systems programming and administration. Under the former, such topics as UNIX commands, filters, shell scripts, system security, user accounts, system backup and rebooting, and associated utilities are studied. In addition, software procurement, and installation will be illustrated. Meaningful applications, which illustrate the topics, will be given.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CPSC 253: Information Technology Systems

Information Technology comprises the part of computing that provides solutions to problems using computer-based technologies. Representing the fundamental vehicle through which computing solutions are provided, the technologies that make up these solutions are continually evolving. The course introduces the student to information technology systems, specifically the basic concepts used to define, build, and maintain information technology systems. Students will be introduced to the major technologies that are used in information technology systems, how these technologies are assembled into operating systems architecture, and the principles of systems and information management.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CPSC 256: SQL Programming

The Structured Query Language (SQL) is the standard programming language used to create, modify, and query relational databases. The purpose of this course is to provide a comprehensive coverage of the SQL language. Rationale: Relational databases are ubiquitous in computing and information technology. The Structured Query Language (SQL) is considered the standard database programming language to store, query, and access data. SQL has been integrated into multiple aspects of business making it a crucial skill for data-driven roles. This course offers students comprehensive coverage of the SQL programming language.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CPSC 273: Computing Systems Integration

This course focuses on the integration of information systems in organizations, which is the process by which different computing systems and software applications are interconnected. It examines the strategies, methodologies, and implementation for combining interdependent systems, enabling two or more applications to interact and exchange data seamlessly. The course will explore various trends in computing system integration, including Enterprise Resource Planning (ERP) software, cloud computing, and mobile integration.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CPSC 280: Cooperative Internship in Computer Science I

Supervised industrial experience at the level of apprentice programmer or information technologist. Available only to CS majors.

CPSC 310: Programming Languages

Topics covered include basic concepts and special facilities in higher level programming languages, including scope of declarations, storage allocations, data structure variety, binding time of constituents, and control organization with emphasis on programming in several representative languages.

CPSC 311: Computer Networks

Computer Networks have become ubiquitous in our society. In depth understanding of their workings is an important part of the foundation of knowledge not only for a computer science student who intends to incorporate networking in their scholastic or professional endeavors, but for anyone working in the discipline, as networking concepts are applicable in many areas inside

and outside the discipline. The students will learn the terminology and implementation of computer networks, and the physical components of networks, including cabling and devices, as well as how these components work. Several application layer protocols will also be studied, including HTTP, E-mail, DNS and DHCP.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CPSC 320: Two-Dimensional Game Development

This course expands two-dimensional game concepts from the Fundamentals of Game Development course. Topics in this course include focusing on production and testing, team collaboration on detailed design, interdisciplinary integration of the arts and engineering skills, game development project management, and applications of artificial intelligence (AI). Students will have an opportunity to create two or more original 2-D games.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CPSC 323: Three-Dimensional Game Development

This course is a continuation of the Fundamentals of Game Development with a focus on the production phase and launching the game. Students will continue utilizing their interdisciplinary skills to collaborate on common projects, finetune game engine skills along with other state-of-the-art tools, and develop games. Students will also have the opportunity to learn three-dimensional concepts and tools related to augmented reality (AR), virtual reality (VR), legal, and game security fundamentals. Students will implement two or more original games using these aspects of game development.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CPSC 325: Introduction to Computer Science Theory

This course covers computer science skills required to understand, model, and devise efficient solutions for problems. These skills include techniques for modeling problems, determining inherent complexity of problems, devising appropriate solutions for problems, and analyzing the efficiency of problem solutions. Topics include automata theory, computability theory, computational complexity, and algorithm design strategies.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CPSC 328: Network and Secure Programming

This course provides coverage of the basics of network programming methodology and implementation with inclusion of relevant aspects of security. Topics that will be covered are network protocols and interprocess communication (IPC) facilities, including pipes and sockets. Applications using both UDP and TCP will be implemented and analyzed. Both the client and server sides of network applications will be designed and implemented. Application layer security requirements will also be discussed.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CPSC 330: Introduction to Mobile Architecture and Systems

This course introduces students to the concepts of technology mobility and the role that new and smaller computing devices play in new systems development. The student will be introduced to the field of mobile systems architecture and apply this knowledge to the creation of architectures using both mobile and traditional computing resources. Following this the student will learn about development using today's popular mobile devices and develop their own architecture and system based on mobile devices.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CPSC 341: Introduction to Information Security

This course is an introduction to the basic concepts of information security. Topics include security threats, attacks, defenses against attacks, risk management, basic cryptography, and trusted information systems. Students will have an opportunity to learn a variety of state-of the-art tools that are being used in industry. There will be hands-on applications to strengthen concepts learned in class.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CPSC 342: Web Technologies

This course is an introduction to the basic concepts of technologies that are used on the Web. Topics include: Web basics, standards, and infrastructure, client/server architecture on the Web, page presentation using markup languages and style sheets, the Document Object Model (DOM), client-side programming and server-side programming, Web data representation, and Web services.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CPSC 343: Operating Systems

This course is an introduction to the basic software components of an operating system. Topics include process management, storage management, processor management, auxiliary storage management, evaluation of an operating system's performance, networks, operating system security, case studies of particular operating systems.

CPSC 351: Digital Forensics

Digital Forensics entails the collection, organization, explanation, and presentation of evidence assembled in the course of investigations initiated by legal and law enforcement personnel to substantiate or refute legal proceedings of a criminal or non-criminal nature. Because computer scientists play a key role in defining and using technologies for digital forensics, their involvement in such activities is extremely critical. The purpose of this course is to engage the student into digital forensics activities from three viewpoints. The first viewpoint involves looking at digital forensics from the standpoint of the activities and issues faced by the digital forensics expert. The second viewpoint is to consider the nature of the contributions that computer scientists can make to the field of digital forensics through the creation and advancement of algorithms to aid in forensics analytical tasks. Finally the third viewpoint will be to examine digital forensics from the viewpoint of the legal personnel involved and to consider their requirements for evidence and explanation.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CPSC 354: Software Engineering I

This is the first course in a two semester capstone sequence. This course introduces the fundamental principles of software engineering. Coverage will include the System Development Lifecycle (SDLC) methodologies, capturing requirements, design modeling, project management, risk management, and quality assurance. Students will learn techniques for requirements elicitation, prioritization, validation, and specification. They will be introduced to various design models that are used to capture requirements.

CPSC 355: Software Engineering II

This is the second course in a two semester capstone sequence. This course presents the advanced principles of software engineering. Coverage will include the professional responsibilities of the software engineer, implementation, testing, configuration management, and the project management. Students will be introduced to different development and testing approaches.

CPSC 356: Introduction to Database Management Systems

Database technology is fundamental to all information technology. Seldom is there a system that has been developed today

without some kind of database component. This course provides the students with a fundamental understanding of database concepts, how to create, modify, and access databases, the different types of databases, and an introduction to advanced database topics.

CPSC 361: Finite Automata and Formal Languages

An introduction to finite state automata and regular expressions; the Myhill Nerode theorem and the minimization of finite automata; context free grammars, the Chomsky normal form; the Greibach normal form, and push-down automata; properties of context free languages; Turing machines; computability and the halting problem, the Chomsky hierarchy; deterministic context free languages and LR(k) grammars.

CPSC 363: Interdisciplinary Software Rapid Prototyping

This course combines students from computer science and information technology programs with students taking a course offered by another academic department into interdisciplinary teams that solve a problem or create a prototype product within the domain of that application discipline or disciplines. Student teams analyze problems or opportunities in the disciplinary application domain. They use rapid prototyping techniques that combine off-the-shelf software and custom software to create a prototype software system, and they present or exhibit this system to an audience interested in the domain.

CPSC 380: Cooperative Internship In Computer Science II

Continuing supervised industrial experience in computer programming and related areas. Available only to CS majors. In this internship the student must function more independently and engage in projects of greater complexity than those of CPSC 280.

CPSC 385: Computer Science Seminar

This course is used to satisfy the senior seminar requirement for CSC majors. The course is designed to integrate the student's work in the CSC major and to provide opportunity for the student to engage in a significant project to structure and apply CSC content and procedures.

CPSC 395: Honors Independent Study/Thesis

Honors Independent Study/Thesis.

CPSC 398: Honors Supplementary Research

Supplementary research conducted by an Honors student in an upper-division (or 300 or 400-level) course in which the student is enrolled. The research is related to a topic in the course, but in addition to the standard requirements of the course, the research should exhibit advanced inquiry or investigation into the topic. The Honors student earns 1, 2, or 3 credits in addition to the credits for the course itself. The number of additional credits depends on the amount and intensity of the supplementary research. Each department in the College of Liberal Arts and Sciences has a specific course number which uses the departmental prefix, but all courses will use a common number (398). The course title will read "Honors Supplementary Research" and will have a variable credit value from 1 to 3 credits, e.g. ENGL 398 Honors Supplementary Research.

CPSC 402: Data Structures II

This course is the second course in data structures. It is designed to present the computer science student with further depth of knowledge in a continuation of CPSC 237, Data Structures. The course is a study in advanced topics of data structures focusing on their structure, efficiency and application. Data structures introduced or expanded include graphs, sets and trees.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CPSC 411: Advanced Networking

This course deals with the theory, implementation and administration of networks. It is also concerned with the various layers of Internet architecture stack, with concentration on layers 3 and 4. The primary protocols for these layers, Transmission Control Protocol (TCP) and Internet Protocol (IP), will be studied in detail. Network addressing and related protocols will also be

covered.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CPSC 415: Design and Analysis of Algorithms I

This course examines the designing techniques and analysis tests for algorithms. Contents include divide and conquer technique, greedy algorithms, dynamic programming, basic search and traversal techniques, and backtracking.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CPSC 421: Web-Based Software Design and Development

This course introduces the students to web-based software design. Using object-oriented techniques, the students will learn how to develop mainly on the client side of event-based web applications. Projects will build off of rudimentary knowledge of event-based design. Those foundations will be expanded upon to create web-based software, including software that communicates over the Internet, and to add multimedia enhancements, including audio, video, and animation. The completion of projects using these features is an integral part of the course.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CPSC 422: Object Oriented Programming I

This course presents the main concepts and components involved in object-oriented development and technology. It presents a comprehensive methodology for program development. The course deals with finding an object-oriented approach to analysis, design, and programming.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CPSC 425: Compiler Design I

Content of this course includes multi-phase translation, lexical analysis, parsing, LL, LR, and LALR parser constructors, error recovery, symbol table organization, static semantic analysis, and the interpretation of formal semantics.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CPSC 441: Advanced Information Security and Ethical Hacking

This course is an in-depth study of security threats and attacks, and cryptosystems. The course also demonstrates the ethical use of various cyber penetration testing tools and techniques. Students are exposed to various computer hacking skills and analyze various protective measures and their effectiveness. Steps in the ethical hacking process include reconnaissance/footprinting, scan/enumerate, gain access, maintain access and clear tracks.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CPSC 445: Introduction to Intelligent Robotics

This course deals with the theory and implementation of intelligent robotics and autonomous agents. The history, fundamental principles, elements, and algorithms of intelligent robots, both in simulation and in the real world, will be examined. Fundamental issues and debates regarding design and implementation and their roots in knowledge representation and theoretical computer science will be investigated. Using the knowledge gained, students will implement actual designs.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CPSC 447: Artificial Intelligence I

An overview of artificial intelligence is presented, including its history, concepts and techniques. Also covered is an introduction to theorem proving and planning (using STRIPS style operators).

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CPSC 456: Database Management Systems I

Database systems are an integral component of almost every information technology system. This course introduces essential database concepts, data models, data base design principles, data normalization, and query languages primarily from a relational database point of view. Various real-world problems of moderate to high complexity are discussed to design and implement database applications.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CPSC 458: Data Mining and Predictive Analytics I

Many academic and commercial endeavors apply the techniques of data mining and predictive analytics to their data sets. Students taking this course will learn methods and software tools for locating and obtaining data of interest, for preparing data for semi-automated analysis, for interacting with software tools in analyzing data for patterns, for visualizing structural and dynamic patterns in data, and for designing systems that respond to patterns in data. Data cleaning and formatting require some programming in a modem scripting language. Other course activities include learning to use off-the-shelf software tools to accomplish the tasks of data analysis.

CPSC 459: Introduction to Big Data

This course explores key data management and analysis techniques, which deal with massive datasets to enable real-time decision-making in distributed environments, business intelligence in the Web, and scientific discovery in a large scale. In particular, map-reduce parallel computing paradigms and associated technologies, such as distributed file systems, noSQL databases, and basic machine learning methods, will be explored.

CPSC 464: Human Computer Interaction

This course is designed to provide an understanding of the principles of user interface design for software, and also to gain practical experience designing interfaces for existing software applications.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CPSC 472: Independent Study and/or Projects in Computer Science

This course involves individual independent study in some area of computer science under the direction of a CSC group staff member. This study can be made in any of the areas of analog and hybrid computers, artificial intelligence, automate theory, business information systems, computer-aided design, computer-assisted instructions, computer graphics, computer mechanisms and devices, computer systems, computer telecommunication, computer typesetting, information retrieval, linguistic processing, mechanical languages, numerical analysis, programming theory, or switching systems and logical design, and others. A student may register for this course more than once up to a maximum of six hours of credit.

CPSC 480: Selected Topics in Computer Science

An in-depth study of a specialized area of computer science. Content will vary from semester to semester. May be repeated with a different topic.

Crafts

CRFT 51: Wood Design for Non Majors

Fundamentals of woodworking techniques and furniture design are studied, including fabrication, simple joinery and finishing for non majors. This course is a General Education elective to permit students with little or no art background to enrich their education through the study of woodwork without having to compete with students planning to become professional artists or craftpersons. Use and care of machine and hand woodworking tools are included.

CRFT 61: Fine Metals for Non Majors

Experiences are centered on the creation of jewelry and metal crafts for Non Majors. This course is a General Education elective to permit students with little or no art background to enrich their education through the study of jewelry and metalcrafts without having to compete with students planning to become professional artists or craftpersons. Emphasis on basic fundamental techniques leads to an experimental use of metals, semi-precious stones, and other materials appropriate to the construction of jewelry, hollowware, and metal sculpture.

CRFT 110: Craft Design

This course is an initial exploration of design concepts and techniques related to basic craft processes. Emphasis is placed on individual production in a variety of materials. Students are required to produce craft objects in a minimum of four craft areas. A minimum of 3 hours of work outside of class is required per week.

CRFT 151: Wood Design I

Fundamentals of woodworking techniques and furniture design are studied, including fabrication, simple joinery and finishing. Use and care of machine and hand woodworking tools are included. A minimum of 3 hours of work outside of class is required per week.

CRFT 161: Fine Metals I

Experiences are centered around the creation of jewelry and metalcrafts. Emphasis on fundamental techniques leads to an experimental use of metals, semi-precious stones, and other materials appropriate to the construction of jewelry, holloware and metal sculpture. A minimum of 3 hours of work outside of class is required per week.

CRFT 221: Ceramics II

This advanced exploration of the clay medium builds on the skills acquired in Ceramics I. The relationship of technique to concept will be explored with an emphasis on craftsmanship. Both functional and non-functional clay objects will be produced. Students are expected to fulfill all the course requirements assigned in relationship to the number of credit hours earned. A minimum of 3 hours of work outside of class is required per week. (6 c.h., 3 s.h.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CRFT 231: Weaving II

Advanced weaving includes techniques appropriate for two-, four- and multi-harness looms, stemming from basic techniques developed in Weaving I. Emphasis is placed upon individual design techniques and the development of personal approaches to weaving. Students are expected to fulfill all the course requirements assigned in relationship to the number of credit hours earned. A minimum of 3 hours of work outside of class is required per week. (6 c.h., 3 s.h.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CRFT 241: Textiles and Material Studies II

Advanced techniques and complex fabric structures are investigated and developed. The student focuses upon aesthetic concepts appropriate for fibers and fabric construction. Students are expected to fulfill all the course requirements assigned in relationship to the number of credit hours earned. A minimum of 3 hours of work outside of class is required per week. (6 c.h., 3 s.h.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CRFT 251: Wood Design II

The course offers advanced study in woodworking techniques and furniture design which include inlay, lathe turning, and various joinery techniques. Care and maintenance of machinery are included. Students are expected to fulfill all the course requirements assigned in relationship to the number of credit hours earned. A minimum of 3 hours of work outside of class is required per week. (6 c.h., 3 s.h.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CRFT 261: Fine Metals II

The creation of unique pieces of jewelry and metal objects becomes the primary emphasis of this course. Advanced techniques of construction and ornamentation will be studied. Areas to be explored by the student include enameling, hollowware, prong settings, repousse (chasing). Works of historic and contemporary significance will be studied. Students are expected to fulfill all the course requirements assigned in relationship to the number of credit hours earned. A minimum of 3 hours of work outside of class is required per week. (6 c.h., 3 s.h.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CRFT 268: Enameling

This course will introduce the fundamental skills and techniques of vitreous enamel. In addition to the basic and traditional techniques, the student will explore an experimental approach with a contemporary direction emphasizing aesthetics, conceptual, and formal concerns. Finished pieces may include, but are not limited to, objects of adornment, vessels, and objects as statement. This course may be used by Fine Metal majors in place of CRFT 361, CRFT 362, CRFT 363, CRFT 364, or CRFT 365. (Repeatable up to 6 semester hours.) Students are expected to fulfill all the course requirements assigned in relationship to the number of credit hours earned. A minimum of 3 hours of work outside of class is required per week. (6 c.h., 3 s.h.)

CRFT 322: Ceramics Studio II

Further advanced study of the ceramic medium is undertaken with an emphasis on concentration in areas of the student's choice. Coursework includes research and experimentation which culminate in the resolution of both technical and conceptual concerns. Technical and conceptual concerns will be addressed in a demonstration/lecture seminar format. (Repeatable up to 15 s.h. with a 6 s.h. maximum per semester.) Students are expected to fulfill all the course requirements assigned in relationship to the number of credit hours earned. This course is repeatable up to five (5) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Craft Studios. Students will develop their personal imagery, critical and creative capabilities, and technical ability. They will also increase their knowledge of relevant processes, techniques, and their understanding of the work of contemporary and historical crafts and craft movements. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of 3 hours of work outside of class is required per week. (6 c.h., 3 s.h.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CRFT 323: Ceramics Studio III

Further advanced study of the ceramic medium is undertaken with an emphasis on concentration in areas of the student's choice. Coursework includes research and experimentation which culminate in the resolution of both technical and conceptual concerns. Technical and conceptual concerns will be addressed in a demonstration/lecture seminar format. (Repeatable up to 15 s.h. with a 6 s.h. maximum per semester.) Students are expected to fulfill all the course requirements assigned in relationship to the number of credit hours earned. This course is repeatable up to five (5) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Craft Studios. Students will develop their personal imagery,

critical and creative capabilities, and technical ability. They will also increase their knowledge of relevant processes, techniques, and their understanding of the work of contemporary and historical crafts and craft movements. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of 3 hours of work outside of class is required per week. (6 c.h., 3 s.h.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CRFT 324: Ceramics Studio IV

Further advanced study of the ceramic medium is undertaken with an emphasis on concentration in areas of the student's choice. Coursework includes research and experimentation which culminate in the resolution of both technical and conceptual concerns. Technical and conceptual concerns will be addressed in a demonstration/lecture seminar format. (Repeatable up to 15 s.h. with a 6 s.h. maximum per semester.) Students are expected to fulfill all the course requirements assigned in relationship to the number of credit hours earned. This course is repeatable up to five (5) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Craft Studios. Students will develop their personal imagery, critical and creative capabilities, and technical ability. They will also increase their knowledge of relevant processes, techniques, and their understanding of the work of contemporary and historical crafts and craft movements. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of 3 hours of work outside of class is required per week. (6 c.h., 3 s.h.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CRFT 325: Ceramics Studio V

Further advanced study of the ceramic medium is undertaken with an emphasis on concentration in areas of the student's choice. Coursework includes research and experimentation which culminate in the resolution of both technical and conceptual concerns. Technical and conceptual concerns will be addressed in a demonstration/lecture seminar format. (Repeatable up to 15 s.h. with a 6 s.h. maximum per semester.) Students are expected to fulfill all the course requirements assigned in relationship to the number of credit hours earned. This course is repeatable up to five (5) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Craft Studios. Students will develop their personal imagery, critical and creative capabilities, and technical ability. They will also increase their knowledge of relevant processes, techniques, and their understanding of the work of contemporary and historical crafts and craft movements. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of 3 hours of work outside of class is required per week. (6 c.h., 3 s.h.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CRFT 331: Weaving Studio I

Individual advanced studio experiences include work on standard four- and multi-harness looms as well as primitive weaving devices. The course allows the student to enlarge a vocabulary of weaving techniques and to concentrate upon areas of special interest. Conceptual, technical and critical development in weaving is emphasized within the development of a personal style. (Repeatable up to 15 s.h. with a 6 s.h. maximum per semester.) Students are expected to fulfill all the course requirements assigned in relationship to the number of credit hours earned. This course is repeatable up to five (5) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Craft Studios. Students will develop their personal imagery, critical and creative capabilities, and technical ability. They will also increase their knowledge of relevant processes, techniques, and their understanding of the work of contemporary and historical crafts and craft movements. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of 3 hours of work outside of class is required per week. (6 c.h., 3 s.h.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CRFT 332: Weaving Studio II

Individual advanced studio experiences include work on standard four- and multi-harness looms as well as primitive weaving

devices. The course allows the student to enlarge a vocabulary of weaving techniques and to concentrate upon areas of special interest. Conceptual, technical and critical development in weaving is emphasized within the development of a personal style. (Repeatable up to 15 s.h. with a 6 s.h. maximum per semester.) Students are expected to fulfill all the course requirements assigned in relationship to the number of credit hours earned. This course is repeatable up to five (5) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Craft Studios. Students will develop their personal imagery, critical and creative capabilities, and technical ability. They will also increase their knowledge of relevant processes, techniques, and their understanding of the work of contemporary and historical crafts and craft movements. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of 3 hours of work outside of class is required per week. (6 c.h., 3 s.h.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CRFT 333: Weaving Studio III

Individual advanced studio experiences include work on standard four- and multi-harness looms as well as primitive weaving devices. The course allows the student to enlarge a vocabulary of weaving techniques and to concentrate upon areas of special interest. Conceptual, technical and critical development in weaving is emphasized within the development of a personal style. (Repeatable up to 15 s.h. with a 6 s.h. maximum per semester.) Students are expected to fulfill all the course requirements assigned in relationship to the number of credit hours earned. This course is repeatable up to five (5) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Craft Studios. Students will develop their personal imagery, critical and creative capabilities, and technical ability. They will also increase their knowledge of relevant processes, techniques, and their understanding of the work of contemporary and historical crafts and craft movements. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of 3 hours of work outside of class is required per week. (6 c.h., 3 s.h.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CRFT 334: Weaving Studio IV

Individual advanced studio experiences include work on standard four- and multi-harness looms as well as primitive weaving devices. The course allows the student to enlarge a vocabulary of weaving techniques and to concentrate upon areas of special interest. Conceptual, technical and critical development in weaving is emphasized within the development of a personal style. (Repeatable up to 15 s.h. with a 6 s.h. maximum per semester.) Students are expected to fulfill all the course requirements assigned in relationship to the number of credit hours earned. This course is repeatable up to five (5) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Craft Studios. Students will develop their personal imagery, critical and creative capabilities, and technical ability. They will also increase their knowledge of relevant processes, techniques, and their understanding of the work of contemporary and historical crafts and craft movements. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of 3 hours of work outside of class is required per week. (6 c.h., 3 s.h.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CRFT 335: Weaving Studio V

Individual advanced studio experiences include work on standard four- and multi-harness looms as well as primitive weaving devices. The course allows the student to enlarge a vocabulary of weaving techniques and to concentrate upon areas of special interest. Conceptual, technical and critical development in weaving is emphasized within the development of a personal style. (Repeatable up to 15 s.h. with a 6 s.h. maximum per semester.) Students are expected to fulfill all the course requirements assigned in relationship to the number of credit hours earned. This course is repeatable up to five (5) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Craft Studios. Students will develop their personal imagery, critical and creative capabilities, and technical ability. They will also increase their knowledge of relevant processes, techniques, and their understanding of the work of contemporary and historical crafts and craft movements. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work

through juried exhibitions and on-campus venues. A minimum of 3 hours of work outside of class is required per week. (6 c.h., 3 s.h.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CRFT 341: Textiles Studio I

Individual studio problems in non-loom fiber and fabric constructions offer the advanced student an opportunity to pursue interests in complex two- and three-dimensional forms. Production problems for the fiber artist are considered. (Repeatable up to 15 s.h. with a 6 s.h. maximum per semester.) Students are expected to fulfill all the course requirements assigned in relationship to the number of credit hours earned. This course is repeatable up to five (5) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Craft Studios. Students will develop their personal imagery, critical and creative capabilities, and technical ability. They will also increase their knowledge of relevant processes, techniques, and their understanding of the work of contemporary and historical crafts and craft movements. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of 3 hours of work outside of class is required per week. (6 c.h., 3 s.h.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CRFT 342: Textiles Studio II

Individual studio problems in non-loom fiber and fabric constructions offer the advanced student an opportunity to pursue interests in complex two- and three-dimensional forms. Production problems for the fiber artist are considered. (Repeatable up to 15 s.h. with a 6 s.h. maximum per semester.) Students are expected to fulfill all the course requirements assigned in relationship to the number of credit hours earned. This course is repeatable up to five (5) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Craft Studios. Students will develop their personal imagery, critical and creative capabilities, and technical ability. They will also increase their knowledge of relevant processes, techniques, and their understanding of the work of contemporary and historical crafts and craft movements. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of 3 hours of work outside of class is required per week. (6 c.h., 3 s.h.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CRFT 343: Textiles Studio III

Individual studio problems in non-loom fiber and fabric constructions offer the advanced student an opportunity to pursue interests in complex two- and three-dimensional forms. Production problems for the fiber artist are considered. (Repeatable up to 15 s.h. with a 6 s.h. maximum per semester.) Students are expected to fulfill all the course requirements assigned in relationship to the number of credit hours earned. This course is repeatable up to five (5) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Craft Studios. Students will develop their personal imagery, critical and creative capabilities, and technical ability. They will also increase their knowledge of relevant processes, techniques, and their understanding of the work of contemporary and historical crafts and craft movements. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of 3 hours of work outside of class is required per week. (6 c.h., 3 s.h.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CRFT 344: Textiles Studio IV

Individual studio problems in non-loom fiber and fabric constructions offer the advanced student an opportunity to pursue interests in complex two- and three-dimensional forms. Production problems for the fiber artist are considered. (Repeatable up to 15 s.h. with a 6 s.h. maximum per semester.) Students are expected to fulfill all the course requirements assigned in relationship to the number of credit hours earned. This course is repeatable up to five (5) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Craft Studios. Students will develop their personal imagery, critical and creative capabilities, and technical ability. They will also increase their knowledge of relevant processes, techniques, and their understanding of the work of contemporary and historical crafts and craft movements. At the more advanced levels of

Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of 3 hours of work outside of class is required per week. (6 c.h., 3 s.h.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CRFT 345: Textiles Studio V

Individual studio problems in non-loom fiber and fabric constructions offer the advanced student an opportunity to pursue interests in complex two- and three-dimensional forms. Production problems for the fiber artist are considered. (Repeatable up to 15 s.h. with a 6 s.h. maximum per semester.) Students are expected to fulfill all the course requirements assigned in relationship to the number of credit hours earned. This course is repeatable up to five (5) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Craft Studios. Students will develop their personal imagery, critical and creative capabilities, and technical ability. They will also increase their knowledge of relevant processes, techniques, and their understanding of the work of contemporary and historical crafts and craft movements. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of 3 hours of work outside of class is required per week. (6 c.h., 3 s.h.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CRFT 361: Fine Metals Studio I

Advanced study in jewelry and metal design is undertaken with an emphasis on concentration in areas of the student's choice. Course work includes research and experimentation in advanced techniques. Conceptual, production and technical concerns are addressed. (Repeatable up to 15 s.h. with a 6 s.h. maximum per semester.) Students are expected to fulfill all the course requirements assigned in relationship to the number of credit hours earned. This course is repeatable up to five (5) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Craft Studios. Students will develop their personal imagery, critical and creative capabilities, and technical ability. They will also increase their knowledge of relevant processes, techniques, and their understanding of the work of contemporary and historical crafts and craft movements. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of 3 hours of work outside of class is required per week. (6 c.h., 3 s.h.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CRFT 362: Fine Metals Studio II

Advanced study in jewelry and metal design is undertaken with an emphasis on concentration in areas of the student's choice. Course work includes research and experimentation in advanced techniques. Conceptual, production and technical concerns are addressed. (Repeatable up to 15 s.h. with a 6 s.h. maximum per semester.) Students are expected to fulfill all the course requirements assigned in relationship to the number of credit hours earned. This course is repeatable up to five (5) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Craft Studios. Students will develop their personal imagery, critical and creative capabilities, and technical ability. They will also increase their knowledge of relevant processes, techniques, and their understanding of the work of contemporary and historical crafts and craft movements. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of 3 hours of work outside of class is required per week. (6 c.h., 3 s.h.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CRFT 363: Fine Metals Studio III

Advanced study in jewelry and metal design is undertaken with an emphasis on concentration in areas of the student's choice. Course work includes research and experimentation in advanced techniques. Conceptual, production and technical concerns are addressed. (Repeatable up to 15 s.h. with a 6 s.h. maximum per semester.) Students are expected to fulfill all the course requirements assigned in relationship to the number of credit hours earned. This course is repeatable up to five (5) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Craft Studios.

Students will develop their personal imagery, critical and creative capabilities, and technical ability. They will also increase their knowledge of relevant processes, techniques, and their understanding of the work of contemporary and historical crafts and craft movements. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of 3 hours of work outside of class is required per week. (6 c.h., 3 s.h.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CRFT 364: Fine Metals Studio IV

Advanced study in jewelry and metal design is undertaken with an emphasis on concentration in areas of the student's choice. Course work includes research and experimentation in advanced techniques. Conceptual, production and technical concerns are addressed. (Repeatable up to 15 s.h. with a 6 s.h. maximum per semester.) Students are expected to fulfill all the course requirements assigned in relationship to the number of credit hours earned. This course is repeatable up to five (5) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Craft Studios. Students will develop their personal imagery, critical and creative capabilities, and technical ability. They will also increase their knowledge of relevant processes, techniques, and their understanding of the work of contemporary and historical crafts and craft movements. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of 3 hours of work outside of class is required per week. (6 c.h., 3 s.h.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CRFT 365: Fine Metals Studio V

Advanced study in jewelry and metal design is undertaken with an emphasis on concentration in areas of the student's choice. Course work includes research and experimentation in advanced techniques. Conceptual, production and technical concerns are addressed. (Repeatable up to 15 s.h. with a 6 s.h. maximum per semester.) Students are expected to fulfill all the course requirements assigned in relationship to the number of credit hours earned. This course is repeatable up to five (5) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Craft Studios. Students will develop their personal imagery, critical and creative capabilities, and technical ability. They will also increase their knowledge of relevant processes, techniques, and their understanding of the work of contemporary and historical crafts and craft movements. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of 3 hours of work outside of class is required per week. (6 c.h., 3 s.h.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CRFT 370: Selected Topics In Crafts

Students in this course will have the opportunity to explore special topics, issues, and creative practices related to crafts. Under this prefix, different topics, which provide distinctive learning experiences, will be offered periodically. The specific topic(s) offered for each semester will be listed in the schedule. Instruction will be through art studios. A minimum of 3 hours of work outside of class is required per week. Repeatable up to 12 s.h. (6 c.h., 3 s.h.)

CRFT 381: Professional Practices: Entrepreneurial Studies

This seminar includes an investigation of the nature of crafts and the influence of history on contemporary crafts. It also covers specific areas of professional concern, such as crafts economics, ethics and safety. During the semester, the students prepare their senior portfolio, compile a business proposal, deliver a teaching presentation to the class, develop a research paper, and assist in a joint student exhibition project.

CRFT 392: Field Experience in Craft

This course is designed to provide the student with educational opportunities outside the normal academic program that cannot be gained through the more traditional course structure. By serving as apprentices, interns, aides, or assistants in a variety of settings ranging from public institutions to private industries, businesses, and studios, the student will be able to augment and extend his or her educational experiences to achieve specific personal professional career objectives. Variable credit 1 to 16 semester hours. Minimum of two hours field experience per week or thirty hours per semester for each academic credit hour.

CRFT 395: Honors Independent Study/Thesis

Honors Independent Study/Thesis.

CRFT 399: Student Exhibition

This student exhibition is a requirement for graduation. All BFA-Crafts degree candidates participate in a Senior Show. Seniors who will be graduated in December register for the senior exhibition held at the end of the Fall semester. Seniors who will be graduated in May or at the end of either of the two Summer Sessions register to participate in the senior shows held during the Spring Semester. Participation in a Senior Show is defined as showing at least one piece/documentation/record within the confines of the display area being used for the exhibition (usually the Sharadin Art Gallery). Showing work in alternate spaces on campus, and not in the Senior Show, will not satisfy the graduation requirement.

Criminal Justice

CRJU 10: Introduction to Criminal Justice

This is a course designed to provide the student with a broad, but basic, understanding of the criminal justice system. As the first course to be taken in the field of criminal justice, it will introduce the student to the roles of the police, prosecutor, criminal court, and treatment and correctional facilities within the system. With the completion of this course, the student will be familiar with the essentials of the criminal justice system. Prerequisite to all other courses in criminal justice.

CRJU 101: Introduction to Policing

This course examines the concepts and practices of police agencies in the United States. Police service is discussed as being an essential element in society's over-all effort to establish order. Factors that contribute to the definition of order and the means to achieve it provide the model for analyzing organizational structures for delivering police service in a diverse society. This course is of particular interest to majors in human services.

CRJU 121: Introduction to Law

This course will introduce the student to various types of law that comprise the American legal system. The course is designed to provide the student with a basic understanding of western legal theory and constitutional legal history, criminal law, tort law, contract law, environmental law, family law, antitrust and consumer law, administrative law, property law, and federal torts: civil liability law. After completion of the course the student will have a foundation on which to build upon when taking more advanced and focused legal theory and applied courses.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CRJU 170: Introduction to Security Management

This course examines the nature and scope of private security in modern society from historical, philosophical, and legal perspectives. It also addresses the latest trends and concerns in the security industry today. Basic principles of administration, organization, and operation of security and protection units are explored with an emphasis on the management aspect of the private security industry.

CRJU 171: Loss Prevention and Asset Protection

This course examines the theory and application of proactive measures to avoid or minimize industrial loss caused by criminal action as well as non-criminal events resulting from human error, natural disasters, and emergencies.

CRJU 175: Criminal Justice Organizations and Systems

This survey course will introduce students to organizational theory, examine local and state criminal justice agencies as organizations, explain the specific functions of each agency, and explore the reality of whether criminal justice operates as a system. The course will also introduce the student to the development and implementation of criminal justice policy at the local and state levels.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CRJU 181: Criminal Law

This course is an in-depth analysis of criminal law in the United States. It focuses on the nature and purposes of criminal law, the sources of classifications and limitations on criminal law, the elements of criminal liability, defenses to criminal liability, parties to crime and the specific crimes against persons, property and public order and morals. Attention will be given to the model penal code and the criminal law of Pennsylvania.

CRJU 182: Criminal Procedure

An extensive analysis of criminal procedure in the United States. The course will focus on decisions of the U.S. Supreme Court dealing with criminal procedure principles and doctrines. This course is designed as a follow-up course to Criminal Law.

CRJU 190: Federal Law Enforcement

This course examines the structure, authority, history, and jurisdiction of federal law enforcement, and its relationships with other state and local law enforcement agencies. The students will explore how federal law enforcement has evolved since this nation was formed and how its organizations have responded to the changing needs of the nation.

CRJU 200: Comparative Criminal Justice Systems

This course is structured to cover the four major criminal justice systems in the world. It offers a topical approach, comparing cross-national criminal justice systems based on substantive and procedural laws, police, corrections, and juvenile justice. In addition, the course explores genocide and the international criminal tribunals that are organized under the auspices of the United Nations.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CRJU 210: The Development of the Criminal Justice System

A history of the American criminal justice system from the colonial period through the twenty-first century. This course provides an overview of the origin, development, operation and impact of police, courts, law, corrections and the juvenile justice system. Major analytical perspectives on American social control are described and analyzed.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CRJU 215: Introduction to Crime Mapping and Analysis

This course provides an introduction to the theoretical and practical aspects of spatial analysis of crime. The foundational topics that will be covered include theories of crime and place, data and analytical techniques, detecting crime trends and hotspots, linking and forecasting crimes. In addition, the crime mapping software such as ArcGIS will be demonstrated to students throughout the course.

CRJU 221: Juvenile Justice System

An introduction to the agencies and processes involved in handling juveniles who are suspected or accused of violating the law; examination of the principles upon which the juvenile justice system is based; and analysis of the differences in procedure

with the adult justice system.

CRJU 232: Diversity in the Criminal Justice System

Criminal practitioners deal with diverse populations on a daily basis. The concept of diversity can be applied to a range of population characteristics. The primary characteristics explored in this course will be race, ethnicity, and gender. This course explores issues stemming from this diversity as they affect victims, offenders and professionals in the criminal justice system.

CRJU 250: Criminology

An intensive review of the major theories of criminal behavior and their applications in crime prevention and control. Examination of leading crime types and criminal behavior systems.

CRJU 270: Management of Offenders

This course is a survey of history, current practices, and offender characteristics in adult corrections. It includes a critical review of treatment and control strategies.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CRJU 271: Substance Abuse and Crime

This course surveys the concept of addictive substances, the relationships between substance abuse and crime, treatment modalities for the addictions, and the role of the criminal justice system in managing substance abusing offenders.

CRJU 272: Community Corrections

This course examines the structure and functions of community correctional agencies including those involved with pretrial release, probation, intermediate sanctions, and parole. Each of the areas explores current practices and their empirical bases.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CRJU 273: Career Criminals and Criminal Careers

This course is designed to introduce students to major psychological perspectives on crime by examining and integrating the career criminal and criminal career paradigms that link the fields of psychology and criminology. Students will learn that integrating the career criminal and criminal career paradigms provides them with a deeper and more comprehensive understanding of criminal behavior than either paradigm is capable of alone.

CRJU 274: Policy, Punishment and Society

This course provides an in-depth look into policy issues related to incarceration, with a particular emphasis on inmate experiences and how they might be shaped by societal perceptions of crime and punishment. Correctional practices will be used as a focal point of discussion for understanding the purposes and impact of incarceration on the U.S. population.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CRJU 280: Ethics in Criminal Justice

This course is structured to explore professional ethics in the various sectors of the criminal justice system in the United States. It covers ethical theories, the history of ethics, and contemporary ethical issues in law enforcement, courts, and corrections. The course examines various perspectives on justice, fairness, discretion, professional duties, and civic responsibilities from the Greek classical period to modernity and post-modernity.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CRJU 281: Crime and Delinquency Prevention

This course examines various strategies of crime and delinquency prevention in the United States. Theoretical frameworks underlying these strategies and their effectiveness will be evaluated based on research. The role of different social and criminal Justice agencies such as the media, school, neighborhood and police in crime and delinquency prevention will be addressed. Successful prevention initiatives employed in other countries will also be examined.

CRJU 301: Investigation and Intelligence

This course is a study of the role of information and information usage in the investigation of completed or predicted crime and the compilation of data useful in the anticipation of criminal or terroristic activities - either on American soil or abroad. The effects of varying scale of agency size and functions will be examined as key variables.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CRJU 320: Evidence

This course is designed to provide students with an in-depth understanding of the rules of evidence. The focus will be on evidence from the time it is collected until it is introduced in court. The emphasis will be on the Federal Rules of Evidence, which are applied in federal court in all fifty states and are similar to each state's rules of evidence. The student will examine evidentiary topics that commonly occur in criminal proceedings, including, but not limited to: hearsay, privileges, and constitutional issues regarding the collection and exclusion of evidence.

CRJU 321: Contemporary Legal Issues

This course is structured to explore contemporary legal issues and their impact on the criminal justice system. The course will examine the most recent Supreme Court and Circuit Court decisions that affect the criminal justice system. Recent cases and legal issues continue to involve the 4th, 5th, and 6th Amendments to the Constitution. The issues addressed by these cases may involve contemporary issues regarding individual rights, homeland security, victims' rights, terrorism, security, hate crimes, discrimination, search and seizure, and juvenile justice.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CRJU 322: National Security Law

This course will expose students to the framework of domestic laws – constitutional, statutory, and judicial – that define, support, and constrain the U.S. government's pursuit of national security policy, with an emphasis on national security law post-9/11. The course will focus on the foundations of national security powers, collecting intelligence, and the role of the criminal justice system as a national security tool.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CRJU 362: Research Methods in Criminal Justice

An introduction to research methods employed to study the causes of crime and to evaluate attempts to ameliorate crime on both individual and systems levels. Restricted to criminal justice majors and minors.

CRJU 370: Selected Topics in Criminal Justice

Extensive readings, critical evaluations and papers on selected research monographs relating to issues in Criminal Justice. Selection of topics will vary depending upon the needs of eligible students. Course may be repeated for credit.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CRJU 373: Selected Topics in Criminal Justice

Extensive readings, critical evaluations and papers on selected research monographs relating to issues in Criminal Justice.

Selection of topics will vary depending upon the needs of eligible students. Course may be repeated for credit.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CRJU 374: Selected Topics in Criminal Justice

Extensive readings, critical evaluations and papers on selected research monographs relating to issues in Criminal Justice. Selection of topics will vary depending upon the needs of eligible students. Course may be repeated for credit.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CRJU 375: Selected Topics in Criminal Justice

Extensive readings, critical evaluations and papers on selected research monographs relating to issues in Criminal Justice. Selection of topics will vary depending upon the needs of eligible students. Course may be repeated for credit.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CRJU 376: Selected Topics in Criminal Justice

Extensive readings, critical evaluations and papers on selected research monographs relating to issues in Criminal Justice. Selection of topics will vary depending upon the needs of eligible students. Course may be repeated for credit.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CRJU 377: Selected Topics in Criminal Justice

Extensive readings, critical evaluations and papers on selected research monographs relating to issues in Criminal Justice. Selection of topics will vary depending upon the needs of eligible students. Course may be repeated for credit.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CRJU 378: Selected Topics in Criminal Justice

Extensive readings, critical evaluations and papers on selected research monographs relating to issues in Criminal Justice. Selection of topics will vary depending upon the needs of eligible students. Course may be repeated for credit.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CRJU 379: Independent Study

The student must confer, and reach agreement, with the faculty member who will guide the independent study. The student and the faculty member must agree upon a topic, course content, evaluation procedures, reading list, and amount of credit prior to registration for the course. This material (course content, evaluation procedures, reading list, etc.) must be filed with, and receive the approval of, the faculty of the discipline involved and of the departmental chairperson.

CRJU 380: Senior Seminar in Criminal Justice

An interdisciplinary seminar devoted to the analysis of selected contemporary issues in criminal justice and to the integration of the student's previous studies and experiences.

CRJU 385: Police Academy Internship

Students who have enrolled in a police academy may enroll in the police academy internship program. This course allows students to earn free elective credits while completing academy training, which will help sh1dents find employment more quickly after graduation. Students must, however, demonstrate their academic and physical readiness for academy training prior to

enrolling in this course as failing the academy training will result in a substantial negative impact on the student's academic standing. It is strongly recommended that students not enroll in any other courses while completing academy training. This course may only count toward free elective credit hours.

CRJU 390: Internship in Criminal Justice I

Placement in a federal, state, local, or private criminal justice agency. Students will gain firsthand, practical experience in the operation of law enforcement, courts, corrections, juvenile justice, or private security agencies.

CRJU 392: Field Work in Criminal Justice II

Placement in a federal, state, local, or private criminal justice agency. Students will gain firsthand, practical experience in the operation of law enforcement, courts, corrections, juvenile justice, or private security agencies.

CRJU 395: Honors Independent Study/Thesis

Honors Independent Study/Thesis.

CRJU 398: Honors Supplementary Research

Supplementary research conducted by an Honors student in an upper-division (or 300 or 400-level) course in which the student is enrolled. The research is related to a topic in the course, but in addition to the standard requirements of the course, the research should exhibit advanced inquiry or investigation into the topic. The Honors student earns 1, 2, or 3 credits in addition to the credits for the course itself. The number of additional credits depends on the amount and intensity of the supplementary research. Each department in the College of Liberal Arts and Sciences has a specific course number which uses the departmental prefix, but all courses will use a common number (398). The course title will read "Honors Supplementary Research" and will have a variable credit value from 1 to 3 credits, e.g. ENGL 398 Honors Supplementary Research.

CRJU 410: Seminar In Criminal Justice

This course is a survey of the field of criminal justice with emphasis on criminal justice theory, classic studies of police, courts, and corrections, and contemporary issues. The course provides an analysis of the evolution of criminal justice institutions and systems and review of diversity and ethics issues in criminal justice.

CRJU 440: Criminal Justice Evaluation Research

This course examines methods of evaluating criminal justice policies, practices, and programs, including evaluability assessment and both process and impact evaluation. Students learn how to conduct evaluations as well as interpret evaluation studies conducted by others. The role of evaluation research in criminal justice planning and decision making is discussed.

Cinema, Television and Media

CTME 10: Introduction to Cinema, Television, and Media

A survey of the historical, technical, economic, regulatory, and social aspects of the electronic media. Traditional broadcast radio and broadcast and cable television systems are considered, as well as satellite, Web, and cellular media delivery. The convergence of mass media technologies and content is given particular consideration. The course also introduces students to electronic media programming, advertising, and audience measurement.

CTME 50: Audio Production

This course focuses on elements of designing, recording, editing, and mixing sound for cinema, television and media production. Students learn the skills of audio recording and mixing to produce realistic sound design for visual productions. Material applied to this course include microphone technique and placement, Field and Studio recording, and Foley/atmospheric creation. Additionally, manipulating these sounds within editing software expands the creative process.

CTME 55: Fundamentals of Studio Production

An introduction to the complete process of video production for professional use. Students learn how video works, how to plan a video production, how to operate various production equipment, how to produce a program, how to evaluate the quality of finished video productions, and how to determine the appropriate type of production for a given circumstance.

CTME 70: Scriptwriting

An introduction to the craft of writing for film, television, and emerging technologies. Students learn the process and appropriate formats needed for writing commercials, PSAs, promos, documentary outlines and proposals, and dramatic narratives. Students will learn to write for the screen by using shot composition, camera movement, and diegetic and non-diegetic audio.

CTME 130: Media Theory and Aesthetics

Beginning with a treatment of the process of human communication, this course introduces students to various theories of how media content reaches and affects audience members. The course follows the traditional approach to aesthetics as an understanding and perception of "beauty." It seeks to apply that approach to media production by exploring fundamental aesthetic considerations for producing effective media content. Specific treatment is given to such topics as narrative structure, visual and sound cues, image framing, lighting, and shot sequencing.

CTME 140: Lighting

This course presents advanced techniques, equipment and applications of lighting for video production. Topics introduced in basic production courses are being expanded upon, and new concepts will be introduced. Students conduct lab exercises in camera sensitivity, color balancing, image control, bounce light, lighting interiors, lighting exteriors, single subject interviews, 2-person interviews, master shots and close-ups.

CTME 160: Cinematography

This course introduces students to the artistic, theoretical and practical elements of cinematography. Students explore the technical and expressive capacities of lighting, composition, and visual-storytelling techniques. Image control exercises include manual camera operation and analysis of lenses, f-stop, shutter speed, and ISO. Students learn the techniques of location lighting with both natural and artificial light while studying historical and current stylistic trends.

CTME 180: Post-Production

This course focuses on video post-production equipment and techniques. Students produce programs using advanced post-production techniques.

CTME 205: Narrative Video Production

This course teaches the theoretical and practical foundations of single-camera narrative video production. Through lectures, scene analysis, and workshop exercises, students learn pre-production, production, and post-production storytelling strategies. Students utilize tools like directing and blocking actors as well as technical tools like camera lenses, lighting, shot composition, and sound design to tell compelling stories. Students write, direct, shoot and edit several narrative productions and rotate crew positions to learn the requirements of each crew position in each department. Students study the current landscape to learn how short productions and their aesthetics are shaping and contributing to the media industry.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CTME 206: Masterpieces in Film History

This course analyzes the films, directors, and movements that shaped the art of cinema from its birth to the present day. Students learn the production models, technological developments, and aesthetic techniques that define cinematic masterworks. This course also introduces students to popular film criticism and its contribution to the discussion of the cinematic "masterpiece."

CTME 211: Post-9/11 American Cinema

This course analyzes the history, aesthetics, business, and production techniques of post-9/11 American cinema. Students will examine how filmmakers continue to consider the power of popular film to function as a potent cultural artifact. Students will be able to reflect on defining fears and anxieties of this tumultuous era. Students will learn business models and technological advancements for production, distribution and exhibition. The course examines the evolution and shift towards realist aesthetics in film, and how the choice of a particular realism has an ideological significance; and the growth of global nature of 9/11 with reference to how Hollywood deals with American catastrophe in a global context.

CTME 218: Studio Production Practicum

This course offers practical experience in various television studio production crew positions and in all the elements required to produce a studio production. The student serves as a camera operator, floor manager, audio technician, assistant director, producer, and in other crew positions. Students are also responsible for writing scripts, gathering B-roll, and producing and editing short features appropriate to the content of the show. Lighting techniques and set design are also included.

CTME 220: Media Law and Ethics in the Digital Age

This course introduces students to state, federal and case laws as well as Constitutional issues pertaining to the fields of media, particularly television, film, video games, and online content. It traces their historical development and will explore their pertinence to today's technology and society. The course allows students to develop an understanding of legal rights and responsibilities working in the media industry as well as practical applications when creating media productions such as licensing, contracts, and distribution. The course also covers material such as freedom of the press, copyright, defamation, privacy issues, obscenity, and ethical considerations when creating media content.

CTME 222: The Evolution of Sports and the Media

The Evolution of Sports and the Media will engage students in exploring the origins of media involvement in the sports industry, the history of media coverage of professional sports, the effects of media in sports and techniques used for producing sporting events. This course does not have a production component.

CTME 240: Lighting for Cinema

This course presents advanced techniques, equipment, and applications of lighting for film and video production. Topics introduced in the lower-level production courses are expanded upon and new concepts are introduced. Students conduct lab exercises in lighting control techniques, color control techniques, lighting interiors, lighting exteriors, lighting for master shots and close-ups, and lighting for film and TV genres.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CTME 250: Engineering and Troubleshooting

Students learn basic video troubleshooting, basic technical terminology and concepts, operation of broadcast test equipment, and alignment and adjustment of video production equipment.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CTME 255: Field Production

This course introduces the student to basic single-camera field production. Students learn planning and production strategies for single-camera field productions. Emphasis is placed on shooting to edit. Students are introduced to fundamentals of nonlinear editing. Lighting and audio techniques for field production are treated in depth.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CTME 262: American Independent Cinema

This course analyzes the history, aesthetics, business, and production techniques of American independent cinema. Students

will examine how independent filmmakers worked in opposition to the Hollywood studio system and how those mavericks generated a new cinema and culture inside and outside the studio system. Students will learn how financial and technological limitations spawned personal artistic voices and unconventional filmmaking techniques. The course examines the latest trends in technology, financing and distribution and how independent filmmakers find an audience.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CTME 263: Cult Cinema

Cult cinema can be defined as weird, edgy or even nostalgic. A viewer of cult content can be labeled a tourist, one who travels in or out of this ambiguous world of pleasure, seeking connection with others who share a similar devotion. This course will examine the historical, contextual and cultural impact of cult films in Western and global cinema, focusing on four major elements: Anatomy, Consumption, Political Economy, and Cultural Status. Also, we will take a look at "camp," new media theory and recent adaptation theory as lenses of appreciation for each production. We'll discuss the evolution of cult cinema, the relationship to mainstream cinema concerns and how this genre challenges the conventional narrative. We'll view a set of outlandish, remarkable, and even funny films. Most importantly, how they work, how they affect us, and how they connect to an eclectic (small and large), rabid audience.

CTME 270: Script to Screen

An advanced course in scriptwriting for cinema, television and emerging media. Students will build their scriptwriting skills and further develop their craft for visual storytelling. The course focuses on advanced techniques in story and beat structure, character development, and scene analysis. Students will also explore the technical and financial requirements of their scripts. Students will learn the professional practices for how producers, directors, and directors of photography budget and translate scripts to screen. Students must develop their visual storytelling skills in order to create compelling content that meets industry standards. Students must learn the process of writing and rewriting, incorporating script feedback, script breakdown and budgeting, and designing more complex characters, story, and visual strategies. translate scripts to screen.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CTME 271: Graphics for Digital Media

This is a foundation course that teachers the creation of graphic assets used in cinema, television and media production. Emphasis will be placed on gaining the ability to effectively utilize the principals and elements of motion graphics in media production environments. The students will have the opportunity to build their portfolio by designing professional, finished static and motion graphics. The course examines principles, tools, and techniques utilized in the design of still and motion graphics. Discussions focus on creating animated shapes, imagery, video, and text. Emphasis is also placed on creating dynamic and visually interesting moving pieces, including logo animations, kinetic typography and title sequences, through the use of current software such as Adobe After Effects, Illustrator, and Photoshop. Students develop finished, rendered works capable of delivery for digital media.

CTME 306: Audio Post-Production

This course examines audio post-production techniques for video. Topics introduced in CTME 050 Audio Production, and CTME 255 Video Field Production, are expanded upon and new audio production concepts are introduced. Students conduct lab exercises in signal processing, multitrack recording procedures, and audio post-production techniques for video. Limited enrollment.

CTME 307: Writing for Narrative Television

This course is designed to immerse students into the television writers' room and teach advanced, professional screenwriting standards and practices. Students learn professional techniques for developing dynamic characters, introducing story arcs, developing multi-episode character arcs, pitching and writing pilot episodes, and formulating structure for serial television. Students learn how to integrate series-wide and episodical foreshadowing, implement traditional act breaks for a streaming

environment, and plan for future seasons. With the shift from traditional broadcasting to streaming content, it is essential that writers understand the key differences in current industry practices and more traditional screenwriting and television writing. Students benefit from learning to work in a collaborative writing environment while adhering to a singular writing style.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CTME 324: Laughing Matters: The Evolution of Comedy Through Cinema, TV,

This course analyzes comedic media productions in classic cinema and the Golden Age of Television, leading to current day online video content. Students will explore the conventions and techniques used in comedy throughout its history. Theories of humor will also be discussed.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CTME 325: Comedy Writing and Production for Sitcoms and Screen Media

An introduction to writing and producing comedy content for television and digital media outlets with a heavy emphasis on comedy sketches, sitcoms, and film. Students will explore comedy structure and format, joke writing, script critique, and humorous story development for the screen. Basic production techniques of sitcoms and comedic screen media will also be discussed, allowing students to see their jokes translate to the screen. Students will use this knowledge to pitch and develop a sitcom pitch by the end of the semester.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CTME 350: Documentary

This course examines the evolution and diversity of form of the documentary film with emphasis on rhetorical position, subject, ideological representation, technology, and documentary ethics. Students learn the skills to translate theory into practice and produce several short documentaries. Students learn how to research, film, and edit short documentaries for television and film exhibition.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CTME 355: Music Video Production

This course analyzes the history, aesthetics, and production of the music video from early music videos through the inception of Friday Night Videos and MTV, to modern music visualizers. Students will learn the methods and technology video artists employed to combine music with visual imagery to create a unique art form which includes narrative, experimental, documentary and animation filmmaking techniques and language. Students will produce their own music videos and learn the craft of visualizing, filming, and editing a music video. Students learn to write for the screen by focusing on visual language, dialogue and performance, shot composition, camera movement, and diegetic and non-diegetic sound.

CTME 360: Advanced Cinematography

This course progresses students through artistic, theoretical and professional elements of cinematography. Students explore the technical and expressive capacities of lighting, composition, and visual-storytelling techniques. Image control exercises include manual camera operation and analysis of lenses, f-stop, shutter speed, and ISO. Students learn the techniques of location lighting with both natural and artificial light while studying historical and current stylistic trends. Additionally, students will build upon skills acquired in CTME 160 along with exploration into new production modalities and postproduction techniques.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CTME 364: Advanced Audio

This course progresses students through artistic, theoretical and professional elements of post-production sound design, sound editing, and sound mixing for film and television. Students explore the technical and expressive capacities of creating sound for the image with particular focus on audio-visual storytelling. Students will build upon skills acquired in CTME 50 and develop advanced skills for audio post-production which specific emphasis on ADR, foley, sound FX and atmosphere, and final audio mix and delivery.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CTME 366: Advanced Post-Production

This course progresses students through artistic, theoretical and professional elements of video post-production equipment and techniques. Students explore the technical and expressive capacities of editing hardware, workflows, and assembly techniques. Students learn color correction, audio post-production, visual effects and project delivery modalities. Students produce programs using advanced post-production techniques. Additionally, students will build upon skills acquired in CTME 180 along with exploration into new production modalities and post-production techniques.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CTME 368: Post-Production Practicum

The student gains practical post-production experience by editing feature stories from raw footage produced and shot by students enrolled in CTME 358. The edited features and related materials are then edited into video programs under the direction of student producers enrolled in CTME 358.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CTME 369: Field/Post Production Practicum

This course offers students practical experience in all aspects of single camera video field production. Students working as a part of a team will be provided opportunities producing, shooting, setting up field lighting and audio as well as editing footage into feature packages and full-length programs for air.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CTME 370: Selected Topics in Electronic Media

This course is an in-depth study of an electronic media topic of current interest. The course content is normally different each time the course is offered. The course may be repeated for credit to a maximum of six credit hours, provided that the same topic is not repeated.

CTME 374: Selected Topics in Electronic Media

This course is an in-depth study of an electronic media topic of current interest. The course content is normally different each time the course is offered. The course may be taught as a laboratory class, with an appropriate increase in contact hours. The course may be repeated for credit to a maximum of 6 credit hours, provided that the same topic is not repeated.

CTME 375: Live Event Production

This course integrates studio and field production techniques, and emphasizes producing and directing for single and multi-camera productions in the styles of "live television". It builds upon skills introduced in earlier video, audio, lighting, and editing courses. Those skills are applied to the operation of the KUTV production trailer. All aspects of the production process are further expanded on and explored for studio and field production situations. Students are introduced to multi-camera field production by conducting site surveys and planning and producing several remotes. Students also plan and create production schedules and create all production assets including B-roll, produced roll-ins and graphic elements.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

CTME 379: Independent Study in Electronic Media

The student pursues an area of interest under the direction of a faculty member. An appropriate creative product such as a research paper, case study, or video production is developed. Repeatable to a maximum of six semester hours.

CTME 380: Senior Seminar in Cinema, Television, and Media

This course serves both as a practical survey of the current state of the electronic media industry and as a vehicle for immediate preparation for professional experience. A fundamental purpose of the course is to guide students in searching for and securing a full-time internship for a subsequent semester. The course also covers best practices for seeking and applying for positions in the electronic media industry, including the importance of developing professional connections. Specific attention is given to the freelance aspect of the business.

CTME 390: Senior Internship in Cinema, Television, and Media

The Senior Internship in Cinema, Television, and Media Production is a program that is designed to give the student a part-time or full-time, full semester, supervised practical experience in a CTME-related facility, or an appropriate corporate, medical, or educational site.

CTME 395: Honors Independent Study/Thesis

Honors Independent Study/Thesis.

CTME 398: Honors Supplementary Research

Supplementary research conducted by an Honors student in an upper-division (or 300 or 400-level) course in which the student is enrolled. The research is related to a topic in the course, but in addition to the standard requirements of the course, the research should exhibit advanced inquiry or investigation into the topic. The Honors student earns 1, 2, or 3 credits in addition to the credits for the course itself. The number of additional credits depends on the amount and intensity of the supplementary research. Each department in the College of Liberal Arts and Sciences has a specific course number which uses the departmental prefix, but all courses will use a common number (398). The course title will read "Honors Supplementary Research" and will have a variable credit value from 1 to 3 credits, e.g. ENGL 398 Honors Supplementary Research.

Economics

ECON 100: Introduction to Economics

Introduction to Economics seeks to familiarize undergraduates with the fundamentals of economics, the workings of market economy, the importance of supply and demand in determining prices, causes of unemployment and inflation, monetary and fiscal policies, Federal Reserve System, Wall Street and financial institutions, role of the government, budget deficits and public debt, international trade, comparative advantage, and trade deficits. This course cannot be used by business majors to fulfill general education, business core, or economics minor course requirements. Students having received credit for ECON 110 or ECON 120 cannot receive credit for ECON 100.

ECON 110: Principles of Macro-economics

Principles of Macroeconomics is an introduction to national income measurement, economic models of aggregate output, inflation, unemployment and economic growth. Emphasis is placed on use of fiscal and monetary policies to achieve the goals of price stability and full employment in a global economy.

ECON 120: Principles of Micro-economics

Microeconomics is the study of the economic behavior of individual units of an economy (such as a person, household, firm, or

industry). It is primarily concerned with the factors that affect individual economic choices, the effect of changes in these factors on decision makers, how choices are coordinated by markets, and how prices and outputs are determined in individual markets. Since the results produced by markets are not always perfect, the role of government in correcting market failures is also examined.

ECON 150: Economic History of the United States

This course is a historical treatment of the economic development of the United States from colonial times to the present. Emphasis is placed on the roles played by the rule of law and the individual entrepreneur.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ECON 201: Development Economics

Development Economics is a theory and policy oriented course that examines domestic and global aspects of the processes of economic growth and development in less-developed nations. Emphasis will be placed on exploring economic theories that explain why some countries achieve economic prosperity while others remain in poverty. Explorations of growth and development theories will be supplemented by a comparative review of policy choices and growth strategies implemented by successful and less successful countries.

ECON 205: Intermediate Microeconomics

This course focuses on the application of intermediate-level microeconomic theories and concepts. Topics include consumer behavior, production and costs, price and output under alternative market structures, factor markets, and market failure. The course is required for the economics minor.

ECON 210: Intermediate Macroeconomics

Intermediate Macroeconomics is a branch of economics that focuses on the study of the causes of fluctuations in aggregate economic variables such as real gross domestic product, consumption, investment, inflation, and unemployment. The course will also examine how monetary and fiscal policy can be used to reduce the frequency and severity of short-term economic fluctuations so that the economy can achieve long-term economic growth, without inflations and recessions. The course is required for all students in the Economics Minor.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ECON 310: Money and Banking

This course looks at key issues in the theory and practice of financial markets, monetary policy and banking and how their interactions affect the economy. A broad range of topics will be analyzed, including the nature and uses of money, inflation, interest rates, and the structure of banks and other financial institutions. This course will also introduce students to the analysis of the Federal Reserve System and other government agencies that regulate the financial industry.

ECON 322: The Economics of Health and Medicine

This course examines the American health care system through the application of economic theories and empirical methods. Topics include physician and hospital services, the pharmaceutical industry, and health care insurance. The role of public policy in achieving specific social objectives is also discussed.

ECON 345: Econometrics

Econometrics is a field that uses economic theory and statistical methods to address empirical problems in economics. It is a tool for empirical discovery and policy analysis with the aid of econometric software. The course covers a variety of econometric tools, without requiring the knowledge of sophisticated mathematical or statistical techniques. Basic knowledge of economic theory, statistics, and mathematics is sufficient to understand the topics covered in this course.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ECON 360: International Trade and Finance

An undergraduate level course in international economics, ECON 360 deals with topics such as workings of the global economy, the theory of foreign trade, tariffs, nontariff distortions to trade, international trade policy, foreign trade and economic growth, balance of payments, international transactions and financial markets, the determination of exchange rates, interest rate and the exchange rate, price level and the exchange rate, capital flows and the developing countries. The course is designed to appeal anybody with an interest in the world economy and an ambition for a leadership position in a multinational corporation.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ECON 379: Independent Study

The Department of Economics offers undergraduate students the opportunity to pursue individual research projects initiated by the student through independent study. Independent study involves advanced individual research supervised by an Economics Department faculty. Before registering the student is required to consult with the faculty member in the discipline to be studied who will supervise the independent study. May be repeated for credit. (1-2 s.h., 1-3 c.h.)

Education

EDUC 10: Professional Orientation

An orientation and guidance course. Opportunities and requirements of the profession, the relationship of the school and society, and the organization and administration of the American school system. Directed observation of various schools and learning situations will be required.

EDUC 15: College of Education: First Year Seminar

College of Education: First Year Seminar introduces College of Education first-year students, organized by cohorts according to declared major, to the critical strategies, resources, and responsibilities of a university student and future teacher. The seminar will build the students' foundation knowledge and understanding of what it means to be professional educators. Toward this end, the students enrolled in this course will participate in a number of relevant experiences that facilitate and strengthen their personal appreciation and intellectual understanding of their role as a teacher candidate and the Kutztown University support available to them to ensure their success. The course will be required to all entering first-year students and transfer students who have less than thirty credits. The course will be offered as Pass/Fail.

EDUC 100: Perspectives on American Education

The course will provide an introduction and overview to the philosophy, history, sociology, and organization of American education. The study of American education will stress the relationships among social, economic, and cultural forces affecting the development of public education; historical and philosophical perspectives will be investigated.

EDUC 101: Teaching Pre-K-8: An Exploration and Investigation

This course is an exploration course for students including dual certification students in the Elementary Education programs. It will build the students' foundation knowledge and understanding of what it means to be professional educators in both Early Childhood and Middle Level education. Students will participate in numerous relevant experiences that will develop and strengthen their academic abilities and personal understanding of their role as a student pursuing certification in either the Pre K - 4 or Middle level certification at Kutztown University. Four hours of fieldwork required.

EDUC 120: Hip Hop and Multicultural Education

This course will investigate the connections between Hip-Hop culture, approaches to educating traditionally marginalized youth, and the way in which schooling can be constructed and disseminated in Hip-Hop. We will analyze the culture of Hip-

Hop in an educational context and consider why rappers and effective teachers, how Hip-Hop is structured in ways that support argumentation and communication, and the ways in which traditional content courses can be taught using components of Hip-Hop culture. Once an understanding of Hip-Hop culture has been established, the term "multicultural education" will be interrogated and lead students to question whether or not multicultural education has true meaning in current research and practice in education. This course will combine scholarship and theory with considerable exposure to various Hip-Hop songs and artists.

EDUC 150: Meeting the Instructional Needs of English Language Learners

This course will provide teacher candidates with information about English Language Learners (ELLs) in American classrooms. The course will address principles of second language learning and teaching, English language acquisition, Cultural Diversity and lesson planning and delivery, PA English Language Proficiency Standards (ELPS), Research-Based teaching methods, and varied assessments. Additionally current federal, state, and local regulations relative to ELLs will be presented.

EDUC 200: Student Activities

Major emphasis is upon the role that student activities play in the educational enterprise - a study of the nature and function of student activities - the managing of the activities program in the elementary and secondary school - detailed study of specific activities including organization, financial control, evaluation and legal responsibility. Student presentation and seminar method will be used.

EDUC 225: The Role of the Teacher in Guidance Services

The history of guidance services will be presented to give the student background material. The foundations of counseling theories and techniques used in public school education will be defined. A study of the evaluative criteria used in school programs and their applications as supportive material to the classroom teacher will be explored.

EDUC 228: Women in Education

Women's changing roles in education will be looked at from the perspectives of a student, a teacher, and an administrator. Women's impact and contributions to education at all levels of education will be examined. The role of the institution and the current status of women at all levels of education will be a major focus.

EDUC 245: Communication Disorders and the Classroom Teacher

This course is designed to enable the teacher to comprehend the stages of speech and language development in the child, to recognize typical speech and language problems, and to develop skill in motivating and guiding pupils in acquiring correct and effective habits of oral communication.

EDUC 260: School and Community

A study of group and intergroup activities. Consideration is also given to the role of the individual in the group, to community interests, needs, resources, and problems, and to teacher responsibility in professional, social, religious, and civic affairs. Student participation in community activities is stressed.

EDUC 326: Introduction to Middle Level Education

The philosophy, history, structure, and future direction of middle level education and how these topics relate to the characteristics of the young adolescent will be explored. Students will have the opportunity to explore the middle school concept, including curriculum and instructional strategies that are particularly appropriate for this age group. Observations in schools with culturally diverse populations and special needs students will target developmentally appropriate practice.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

EDUC 330: Introduction To The Research Process

This course will familiarize students with the basics of the research process. It will include the structure and process of research, as well as the various types of research, and strategies that support each.

EDUC 335: Urban Seminar: Field-Based Multicultural Education

This two-week field experience will be conducted in Philadelphia, PA, and is an opportunity for pre-service teachers, both elementary and secondary education majors, to interact with teachers and students in urban public schools. The course will emphasize interpersonal pedagogical skills needed for success of teachers and learners in urban schools. Inclusive in the course will be a community service project in the neighborhoods near the host schools.

EDUC 350: Diagnostic and Remedial Reading

Lecture, reading, demonstration and practice in procedures for identifying and treating common disabilities in word perception and comprehension. Brief introduction to etiology of severe disability.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

EDUC 392: Managing an Inclusive Classroom

Managing an Inclusive Classroom provides both theoretical and practical information to help teacher candidates construct an environment for student learning. Teacher candidates will learn how to develop classroom procedures, manage student behaviors, and create positive learning environments. There will be an emphasis on restorative justice practices and collaborative learning with a focus on establishing a culture of learning while maintaining an environment of respect and rapport. This course is to be taken concurrently with student teaching.

EDUC 395: Honors Independent Study/Thesis

Honors Independent Study/Thesis.

EDUC 411: Methods for Teaching Foreign Languages to Early Second Language

This three-hour course provides pre-service and in-service teachers and native speakers whose teacher preparation has come from outside the United States with program models for FLEX (Foreign Language Exploratory Program), sequential FLES (Foreign Language Elementary School Program), and immersion programs as well as the theoretical and historical background and techniques for implementing them. Foreign languages as an integral part of the elementary school curriculum will be emphasized as a complement to the use of webbing within the classroom as it applies to foreign languages. Field experiences teaching in elementary schools are a required element of this course, which is also recommended for Elementary Education majors with a concentration in Foreign Languages.

EDUC 428: Culture and Diversity of English Learners

This course is designed to prepare English as a Second Language (ESL) program specialists to facilitate the integration of English Language Learners (ELLs) and their families into the host school and community. As well, the course facilitates school staff members' understanding of multi-cultural and multi-language learners' needs and support strategies so as to maximize the educational experience. Participants in this course will undertake a comparative approach to similarities and differences between the US culture and other cultures with the goal of developing cultural understanding and sensitivity of ELL/ESL students and families living in the US culture.

EDUC 434: Instructional Methodology for English Learners

This course is for English as a Second Language (ESL) practitioners in partial requirement for the Pennsylvania Program Specialist ESL Certificate. This course offers research-based information relative to the design and implementation of an ESL program; methods, strategies, and resources for ESL programs; the use of computer technology (hardware and software) for ELLs; the use of audio/visual media for ELLs; the adaptation of instructional strategies and materials to address the specific needs, talents and interests of ELLs; the integration of multicultural information for ELLs through various curricula; the development, implementation, and evaluation of varied curricular and instructional activities for diverse ELLs; metacognitive awareness and strategic planning of ELLs to assist them in regular classrooms; and the acculturation process regarding reading, writing, speaking, listening, and culture.

EDUC 435: Language Acquisition and English Linguistics

This course is for English as a Second Language (ESL) practitioners in partial requirement for the Pennsylvania Program Specialist-ESL Certificate. This course offers an overview of the basic mechanisms of human language, as well as first and second language acquisition and literacy development. Students will examine the linguistic elements of American English and discover effective methods of instruction and assessment of spoken and written language for use with ESL learners. This course is for English as a Second Language (ESL) practitioners in partial requirement for the Pennsylvania Program Specialist-ESL Certificate. This course offers an overview of the basic mechanisms of human language, as well as first and second language acquisition and literacy development. Students will examine the linguistic elements of American English and discover effective methods of instruction and assessment of spoken and written language for use with ESL learners.

EDUC 436: Assessment of English Learners

This course examines the different types and purposes of assessment and the various assessment issues that affect English language learners (i.e. accountability, bias). Students will learn about a variety of performance-based assessments as well as appropriate modifications and accommodations to traditional classroom and standardized assessments in order to measure English language learners' content knowledge independent of their language proficiency. This course will also prepare students to administer standards-based language proficiency assessments and to use the results of these assessments to determine the entry, placement, and instruction of English language learners, as well as to demonstrate students' progress toward and attainment of English language proficiency. This course is designed to meet the requirements for the Pennsylvania English as a Second Language Program Specialist certification program and the TESOL/CAEP Standards for P-12 Teacher Education Programs.

EDUC 437: Protocols and Practices for PA ESL Programs

This course examines the history of bilingual and English as a Second Language (ESL) instruction in the United States and the impact of educational policy on the education of English language learners (ELLs). This course will also prepare students to build collaborative relationships with colleagues who are responsible for general and content-area instruction of ELLs and to serve as advocates for ELLs and their families. This course is designed to meet the requirements for the Pennsylvania English as a Second Language Program Specialist certification program and the TESOL/CAEP Standards for P-12 Teacher Education Programs.

EDUC 450: Foundations in Science, Technology, Engineering and Mathematics

This transdisciplinary course provides insight into the historical, fundamental, and contemporary ideas of the nature of K-12 STEM education. Students explore contemporary K-12 STEM education developments, opportunities, and challenges from both discipline-based and integrative approaches. Through inquiry, students will examine current STEM education initiatives and modern integrative STEM educational considerations pe1taining to policy, structure, and student learning. Finally, this course addresses the specific set of competencies that are relevant to teaching and learning STEM, including knowledge of standards (Next Generation Science Standards, PA Mathematics Standards, PA Science and Technology Standards), the need for authentic instruction, inquiry-based methodologies, design processes, and the important role of STEM in workforce preparation and responding to global issues.

EDUC 452: Science, Technology, Engineering, and Mathematics (STEM)

This course examines the implementation of best practices in integrative STEM education and prepares teachers to create, implement, and reflect upon lessons designed to help students master content standards and STEM-based skills. This course also addresses the issues and knowledge that are relevant for teaching and learning, including integration of Pennsylvania's Standards Aligned System (SAS). Students explore the signature pedagogies unique to the fields of STEM education. Students also obtain an awareness of multiple models of teaching and learning, including inquiry-based instruction, project-based learning, use of instructional technologies, higher-order questioning strategies, critical thinking, collaborative problem solving, design and reflection cycles, STEM literacy skills, purposeful grouping, and differentiated instruction. This course will include five hours of fieldwork in a STEM setting.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

EDUC 454: Science, Technology, Engineering, and Mathematics (STEM)

This course will cover the demonstration and application of STEM and 21st Century Learning skills. Course topics include higher-order thinking skills, creative problem solving, representation of real-world phenomena, and manipulation of technology. Candidates will learn to assess students using technology-enhanced, formative and summative assessments that measure mastery of 21st century skills, consistent with integrative STEM classroom learning. This course includes 10 hours of fieldwork in STEM classrooms.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

EDUC 456: Science, Technology, Engineering, and Mathematics (STEM)

This course is the culmination of teacher candidates' work and experiences in the STEM endorsement certificate program. The learning seminar engages teacher candidates with the real world data, tools, and expe1is they will encounter in STEM-related fields and further develops their critical thinking and practical work skills. This course examines technologies that are particular to STEM education and explores several significant, contemporary topics related to research in STEM education. Course instruction follows a seminar format appropriate for field experience activities, including facilitated discussions and personal reflections. This course requires candidates to complete a 25-hour on-site experience with a STEM professional.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

EDUC 490: Teacher Intern

This course is the capstone course for students who are obtaining Pennsylvania certification through the Teacher Intern Program. A fieldwork placement similar to student teaching is included in this experience. Department approval is required.

EDUC 491: Tutoring Methods and Strategies for Literacy Volunteers

This course will prepare undergraduate students in various academic disciplines to perform volunteer literacy tutoring and community service. The course will feature instruction in various literacy strategies, tutoring methods, and materials, including Laubach, Orton-Gillingham, Language Experience Approach, and ESOL, combined with instruction in affective strategies such as building self-esteem, establishing a climate conducive to learning, and reducing anxiety in the adult learner. Students will be required to serve as volunteer tutors.

EDUC 496: Multicultural Education

This course is designed to help pre-service and in-service teachers and other education professionals to design and implement effective teaching strategies that reflect diversity, and to derive sound guidelines for multi-cultural programs and practices. The life realities, needs, and aspirations of culturally different children and youth are analyzed. Sources of content will be scholarly writings, field investigations, and community resources in foreign countries or American subcultures. Students will be participant observers conducting ethnographic qualitative research in cultural settings different from the mainstream American macro-culture.

Elementary Education Pre-K 4

EEPK 202: Dispositions Toward Advocacy, Collaboration, and Cooperation

This course is designed to provide participants with a variety of experiences that will develop dispositions expected of professional educators as delineated in professional, state, and institutional standards. Participants will gain knowledge and understanding and foster values about cultural and community diversity to use the information as a basis for connecting instruction to students' experiences. Students who can demonstrate prescribed dispositions will be encouraged to continue

through the program. Five hours of fieldwork are required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

EEPK 209: Math Foundations for Pre-K 1

This course is designed to prepare prospective teachers to teach mathematics to all children from preschool to grade one. Instructional strategies appropriate for various stages of intellectual development will be examined. The use of manipulatives and technology in the teaching of mathematics will be included. Pre-K through grade 4 candidates will be instructed to apply the principles that guide all mathematics instruction as well as the specific NCTM standards for early childhood that are based on the belief that "students learn important mathematical skills and processes with understanding". Candidates must know and effectively deliver core academic content in the following learning areas and must have the skills to stay current with the research on best practices for content instruction for students, Pre-K through grade 1. Five hours of fieldwork required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

EEPK 215: Introduction to Early Childhood Education

A survey course focusing on early childhood educational continuum from infancy through age nine. Consideration will be given to historical backgrounds, existing programs, and relevant research in each approach. Participants must know and understand child development, theories of learning, and developmentally appropriate practice when working in the field of early childhood education. Emphasis will be placed upon the role and value of play, working with families, and designing effective learning environments that meet the needs of all learners. Field experiences and observations in preschool programs, day care settings, nursery schools, kindergarten and primary classrooms are an integral part of the course. Eight hours of required fieldwork in Pre-K setting, background checks will be required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

EEPK 225: Assessment I: Observation and Informal Assessment

This course examines the informal assessment of children from pre-kindergarten through grade four. Both traditional and alternative assessment methods, including observation of students, performance-based assessment, and portfolios will be instructed and developed. Use of technology to support assessment and data management will also be addressed. Seven hours of required fieldwork in Pre-K setting.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

EEPK 236: The Arts and Pre-K 4 Education

This course provides Pre-K through Gr4 Teacher Candidates with concepts and skills central to the visual and performing arts (Visual Art, Music, Theater, and Dance). Candidate will learn how to construct developmentally appropriate learning experiences in the arts for Pre-K through 4 students and how to integrate these experiences with other subjects. (3 s.h., 4 c.h.)

EEPK 299: Language and Literacy Acquisition in Early Childhood

The Early Language and Literacy Course is a survey course designed to construct knowledge of young children's language development and early literacy experiences in both home and school settings. This course is designed for those who will work with young children and their families to know and understand language developmental milestones, the importance of cultivating language and literacy experiences in early childhood. EEPK 299 will build participants' understanding of language and preliteracy literacy development for young learners and the effect that development has on later literacy skills. This course will build foundational knowledge to allow participants' to have a greater understanding of how literacy develops so they are able to determine how to support a child's literacy development. This includes recognizing the foundational skills for language, reading, and writing. This course also includes field experience assignments which will build the participants' experience and familiarity of children and their language milestones and pre and early literacy skills. The course provides context and background knowledge for teacher candidates who will take EEPK 300. EEPK 301, EEPK 303 and EEPK 353.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

EEPK 300: Early Literacy Development and Acquisition Pre-K 1

Teacher candidates preparing to become Pre-K -1 Category II Classroom Teachers, as defined by the International Reading Association, and supported by Interstate New Teacher Assessment Support Consortium (INTASC) and PA Department of Education (PDE) Standards will study foundation knowledge of reading and writing processes and methods of reading instruction in this course. Focus will be upon knowledge and skills necessary for understanding the reading process for beginning readers as one of the interrelated language arts with emphasis placed on belief systems about reading; instruction in relation to effective teaching of standards-based curriculum; perception and reading; language development and its relation to student achievement and success in reading; understanding word structure; skills of word recognition; vocabulary development; and literate environments. This is a required course in the Pre K - 4 Teacher Education Program. Nine hours of fieldwork required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

EEPK 301: Teaching Literacy in Grades 2-4

This course examines literacy development in grades 2-4 with particular attention to how students create meaning as they read. Teacher candidates learn strategies to develop word study, fluency, meaning vocabulary, and comprehension. The course also prepares candidates to use and evaluate various reading programs, instructional approaches, and materials. This course situates the teaching of reading within theories of learning as they relate to the reading process. This course is part of the professional semester block.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

EEPK 303: Language Development and Teaching Language Arts In Prek-4

This methodology course will prepare candidates to become effective teachers of the language arts based on research based best practices. The focus will be on learning the development of language in children and its implications for planning effective language arts instruction including using mentor texts as a model for student writing. In addition, candidates will learn instructional strategies for integrating the language arts onto content areas. This course is one of the courses in the Professional Semester block.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

EEPK 304: Teaching Social Studies for Pre-K 4

Teaching Social Studies Methods in Pre-K4 is designed to teach pre-service teachers, entering the field in Pre-K4, different approaches to teaching social studies. The course helps to prepare pre-service teachers to implement social studies concepts and content where ever they can integrate it into multiple content areas. The course will also focus around the ten National Council of Social Studies Themes which are: Culture; Time, Continuity and Change; People, Places, and Environments; Individual Development and Identity; Individuals, Groups, and Institutions; Power, Authority, and Governance; Production, Distribution, and Consumption; Science, Technology, and Society; Global Connections; Civic Ideals and Practices.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

EEPK 305: Teaching Science in Early Childhood

Teaching Science in Early Childhood is designed to prepare teacher candidates with a background for teaching science in the primary level classrooms using inquiry centered, hands-on, "minds-on" approach. The connection between inquiry and science content is stressed throughout the course. The course is designed to build content knowledge, pedagogical knowledge, assessment, and connections to other disciplines in the classroom. The course utilizes exemplary science programs grounded in research. Teacher candidates will utilize science tools, materials, media, and technological resources to engage students in the learning of science content. The course models current research that focuses on student achievement and the role of the teacher in the classroom. The course will focus on the planning of inquiry-based science programs, actions taken to guide and facilitate student learning, the assessments made of teaching and student learning, the development of environments that

enable to learn science, the creation of communities of science learners, and the planning and development of the school science program.

EEPK 306: Integrating Principles of Learning for Pre-K 4

This course provides teacher candidates with an overview of current practices in preschool and elementary education that address instructional models and processes, classroom management and professional behavior. Teacher candidates are also presented with current learning theory including issues of child development, diversity and exceptionality. This course includes a preschool/elementary school classroom placement where teacher candidates are given an opportunity to apply theories and implement strategies developed in their coursework.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

EEPK 309: Teaching Mathematics in Grades 2-4

This is the second of two courses designed to prepare prospective teachers to teach mathematics to all children from preschool to grade four. Instructional strategies appropriate for various stages of intellectual development will be examined. The use of manipulatives and technology in the teaching of mathematics will be included. Pre-K through grade 4 candidates will be instructed to apply the principles that guide all mathematics instruction as well as the specific NCTM standards for early childhood that are based on the belief that "students learn important mathematical skills and processes with understanding." Candidates must know and effectively deliver core academic content in the following learning areas and must have the skills to stay current with the research on best practices for content instruction for students, grade 2 through grade 4.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

EEPK 315: Family and Community Collaboration Partnerships

This course explores the relationships of the diverse people, organizations, and societies responsible for the education of young children. Historical influences, effective teaching strategies and curriculum for working together, and successful partnership models are emphasized. Field experiences with parent programs and family agencies are required.

EEPK 320: Literature for PreK-4 Learners

This course focuses on literature for PreK-4 students with emphasis on classroom applications. Literary theory, genre, form, and illustrations are considered in the context of lesson implementation. Approaches to evaluating the quality of literature, selecting literature for instruction, planning response experiences, and the development of specific teacher skills related to the use of literature in grades PreK-4 are included. Furthermore, PreK-4 educators must demonstrate disposition and commitment to equity for all students using children's literature. This requires that educators employ research-based rationale for the inclusion of authentic literature (first-person) that connects cultural backgrounds, learner's daily lives, and builds learners' knowledge, as well as possess instructional skills necessary to successfully utilize literature within language arts and content area instruction. Educators must be empowered to serve as strong models of lifelong learning and advocates of equity for all students through literacy.

EEPK 325: Assessment Methods II: Formative, Summative, Diagnostic, and

This course examines the formal assessment of children from pre-kindergarten through grade 4. Both traditional and alternative assessment methods that include diagnostic, normative, authentic, benchmark, and summative tools will be instructed and developed within this course. Use of technology to support instruction and assessment will also be addressed. Learning appropriate assessment methods is imperative to meet the instructional needs of individual students. Required (except for those students in the dual certification program in Special Education).

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

EEPK 350: Language Development, Learning to Read and Assessment

Candidates identify the factors that affect language and literacy development, study probable causes of dysfluency and other

reading problems, plus collect and evaluate a variety of evidence to evaluate a child's strengths and needs related to literacy. Instructional interventions are designed to meet the needs for differentiated instruction. A field experience is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

EEPK 390: Clinical Experience I: Pre-K 4

EEPK 390 and EEPK 391 are segments of a program requirement, which provide two full-time early childhood classroom experiences comprising an entire semester. Opportunities are provided for observations and participation activities related to teaching. The practicum, concurrent with student teaching, provides an opportunity for the discussion of current issues and problems that arise in and out of the classroom.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

EEPK 391: Clinical Experience II: Pre-K 4

EEPK 390 and EEPK 391 are segments of a program requirement, which provide two full-time early childhood classroom experiences comprising an entire semester. Opportunities are provided for observations and participation activities related to teaching. The practicum, concurrent with student teaching, provides an opportunity for the discussion of current issues and problems that arise in and out of the classroom.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

EEPK 415: Family and Community Collaboration Partnerships

This course explores the relationships of the diverse people, organizations, and societies responsible for the education of young children. Historical influences, effective teaching strategies and curriculum for working together with families, and successful partnership models are emphasized. Teacher candidates will gain knowledge and demonstrate an understanding of cultural and community diversity as a basis for instructional planning with ELL awareness and accommodations. Field experiences with parent programs and family agencies are required.

Elementary Education

ELED 110: The Visual Arts Experience in Elementary Education

The visual arts experience is examined in relationship to the education of children pre-school through middle school. Through involvement in a variety of art history, art criticism and art production processes suitable for children, students will focus on the relationship of the visual arts to general education in a multi-cultural society, to the developmental growth of children, and to current issues in art education.

ELED 120: Music for Elementary Classroom Teacher

Designed to equip the elementary classroom teacher with the basic experience and competencies for teaching music in the elementary school, the course emphasizes practical classroom experiences in singing, listening, playing instruments, movement, and creative activities.

ELED 130: Introduction to Early Childhood Education

This foundation course focuses on the development of young children from infancy through age eight. Consideration will be given to historical perspectives, present programs, and current research in contemporary issues. Field experiences in pre-school programs, child care settings, and kindergartens are an integral part of the course.

ELED 202: Society, Teaching, and Dispositions

This course is designed to provide candidates with a variety of experiences that will develop dispositions expected of

professional educators as delineated in professional, state, and institutional standards. Through structured field experiences, lecture, discussions and readings, candidates can gain knowledge and understanding and foster values about cultural and community diversity to use the information as a basis for connecting instruction to students' experiences. Candidates who can demonstrate prescribed dispositions will be encouraged to continue through the program.

ELED 205: Science for the Elementary and Middle Schools (Required)

This course is designed to provide the future elementary and middle school teacher with a background for teaching science in the elementary and middle school classrooms using the discovery-inquiry, hands-on, "minds-on" approach. The scientific method is stressed throughout the course. The course includes the use of the metric system in the elementary and middle school classrooms as well as the utilization of various materials and special techniques and strategies. Laboratory activities are an integral part of this course. Materials have been selected from the various fields of science.

ELED 206: Teaching Science for Middle Level Learners

ELED 206 is designed to prepare teacher candidates with a background for teaching science in the middle level classrooms using inquiry centered, hands-on, "minds-on" approach. The connection between inquiry and science content is stressed throughout the course. The course is designed to build content knowledge, pedagogical knowledge, assessment, and connections to other disciplines in the classroom. The course utilizes exemplary science programs grounded in research. Teacher candidates will utilize science tools, materials, media, and technological resources to engage students in the learning of science content. The course models current research that focuses on student achievement and the role of the teacher in the classroom. The course will focus on the planning of inquiry-based science programs, actions taken to guide and facilitate student learning, the assessments made of teaching and student learning, the development of environments that enable to learn science, the creation of communities of science learners, and the planning and development of the school science program. (3 s.h., 4 c.h.)

ELED 207: Health and Physical Education for Elementary Schools (Required)

This methods course is designed to provide students with an overview of the essential elements of school health and physical education for grades K through 8. Pre-service educators will receive instruction in various teaching styles and strategies used to present health and movement skills. The course will provide teacher candidates with the opportunity to plan and present health topics and physical education lessons. Skills necessary to stay current with trends and information in the field of health and physical education will be emphasized.

ELED 212: Teaching Diverse Learners at the Middle Level

This course is designed to provide pre-service teachers with a variety of experiences that will develop dispositions expected of professional educators as delineated in professional, state, and institutional standards. Pre-service teachers will gain knowledge and foster values about cultural and community diversity to use as a basis for connecting instruction to students' experiences. Students who can demonstrate appropriate dispositions toward diverse populations and knowledge of effective and appropriate strategies will be encouraged to continue through the program.

ELED 218: Multicultural Perspectives of Urban Education

Participants will be invited to engage in the pedagogical process of building a framework that contributes to their understanding of the unique preparation involved in becoming an effective educator for children and young adolescents who attend schools in dynamic urban settings. Through the development of an appreciation for the personal, cultural, social, family, and community dynamics of urban education, participants will learn to use knowledge from current multidimensional research about urban instructional models to develop, manage and support meaningful instruction for all students in urban settings. Two hours of observations in urban school settings are required.

ELED 221: Literature Middle Level Learners

This course focuses on literature for middle level students with emphasis on classroom applications. Literary theory, genre, form, and illustrations are considered in the context of lesson implementation. Approaches to evaluating the quality of literature, selecting literature for instruction, planning response experiences, and the development of specific teacher skills related to the use of literature at the fourth through eighth grade levels are included. This course will focus on using a rich variety of diverse literature contributing to culturally relevant classroom practice. Middle level philosophy and best practices for young adolescent learners will be infused throughout all learning and assessment.

ELED 226: Teaching Middle Level: Theories and Practices

This course introduces teacher candidates to the theories that make teaching adolescents unique. Current research in the teaching of this age group will be explored along with the major tenets recommended by the National body, Association for Middle Level Education. General teaching practices such as educational theorists, classroom management and assessment will be explored. In addition, students will observe in a local middle school setting in order to see these practices in action.

ELED 233: The Integrated Curriculum in Early Childhood Education

This course focuses on determining and devising a developmentally appropriate, all-inclusive content curriculum for infants, toddlers and young children reflecting diversity. Curriculum goals, program schedules, learning environments, selection of instructional materials, content areas and assessment of the curriculum are addressed through projects, readings and field experiences.

ELED 236: The Arts in the Early Childhood Curriculum

This course focuses on designing an all-inclusive, developmentally appropriate creative arts curriculum for the young child. This creative arts curriculum emphasizes play, literature, creative movement, music, creative dramatics and visual arts. A diversified visual and performing arts curriculum will be developed using research, readings, projects, and field experiences.

ELED 300: Fundamentals of Reading Instruction I

In this course, teacher candidates preparing to become certified elementary classroom teachers (a type of Category II Classroom Teachers as defined by the International Reading Association), will study foundational knowledge of reading and writing processes and instruction. Focus will be on understanding the reading process as one of the interrelated language arts with emphasis placed on belief systems about reading instruction, perception and reading, language development and its relation to success in reading, understanding word structure, word recognition skills, fluency, and literate environments. This is a required course in the Elementary Education Program, to be taken after candidacy requirements are met.

ELED 301: Fundamentals of Reading Instruction II (Required)

A continuation of study begun in Fundamentals of Reading Instruction I with emphasis on comprehension skills, teaching reading in content area subjects, understanding programs and processes and evaluating performance in reading. Students examine various materials of instruction in reading. A part of the professional semester block.

ELED 302: Children's Literature (Required)

This course consists of a survey of important children's books, including winners of Newbery and Caldecott Awards, folk literature and poetry. The course encourages the wide reading of children's literature and provides opportunity for storytelling, the creating of materials to be used with children, and the reviewing of criteria used in the evaluation of children's books. A vital part of this course is the emphasis on books about children from multi-cultural backgrounds. Where applicable the historical, political, philosophical and sociological backgrounds of education are blended into the ongoing study of children's books. A part of the professional semester block.

ELED 303: Language Arts (Required)

Background material and techniques for teaching and evaluating skills in the many aspects of oral and written language arts - listening, speaking, usage, spelling, creative writing, handwriting: manuscript and cursive. A part of the professional semester block.

ELED 304: Social Studies for Elementary Schools (Required)

This course focuses on standards and concepts from the social sciences and citizenship education. It examines the development of integrated instruction and resources including technology. A part of the professional semester block.

ELED 306: Integrating Principles of Learning and Teaching: Classroom

Teacher candidates are provided with current theory and practices in elementary education including instructional models and processes, classroom management, professional behavior, current learning theory and issues of diversity. This course incorporates an elementary/middle school classroom placement. A part of the professional semester block.

ELED 308: Mathematics for Elementary Schools (Required)

This course is designed to prepare prospective teachers to teach mathematics to all children from preschool to grade eight. Instructional strategies appropriate for various stages of intellectual development will be examined. The use of manipulatives, calculators and computers in the teaching of mathematics will be included. ELED 308 is part of the professional semester block.

ELED 311: Teaching Culturally and Linguistically Diverse Children to Read

ELED 311 Teaching Culturally and Linguistically Diverse Children to Read is a course in the Reading Concentration that is designed to provide elementary teacher candidates with those cognitive and affective competencies required to effectively teach reading skills to children classified as culturally and linguistically different.

ELED 312: Culturally Responsive Teaching for English Language Learners

This course is designed to provide elementary teacher candidates with the professional knowledge, skills, context, and strategies to facilitate culturally responsive learning for English Language Learners (ELLs). This course will allow teacher candidates to develop a comprehensive, common language for teaching ELLs based on research-based, culturally responsive, best practices with an equity/social justice focus. The course will address the cultural diversity of ELLs; the developmental continuum of acquiring language skill/proficiency in speaking, reading, writing and listening; theories of language acquisition; local, state, and national policies/regulations as related to ELLs; methods for teaching social and academic language; national and Pennsylvania English Language Proficiency Standards (ELPS); and lesson planning for language development and content knowledge.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ELED 321: Assessment of Children: Birth through the Middle Years (Required)

This course examines formal and informal assessment of children from infancy through the elementary school years. Both traditional and alternative assessment methods, including observation of students, testing, performance-based assessment, rubrics and portfolios will be included. Teacher-made evaluation instruments and record-keeping devices will be emphasized and used during experiences. Required (except for those students in the dual certification program in Special Education).

ELED 322: Assessment Methods: Formative, Summative, Diagnostic, and

This course examines the formal assessment of children from grades four through eight. Both traditional and alternative assessment methods including diagnostic, authentic, formative, summative, and benchmark are instructed and developed within this course. Use of technology to support instruction and assessment will also be addressed. Learning appropriate assessment methods is imperative to meet the instructional needs of individual students. Required (except for those students in the dual certification program in Special Education).

ELED 325: Differentiated Instruction: Key to Responsive Teaching

This course investigates basic procedures for differentiating instruction based on students' readiness, interests, or learning profiles. Participants will explore strategies that can be used effectively and applied realistically in elementary and middle school classrooms. These strategies will be based on classroom elements such as content, process, products, and learning environment. Appropriate assessments for use in differentiated instruction will be examined.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ELED 331: Teaching and Assessing Literacy for Middle Level Learners Across

This course examines literacy development in grades 4-8. Teacher candidates will learn strategies for developing students' proficiencies in word recognition, fluency, vocabulary, and comprehension as they read across content areas. Participants in this course will examine major literacy concepts in academic disciplines and theories associated with young adolescent cognitive development, special education, and English Language Learners (ELLs), including research related to motivation and learning styles applied to content areas. The course also requires candidates to apply their knowledge of the reading process, based on theories of learning, as they explore and evaluate various reading programs, instructional approaches, appropriate assessments, technology, and materials for middle level learners.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ELED 334: Instructional Strategies in Early Childhood Education

Instructional strategies appropriate for advancing the intellectual, social, emotional, and physical development of the young child will be examined in this course. Significant contributions of recent research focusing on teaching methods will be considered. Opportunities to develop a variety of teaching strategies and to use them in nursery, kindergarten, or primary school settings will be provided. Micro-teaching will be available to the student.

ELED 338: Internship in Early Childhood Education

Supervised field experiences in diverse settings will include, but not be limited, to daycare centers, Headstart programs, migrant programs, public schools, or family day care homes. The internship may also include international, administrative, or community settings.

ELED 341: Methods in Social Studies and Content Area Reading for Middle Level

Designed for teacher candidates in the middle level professional core - grades 4-8, participants in this course will examine major content area literacy concepts and theories associated with young adolescent cognitive development, special education, and ELL, including research related to motivation and learning styles applied to content areas, specifically Social Studies. Teacher candidates will also critically examine the role of Social Studies in the middle level curriculum. The concepts and processes drawn from the social science disciplines and humanities will be developed. An analysis of contemporary methods and materials in social studies will enable the teacher candidates to gain the knowledge, skills, and dispositions necessary to prepare young adolescent learners of all backgrounds for participation in a democratic society in an interdependent world. Both content areas will be integrated and applied in support of each other during an intensive field experience.

ELED 342: Teaching Writing at the Middle Level

Middle school teacher candidates will pursue in-depth examination of the research, theory, and best practice in writing instruction for middle level learners. Emphasis will be placed upon instruction in the modes of writing; integrating direct instruction of grammar and usage within authentic contexts; incorporating writing in response to literature; writing to construct meaning across the curriculum; addressing the state standards as they impact the teaching of writing; analyzing assessment strategies to determine individual student progress and program effectiveness; designing effective writing assignments; experiencing and reflecting on the writing process as a writer; and implementing technology into the writing workshop environment.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ELED 344: Teaching and Assessing Social Studies for Middle Level Learners

Designed to prepare teacher candidates with a background for teaching and assessing social studies themes of history, geography, civics/government, and economics in elementary and middle level classrooms grades 4-8, this course uses inquiry based and student-centered approaches to lifelong learning. By using simulation, role-play, case studies, cultural artifacts, cooperative learning, and inquiry project built upon student research, participants are invited to share social studies concepts and themes that provide insights into historical periods and cultures and help students and youth to understand events and

periods from multiple perspectives. Emphasis is placed upon authentic activities that call for real-life applications using skills and content of the field. Teacher candidates will demonstrate the ability to teach and assess social studies content using analytic thinking skills while meeting state content standards both on campus and in an extensive field experience. ELU 344 is part of the Elementary Education Grades4-8 professional semester block of courses.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ELED 346: Middle Level Cognitive Development

This course provides teacher candidates with an overview of current practices in middle level education (grades 4-8) that address instructional models and processes, classroom management and professional behavior. Teacher candidates are also presented with current learning and motivation theory including issues of adolescent development. This course includes a middle level school classroom placement where teacher candidates are given an opportunity to apply theories and implement strategies developed in their coursework.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ELED 347: Teaching and Assessing Mathematics for Middle Level Learners

This methodology course is designed to prepare teacher candidates to teach and assess mathematics for a wide variety of middle level learners. It will enable candidates to understand and use effective instructional strategies and accepted best practices in order to help adolescent students master more rigorous mathematical content. Candidates will be instructed how to integrate learning theory, developmental theory and cognitive science. There will be a strong link between math content and methods so that candidates will have an understanding about the connection between content knowledge and pedagogical knowledge for optimal teaching and assessing mathematics. This course is part of the Elementary Education Grades4-8 professional semester block of courses.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ELED 348: Teaching Mathematics and Science for Middle Level Learners

This course is designed to prepare prospective teachers to teach mathematics and science for a wide variety of middle level learners. It is designed to prepare teacher candidates to an inquiry centered, hands-on, "minds-on" approach as they teach mathematical and science. The connection between inquiry and content is stressed throughout the course. The course is designed to build on content knowledge, pedagogical knowledge, assessment, and connections to other disciplines in the classroom. Candidates will be instructed how to integrate learning theory, development theory and cognitive science. There will be a strong link between mathematics content and methods so that candidates will have an understanding about the connection between content knowledge and pedagogical knowledge for optimal teaching. Teacher candidates will utilize science tools, mathematical manipulatives, materials, media, and technological resources to engage students in the learning of science and/or mathematics content. The course models current research that focus on planning of inquiry-based programs and the actions needed to guide and facilitate student learning. ELED 348 is part of the professional semester block.

ELED 349: Teaching and Assessing Science for Middle Level Learners

Designed to prepare teacher candidates with a background for teaching and assessing science for students in middle level classrooms, this course emphasizes use of student-centered, inquiry-based, hands-on, "minds-on" instructional approaches to teaching science content knowledge, skills and dispositions observed in scientific communities. Use of explicit connections between inquiry learning and science processes to develop science content knowledge is stressed throughout the course. Building upon their entering science content knowledge, as well as knowledge of assessment in science, teacher candidates learn ways of connecting exemplary science methodology, and programs grounded in research, to other classroom disciplines. Teacher candidates are expected to utilize science tools, materials, media, and technological resources to develop a repertoire of lessons that engage students in the learning of science content and the real-life process skills they can use to "do science." Additionally, the course models current curriculum research that focuses on student achievement, high stakes testing, and the role of the teacher as facilitator and guide in the inquiry-based science classroom. During extensive professional semester field placements, teacher candidates will explore, plan and implement ways to engage students in inquiry-based science lessons as the foundation of strong science programs.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ELED 351: Diagnostic and Remedial Reading

Students study causes and classification of reading disability cases, examine and administer tests of reading ability, determine needs and plan appropriate learning activities for disabled readers. Materials designed specifically for learning disabled children are pursued. This course is only offered in the Fall.

ELED 352: Reading Diagnosis and Interventions at the Middle Level

Candidates identify the factors that impede reading development for the middle level learner resulting in reading disabilities. Teacher candidates collect and evaluate a variety of evidence to determine a child's strengths and needs. Materials designed for learning disabled and ELL children are pursued. A field experience is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ELED 353: Language Development, Reading Assessment and Interventions

Participants will identify factors that contribute to language and literacy development of children and young adolescent students. Focus will be on the study of students' reading and writing behaviors with emphasis on the development and use of instructional plans that effectively address language and related literacy development, with explicit attention toward assessment of reading and writing difficulties. Teacher candidates will collect and evaluate a variety of artifacts that support students' strengths and needs in relation to their literacy development. Classroom instructional interventions will be explored and designed to meet differentiated instructional needs of all students, including children with special needs and English as an additional language. A field experience is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ELED 366: Integrating the Arts into the Elementary Classroom

This course explores the concepts and skills central to the visual and performing arts and examines the role of the arts in society. Students will learn how to develop substantive connections between the arts and other subject areas in the elementary curriculum. They will learn and practice developmentally appropriate strategies for integrating and assessing learning in the arts.

ELED 370: Selected Topics in Elementary Education

An in-depth study of a topic that is of high immediate relevancy to elementary educators. Topics will vary depending upon interests of students and faculty, or the timeliness of the subject matter. The course content will normally change each time the course is offered. The course may be repeated for up to six credits provided the same topic is not repeated.

ELED 380: Independent Study in Elementary Education

Independent Study is based on a student's pursuit of a subject in elementary education not covered within a regularly offered undergraduate course in Elementary Education. Students may schedule this course for one to three credits in a single semester, with no more than six credits for Independent Study overall.

ELED 390: Student Teaching and Practicum (Elementary I)

ELED 390 and 391 are segments of a single course which provides two full-time classroom experiences comprising an entire semester. Opportunities are provided for observations and participation in all activities related to teaching. The practicum, concurrent with student teaching, is a clearing house for the selection, organization, and presentation of proposed units, lessons, and other classroom related activities. In addition, it provides an opportunity for the discussion of problems that arise in the classroom. Students organize units of instruction and present them for evaluation by the group.

ELED 391: Student Teaching and Practicum (Elementary II)

ELED 390 and 391 are segments of a single course which provides two full-time classroom experiences comprising an entire semester. Opportunities are provided for observations and participation in all activities related to teaching. The practicum, concurrent with student teaching, is a clearing house for the selection, organization, and presentation of proposed units, lessons, and other classroom related activities. In addition, it provides an opportunity for the discussion of problems that arise in the classroom. Students organize units of instruction and present them for evaluation by the group.

ELED 392: Clinical Experience with Middle Level Learners I

ELED 392 and ELED 393 are segments of a program requirement, which provide two full-time elementary/middle classroom experiences comprising an entire semester. Opportunities are provided for observations and participation activities related to teaching. The practicum, concurrent with student teaching, provides an opportunity for the discussion of current issues and problems that arise in and out of the classroom.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ELED 393: Clinical Experience with Middle Level Learners II

ELED 392 and ELED 393 are segments of a program requirement, which provide two full-time elementary/middle classroom experiences comprising an entire semester. Opportunities are provided for observations and participation activities related to teaching. The practicum, concurrent with student teaching, provides an opportunity for the discussion of current issues and problems that arise in and out of the classroom.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ELED 395: Honors Independent Study/Thesis

Honors Independent Study/Thesis.

ELED 412: Education and Care of Infants and Toddlers

Through research, discussion, practical applications in the field, and critical thinking, the students will expand their knowledge and understanding of the child from birth to age three. Ideas and selected approaches will be introduced to increase the students' abilities to create an appropriate educational environment based upon sound child development principles. Recent neurophysical research findings will be stressed and applied to develop strategies and plans for group care of the child from birth to three.

ELED 415: Building Partnerships for Educating Young Children: Families,

This course explores the relationships of the diverse people, organizations, and societies responsible for the education of young children. Historical influences, effective teaching strategies and curriculum for working together and successful partnership models are emphasized. Field experiences with parent programs and family agencies are required.

ELED 420: Administration of Early Childhood Programs

This course is designed to provide the knowledge-base necessary for administering and directing diverse early childhood programs. The roles and duties of the administrator, budgets, personnel, environmental factors and public awareness are addressed through projects and readings. Through both field experiences and research, alternative models of early childhood programs are explored.

ELED 452: Current Trends in Reading Instruction

This course will examine current reading programs and major developments in the teaching of reading. Students will analyze programs, approaches, and instructional methods in view of current reading research. In addition, students will take part in

discussions concerning the selected topics. Specific topics will vary from semester to semester, as changes occur in topics addressed in current professional journals.

English Teaching

ENED 405: Teaching Writing

This course is designed to aid future and current teachers, tutors, and professors in navigating the challenges of teaching writing in the 21st century. Students will develop their own teaching philosophies, grounded in the study of composition theory and pedagogy. Whether teaching writing at the elementary, secondary, or post-secondary level, students will be well-informed of the challenges and possibilities of developing literacies and equipped to create their own writing assignments in the classroom. As a 400-level course, both undergraduates and graduate students may take this class.

ENED 407: Teaching Literature

This course focuses on the understanding of the various forms, their development and proliferation, along with instruction in newer methods of teaching literature at the high school level.

English

ENGL 21: English as a Second Language

This course, for students for whom English is not a native language, develops vocabulary, reading, and writing skills. It does not satisfy the English composition requirement. Grade: Satisfactory/Unsatisfactory.

ENGL 22: Introduction to College Composition

This is an introductory writing course designed to increase students' writing proficiency and prepare them for the work of ENGL 023. ENGL 022 focuses on the writing process and provides an introduction to critical thinking and analytical writing. Students gain experience in writing in variety of genres which may include, but are not limited to, proposals, reviews, personal narratives, digital texts, rhetorical analyses, persuasive essays, reports, and critical analysis. Readings are assigned to provoke discussions, provide opportunities for the analysis and synthesis of arguments, and to generate essay topics. Particular attention is paid to topic generation, focus, purpose and development. In addition, mechanics of Standard Edited American English, which may include diction, grammar, syntax, usage, and structure, are addressed as part of the process of writing; however, the focus of this course is not grammar instruction. Students completing this course must still complete ENGL 023 or ENGL 025 to fulfill the General Education requirement in composition.

ENGL 23: College Composition I

This is a sustained examination of and practice with college-level writing. Students will generally take ENGL 023 in their first year of college. The course focuses on the writing process and provides sustained practice in critical thinking, reading, and writing demanded by academic, public, and professional writing. Students gain experience in writing in a variety of genres which may include, but are not limited to, proposals, reviews, personal narratives, digital texts, rhetorical analyses, persuasive essays, reports, and critical analysis essays. Readings are assigned to provoke discussions, provide opportunities for the analysis and synthesis of arguments, and finally to generate essay topics. Particular attention is paid to research processes and the conventions of including research in texts. In addition, the mechanics of good writing, which may include diction, grammar, syntax, usage, and structure are addressed as part of the process of writing; however, the focus of this course is not grammar instruction. ENGL 023 (or ENGL 025) is a General Education requirement for all students in all majors. In addition, ENGL 023 is a prerequisite for all upper-division English department courses.

ENGL 25: Honors Composition

A first course within the Honors Program that focuses on critical reading, writing, and thinking within the arts and sciences. Satisfactory completion of this course fulfills the university requirement in composition and the prerequisite for all other upper-division writing courses. This course does not replace ENGL 230. Previously offered as ENG 231.

ENGL 100: Reading and Writing in the Professions

This course will orient students to the significance of critical reading and different genres of writing in public, professional, creative, and academic careers. Students will analyze a range of print and non-print texts and media from different genres. They will also get experience writing in a variety of different genres. Students will exercise and refine interpretive methods, critical strategies, and writing practices as they also explore and prepare for the varied career opportunities for English and Professional Writing majors.

ENGL 101: World Literature I

World Literature I surveys literary masterpieces from the Ancient period to the Renaissance, focusing on texts outside the traditional canons of American and British Literature. Particular attention will be given to those texts and authors that have had the greatest impact on our literary world.

ENGL 102: World Literature II

Intensive reading of selected masterpieces of world literature which reflect the evolution of human thought, to develop in the student the power of discrimination and the habit of evaluating. Either semester may be taken independently.

ENGL 105: Experiences in American Literature

This course covers representative and foundational period writings in American literature. Particular attention is given to works that illuminate national literary development, intellectual and cultural history, and ideals.

ENGL 106: Experiences in British Literature

The source of pop culture phenomena such as Harry Potter, the Lord of the Rings, and James Bond, as well as recognized traditional literary masterpieces, Britain has produced novels, films, music, plays, and poems that have--for better or worse--spread across the world for centuries. Students will read and analyze works from a range of genres, spanning from the earliest tales of knights on quests through the dark gothic stories up to today's most recognized cultural icons.

ENGL 107: Conventions of English Grammar

This course surveys the fundamentals and conventions of English grammar and syntax. Topics include lexical categories, phrase structure, clause structure, modification, subordination, punctuation, and language acquisition. Additional attention is given to matters of style in order to sharpen students' prose. This course is recommended for those pursuing degrees in English, Professional Writing, Elementary Education, and English Secondary Education although open to any student wishing a deeper understanding of English grammar.

ENGL 108: Poetry and Poetics

Poetry is among the most fundamental human activities. From our most distant origins all the way down to the present day, from landmark occasions to our daily lives, people sing, pray, protest, aspire, love, and grieve in verse. This course engages these traditions by studying poems old and new to illustrate the traditions and aesthetic theories of the art. It is writing intensive, galvanizing skills in analysis, interpretation, research, and critical writing; therefore, it meets General Education requirements for category A4.

ENGL 109: Rebel Hearts -Explorations of Irish Literature

"We have always found the Irish to be a bit odd. They refuse to be English." These words uttered by Winston Churchill point to the tenacious character of Irish culture to be forcibly unique despite the impact of colonialism and conflict. Such an identity

is fiercely present in a centuries-old body of Irish literature that appeals to a reader's sense of history, humor, revolution, and romance. From ancient Celtic mysticism to medieval folklore, political nationalism to 1:5lobal revolution, contemporary thrillers to gothic horror, ever-present humor to bleak tragedy, the Irish literary tradition canvasses all genres and forms in a way that is uniquely Irish. This course will offer students an opportunity to experience all of this in an effort to truly understand what it means to be Irish.

ENGL 110: Introduction to Literature

Explore a variety of literary forms and styles in this introductory study of literature. Students will learn about both form and meaning by learning about the history, methods, and aesthetics embedded in the study of the written word. The course will be broken down into three units, fiction, drama, and poetry with further exploration of sub-genres including song lyrics, television and film scripts and screenplays, biographical writing, podcasts, and more. In addition to reading and experiencing exemplary works in each genre, students will also create works within each genre allowing them to experience first-hand, the process of writing and composing literature.

ENGL 116: Weird Fictions: Ten Cent Plagues, Video Nasties, and Other (Un-)

Uncanny fantasy stories, slasher movies, and heavy metal mt1sic are just a few examples of the unpopular culture the course considers. Beginning with the weird fictions of H. P. Lovecraft and Robert E. Howard, we'll read, watch, and listen through the twentieth century, unearthing significant movements and texts in unpopular culture, in America and elsewhere, and socio-political responses to these weird fictions. Through close analysis of fiction, films, and other media, students examine the parameters of aesthetic taste, good and bad, and consider the social at1d cultural work that underground, alternative, and sub-sub genre texts do. Throughout we will consider why and how so many of those texts have proven so su111risingly popular, so strangely pleasurable, and oddly important.

ENGL 117: Science Fiction

Advanced technologies, both mechanical and digital; alien lifeforms, both monstrous and beautiful; and space exploration, of planets near and far: these themes have been imagined in the amazing stories and weird tales of science fiction since its emergence. This course examines classic and contemporary stories of science fiction, focusing on film, novels and short fiction, and graphic narrative. Students will address some of the genre's most popular and most innovative texts, and will engage its history and development. Space odysseys, wars among the stars, and some even stranger things will appear as we read, discuss, and think critically about the enduring importance and artistic joys of science fiction.

ENGL 119: American Genre Film

A genre approach to film study designed to introduce the general student to basic concepts in film criticism, aesthetics and history.

ENGL 123: Current Themes in Literature: American Writers and the

This course uses an Ecocritical approach to representative works in American literature that contemplate nature and reflect on humans' relationship to the natural world. This course is suitable for both majors and non-majors.

ENGL 126: Current Themes in Literature: Sports in Literature: An Examination

This course examines the ways in which American sports are represented in late twentieth- and twenty-first century works of literature, film, and television, as well as on websites, blogs, podcasts, and social media platforms. Students will be introduced to a variety of aesthetic forms and styles as they appear in fiction, poetry, and drama and study the ways in which they are deployed in both literary and non-literary texts about sports in the US. They will write critically and creatively about sports, their representation, and their place in contemporary American history and culture.

ENGL 126: American Sports and Contemporary Texts

This course examines the ways in which American sports are represented in late twentieth- and twenty-first century works of literature, film, and television, as well as on websites, blogs, podcasts, and social media platforms. Students will be introduced

to a variety of aesthetic forms and styles as they appear in fiction, poetry, and drama and study the ways in which they are deployed in both literary and non-literary texts about sports in the US. They will write critically and creatively about sports, their representation, and their place in contemporary American history and culture.

ENGL 127: Current Themes in English: Ghost Stories

This course examines the ghost story as a literary genre from its earliest appearances in myth and legend through contemporary times, including local ghost lore of the Kutztown area. This haunting genre includes oral histories, horror films, short stories, and contemporary novels.

ENGL 129: Current Themes in Literature: Jazz Culture

This course explores the special relationship shared by Jazz and Literature. The course will put the literature about jazz culture into conversation with jazz music, jazz film, jazz dance, jazz theater, and other jazz arts.

ENGL 132: Contemporary Gay and Lesbian Literature

This course will focus on contemporary gay and lesbian literature with an emphasis on fiction written after the 1969 Stonewall riots. As a relatively new field of literary studies, gay and lesbian literature represents a wide, creative and challenging oeuvre. Novels, poetry, and drama written by and/or about gay men and women will be examined in connection with identity and gender politics, social movements, camp, feminist and queer theory, and the influence of the AIDS epidemic.

ENGL 135: Contemporary African Novel

Contemporary African Novel will introduce students to a broad sampling of novels written originally in English or translated into English, from Amos Tutuola's My Life in the Bush of Ghosts (1954) to the present.

ENGL 136: Contemporary African Poetry and Drama

Contemporary African Poetry and Drama will introduce students to a broad sampling of poetry and drama from Africa, written in English or in English translation.

ENGL 137: Experiences in African American Literature

Students of this course will be challenged as they intensively survey the oral and literary tradition of literature and music written and performed by African Americans from the eighteenth century to the present. Students will read works in different literary and musical genres as they survey African-American literature from its beginnings through the 21st century-poetry, prose, slave narratives, and fiction-including the corresponding history that encourage the literary production and movements in and by Black Americans.

ENGL 141: Literature and Film

This course is designed to give the student an opportunity to consider the similarities and distinctions in form and style between literary texts and films by examining adaptations of literary works and their source material. Students will consider the artistic choices made in the work of adaptation and their resulting discourses about the cultures in which they are produced. Critical approaches relevant to literature and film provide the student with additional areas of study.

ENGL 142: Gothic Literature

This course examines the history of Gothic literature from the late-eighteenth century Gothic romance to southern American Gothic fiction and the recent Gothic revival. Representative works, their distinguishing features, their recurrent themes and motifs, their social, psychological, and rhetorical implications are also examined.

ENGL 144: Comics Studies

This class is an exploration of the medium of comics in its various forms, from the comic strip to the comic book to the graphic novel to the web comic. Students will investigate historical and contemporary, independent and mainstream, and American and international comics; develop a vocabulary for examining the specific features of the medium; and examine how authors and artists have deployed those features in a range of different contexts.

ENGL 145: The Fairy Tale

Why do we still care about fairy tales? What makes them so popular and so relatable to our modern lives? To answer these questions, this course examines classic fairy tales, from their earliest oral and written roots to current representations and transformations. It explores the origins of fairy tales and traces their continual evolution in response to their cultural settings. We will study a number of individual tales in depth, read fairy tales and poetry by contemporary authors, and view films that both depict traditional tales and re-interpret them.

ENGL 146: Ireland's Literary Landscape

Myths, legends, epics, ballads, keens, fairy tales, folklore, poetry, plays, fiction, satire. Cliffs, dolmens, battlefields, passage tombs, ruined monasteries, ring forts, round towers, manor houses, cathedrals, colleges, modern cites. Rich in both great literature and spectacular landscape, Ireland reverberates in the world's imagination. Designed as a study-abroad exploration of Ireland, this course maps the relationship between the Irish landscape and its literature. Ireland boasts one of the world's richest and most influential literary traditions. Reading both classical and modern Irish literature provides opportunities for students to survey elements of its vital and at times troubled social and cultural history. Site visits buttress readings, illustrating the resonances of the landscape in the literature. This course meets General Education, Literature Minor, and English Major requirements.

ENGL 155: Dis/Abilities and Literature

The world holds certain expectations for what we are able - and unable - to do, given the individual features of our bodies and minds. Writers across the globe have confronted these societal expectations by creating characters whose minds and bodies don't conform to the rules or norms that society places on them. In this course, we will read literary representations of people with cognitive, sensory, and physical impairments, and discuss what these representations reveal about cultural values and norms.

ENGL 171: Friendship in Western Cultural Texts

This course considers friendship, one of the most important elements of human experience, and examines how it is represented in cultural texts (primarily literary works, but also works of film, television, video, and social media). Readings that have been important in the history of friendship, ranging from classical Greek and Roman to British and American texts, will provide background for understanding the ideas about friendship that we have inherited.

ENGL 175: Archetypal Women in Myth and Literature

This course examines powerful female figures, including goddesses, queens, and warriors, in mythical and literary texts and interprets their symbolic and cultural significance through the lenses of archetypal, mythological, and feminist literary criticism.

ENGL 180: Literature and Rock and Roll

This course examines the relationships, social, cultural, and artistic, between literature and rock music. Course materials include works of literature, broadly conceived, that directly engage with or seek to represent rock music, and rock music that addresses, comments on, or is influenced by literary history and culture. The course explores the notion that rock music should be taken as seriously as literature, and the complementary notion that techniques of literary interpretation can be productively applied to rock's intensities, pleasures, and complexities. Readings will rock, listening will be loud.

ENGL 200: History of the English Language

Take a linguistic tour through the history of the English language. Learn the origins of our eclectic English spelling, listen to the language of Anglo-Saxon warrior kings, and read ancient illuminated manuscripts dotted with runic letters. This course focuses on the origins and development of the English language, tracing linguistic changes from its Indo-European roots through to today, including the modern emergence of World Englishes. We will focus on cultural and historical developments that influenced Old and Middle English and give particular attention to literary texts from these periods. Throughout this course, students will gain familiarity with basic concepts and terminology of linguistics and engage in the process of research writing.

ENGL 217: German Comics in English

German Comics in English examines German-language comics and graphic novels as reflective of cultural, social, and historical conditions. The course also focuses on aspects of comics theory, artistic practices, and narrative form. Students produce an original graphic novel at the conclusion of the course. Taught in English.

ENGL 221: Jane Austen: Early Woman Novelist, Modern Media Property

This course examines the work of Jane Austen in her multiple roles as the pioneering woman novelist of two centuries ago, the major canonical novelist she became recognized as in the twentieth century, and the living presence in contemporary culture that she remains. Approaches will include historicist, feminist, and multimedia.

ENGL 223: Games and Literature

In this course students will play, analyze, and write their own interactive narrative games. The literary nature of video console, computer, boardgame, and roleplaying games will be the focus of this course with particular emphasis on short form avant-garde games that challenge the genre. We'll discuss the ways that narrative games transform the reader into a player with an active role in story creation, how games might be understood as literature, and the tropes that these games often rely upon. Playing and discussing games is one major part of the course activities, but writing will be equally important as the main method of responding to and creating interactive games.

ENGL 224: American Modernism

American modernism is the study of various cultural responses to rapid social changes brought on by innovations in technology that caused sharp changes to the global economy. This course employs interdisciplinary research methods based on the interplay between literature, popular culture {including art, film, and music), and the events that shaped early twentieth-century Americans' sense that they were now inhabiting an irrevocably changed world. Crucially, the course will explore diverse voices reflecting a variety of responses to modernity.

ENGL 229: Literature and Psychology

In this course, students will use concepts from contemporary psychology to analyze literary works from a variety of genres. Approaching literature through psychology can add greatly to our understanding of literary creation and consumption, and it can teach us about social dynamics and human motivations. This course will consider how authors create their identities, how literary works change our ways of thinking, and how the exchange between literature and psychology increases our understanding of human nature.

ENGL 233: Contemporary Fiction

This course examines representative contemporary fiction, both American and international, from about 1990 through the present. Topics covered include the development of contemporary fiction, the use of traditional and new literary approaches and strategies of representation in contemporary fiction, themes and motifs found in contemporary fiction, and the historical and cultural contexts of these literary works and themes.

ENGL 235: The American Autobiography

The American Autobiography treats a broad spectrum of 18th to 20th-century autobiographies which are characterized by a great diversity in technique, theme, and authorial background.

ENGL 236: Black American Literature: Poetry/Drama

An exploration of the poetry and drama of Black Americans, beginning with Phillis Wheatley and William Wells Brown as precursors of the Black literary tradition, and ending with, as the focal point, contemporary poets and dramatists.

ENGL 237: Black American Literature: Novel

An exploration of the prose writings of Black American novelists and essayists, beginning with the slave narratives as prototypes and ending with, as the focal point, the latest contemporary novels.

ENGL 238: African Diasporic Literature

African Diasporic Literature will introduce students to a broad sampling of the literature written originally in French, Spanish, and Portuguese, and translated into English, by people of African descent dispersed in such places as Argentina, Brazil, Colombia, Cuba, Dominican Republic, Ecuador, Guadeloupe Haiti, Mexico, Peru, Puerto Rico, and Venezuela. These, and other, places where people tracing their descent to Africa reside, constitute the African Diaspora. The course will be found useful by students in English, Secondary Education, Modern Languages, Women Studies, and General Education.

ENGL 244: Documentary Film and Theories of Representation

This course is a study of the documentary film genre, its history, and the theories of representation that have informed its different modes. Whether the intention of the documentary film is to preserve, persuade, or analyze a subject, students will consider documentary films and theories from a number of perspectives, including that of the filmmaker, the film subject, and the viewer. In conjunction with documentary film history, students will read theoretical and critical approaches that informs the production and analysis of this cinematic genre and the ethics of representation. This course is suitable for both majors and non-majors.

ENGL 247: Modern Latin American Literature in Translation

An in-depth study of outstanding Twentieth Century literary works of Latin American writers. The survey will include representative works from the major literary genres: novel, essay, short story, drama and poetry.

ENGL 248: Living Literacy

Literacy isn't learned-it's lived. While we may associate it primarily with school, literacy saturates our work and 'social lives. Further, an educational focus on text-based literacies is complicated by social media, remix practices, and new technologies. "Reading" and "writing," then, need to be understood in light of our shifting culture: technologically, socially, economically, and politically, Students will challenge literacy myths and measures while exploring their own lived literacies.

ENGL 249: Edgar Allan Poe: Gothic Horror, Detective Fiction, and Journalism

Edgar Allan Poe is one of the most popular writers in American literary history, and yet a maelstrom of mysteries and misunderstandings swirl around his work, his life, and his legacy. But as Poe himself wrote, "Believe nothing you hear and half of what you see." This course attempts to shed light on Poe's works of Gothic horror, detective fiction, and journalism. Beginning with the eighteenth-century fiction of Charles Brockden Brown, it examines the American Gothic tradition from which Poe's distinctive brand of horror arose before exploring topics including mental illness, drug abuse, murder, entombment, beauty, originality, science, and the supernatural in his poems, short stories, journalism, and hoaxes. It concludes by tracing Poe's influence in contemporary works of literature, film, television, and video games.

ENGL 253: German Literature in English Translation I

GERM 253 This course is an in-depth study in English translation of some outstanding works in German literature. It is devoted to German writers from Lessing to E.T.A. Hoffmann. Its sequel, ENGL/GERM 254, is a continuation of ENGL/GERM 253 and treats outstanding writers from Realism through the 20th century. Either semester may be taken independently.

ENGL 254: German Literature in English Translation II

GERM 254 This course is an in-depth study in English translation of some outstanding works in German literature from Realism through the 20th century. It is a continuation of GERM 253. Either semester may be taken independently.

ENGL 260: German Cinema in English

This course investigates German cultural and historical impulses as told through 20th and 21st century German film. Students survey films from selected periods, and discuss predominant themes as well as aspects of film technique that support critical

interpretations.

ENGL 265: Real Life Research

Research may begin in the library, but it doesn't need to end in the databases or among the shelves. In this course, students will conduct first-person research using ethnography, case study, oral history, or interview. Moving beyond the basics of using search engines, you will deepen your information literacy, navigating digital spaces and assessing their integrity. Finally, you will experiment with digital genres in which to draft and share your work beyond the classroom. This course is an elective in the English major.

ENGL 270: Short Story

The development of the short story as a distinct literary type traced by means of wide reading and close analysis.

ENGL 271: Native American Writing and Rhetoric

Learn about contemporary Native American peoples in four genres: stand-up comedy, comics, music, and creative nonfiction. The course also provides students an opportunity to research how certain Native American writers, thinkers, performers, artists, or speakers carve space for their voices in the crowded space of modern intellectual thought and practice. Students will consider issues of identity, cross-cultural understanding, individuality and community by intellectually engaging with the texts and performances of indigenous practitioners. This course is an elective in the English major.

ENGL 272: Women and Violence in Contemporary World Texts

This course will investigate the complex relationship women around the world have with violence. Though formerly only regarded as those in need of protection, women who perpetrate violence have forced a shift in gender roles ascribed to violence. Looking at written and visual texts that depict women as both victims/survivors and perpetrators of violence will allow students to discuss the ways women's shifting role in violent movements and in texts has changed both the gender ideology and the political climate in a rapidly globalizing world. This course work will look at the ways women's relationship to violence is constructed and question ideas that women are "naturally" non-violent. While this course does not condone the use of violence, it does study ways women use violent tactics to resist oppression, enact revenge, and find a voice.

ENGL 274: Women, Writing and Rhetoric

While the spoken and written word have long been studied for their rhetorical intent and success, this study has been conducted primarily through a male lens. As such, womens contributions to rhetoric throughout history, like so many other aspects of womens experience, have yet to be fully explored. Women, Writing, and Rhetoric seeks to expand the study of rhetoric with a multi-layered consideration of how rhetoric has been informed by, and informs, a female consciousness. This is an elective course for English majors, Womens Studies minors, and those seeking a concentration in Composition, Rhetoric, and Literacy Studies.

ENGL 278: Women Writers Around the World

The focus of this course is modern and contemporary literature by women around the world. Students will read selected fiction, non-fiction and poetry, and examine these works primarily, but not exclusively, from the perspectives of Feminist Critical Theory.

ENGL 283: American Modernists in London

To be offered as study-abroad in London course, American Modernists in London provides the opportunity to delve into a significant moment in literary history. At the turn of the twentieth century, London was seen as the capital of modern world culture, attracting America's most significant writers, including Henry James, Mark Twain, Stephen Crane, Bret Harte, Jack London, Robert Frost, Ezra Pound, H.D. and T. S. Eliot. Students will read works written by these writers while living in London, and they will visit and explore the places these writers frequented. The class will map the influence of turn-of-the-century London on the development of American identity at a pivotal historical moment. This course satisfies electives in the English

major as well as General Education Humanities and LAS electives.

ENGL 285: Victorian Sensation Fiction

This course will examine the genre of Victorian popular novels known as Sensation Fiction. These novels thrilled and horrified the Victorian middle class readers with tales of sinister conspiracies, bigamy, murder, sexual scandals, and madness. Students will study the cultural role and unusual narrative forms of this subversive and pleasurably horrifying popular literature.

ENGL 314: Social Media Analytics

Students will learn how to collect, analyze, and derive insights from social media data. The course focuses primarily on R programming as a freely available tool for social media analytics. While the course primarily focuses on Twitter data, the skills and abilities derived from the course will be easily transferrable to the analysis of other, popular social media platforms.

ENGL 317: From Science to Séance: Pseudoscience and Spiritualism in

This course examines the nineteenth-century fascination with bizarre phenomena such as mesmerism, séances, and weird science of all kinds. Students will read British and American literary and theoretical texts that engage with contemporary scientific, pseudoscientific, and spiritualist theories and practices, including evolution, phrenology, and mediumship.

ENGL 319: Culture and Media

This course offers a study of popular media texts, especially, but not exclusively, film, television, and new media, through a variety of theoretical lenses. Students will gain an understanding of foundational media theories while also examining more contemporary critical approaches to popular media texts.

ENGL 323: Native American Women Writers

This course provides undergraduate students an introduction to selected Native American Women Writers across several genres. Students will experience a variety of writings which move across traditional boundaries (such as nonfiction, poetry, fiction, theory, activist, and so on). The course also provides students an opportunity to consider Indigenous Feminism in theory and practice. Students will consider issues of gender, identity, cross-cultural understanding, individuality and community by intellectually engaging with the texts and performances of Native American women. This class may also include the opportunity for digital storytelling, blogging, interviewing, and community engagement.

ENGL 326: Punk Cultures in America

Punk-as style, genre, attitude-is most frequently recognized as a musical phenomenon, which emerged in the mid-l 970s as an anarchic, sometimes satiric, always disruptive force. This course broadens that popular concept, engaging a series of cultural moments-between the mid-l 960s through the 1980s-that are crucial for our understanding of punk's appearance and elaboration in the United States. The course will examine a number of artifacts that articulated and incorporated punk's style and energy: records and reviews, but also prose fiction, film, visual arts, graphic narrative, and theoretical discourse. Authors and artists that will be given significant attention include the Stooges, Lester Bangs, Samuel R. Delany, Patti Smith, Black Flag, Los Bros. Hernandez, Kathy Acker, X, Linda Hutcheon, Greil Marcus, Fredric Jameson, and Raymond Williams.

ENGL 327: Eighteenth Century Literature I

Poetry, neoclassical literary criticism, and drama from 1660 to 1780 with consideration of central issues and prevailing attitudes reflected therein; emphasis on major writers.

ENGL 329: Feminist and Gender Theories

This course provides an overview of the leading currents, issues, and debates in feminist literary theory, including gendered voice, difference vs. equality feminism, essentialism, and queer theory. Students will read theoretical and literary selections from nineteenth-, twentieth-, and twenty-first century feminists.

ENGL 331: Shakespeare's Earlier Plays

A study of a selection of Shakespeare's earlier plays, including among others, The Comedy of Errors, Richard II, Richard III, Henry IV Parts I and II, Henry V, Romeo and Juliet, Much Ado About Nothing, As You Like It, and Twelfth Night, and of the social, historical, and literary background necessary for their understanding and appreciation. Recordings, movies, and, when possible, "live" and TV productions are utilized.

ENGL 332: Shakespeare's Later Plays

A study of a selection of Shakespeare's later plays including among others, Hamlet, Othello, King Lear, Macbeth, Troilus and Cressida, the Winter's Tale and The Tempest, and of the social, historical, and literary background necessary for their understanding and appreciation. Recordings, movies, and, when possible, "live" and TV productions are utilized.

ENGL 333: Digital Rhetoric and Writing

This course focuses on honing the analysis and production of contemporary digital texts by extending longstanding academic conceptions rooted in the printed word alone. Specifically, the course examines how emerging areas within Rhetoric and Composition such as visual rhetoric, digital writing, and multimodal style are vital in cultivating sophisticated, responsive methods of analysis and production in a variety of online texts. Students will familiarize themselves with issues surrounding the creation, revision, and deployment of digital texts to better understand the complex rhetorics involved when arranging words, images, sounds, coding languages, available designs, fonts, colors, and spaces to make new kinds of 21st century texts and arguments.

ENGL 334: Linguistics

What is a word? And what, for that matter, are questions? Learn what we mean by meaning in this exploration of the nature of language. Using a descriptive approach, we will discover the building blocks of language including the structure of speech sounds, words, and sentences. Beyond this, we will touch upon techniques in applied linguistics and semantics. In doing so, we will analyze everyday assumptions about the "correct" way of speaking and discuss the legitimacy of World Englishes.

ENGL 338: HON: Crime and Punishment in Literature

This is a course in which students participate in critical analysis and interpretation of an international selection of classic works of literature from Greek drama to modern absurdist stories that create the theme of crime and punishment.

ENGL 339: New Media, Story, Change

This course investigates the crucial role that story plays in creating impactful campaigns within new and emerging media environments. Particular attention will be paid to the ways in which story continues to be one of the most important rhetorical tools in community and social movements seeking change. Readings will draw from a wide range of disciplines including rhetoric, literacy studies, marketing, public relations, communication studies, social media theory, cognitive psychology, and social movement studies.

ENGL 340: Romantic Movement

This course provides an in-depth study of literature from the Romantic period (l 780sl 830s), including poetry, novels, and essays. Encompassing themes as diverse as political revolution, sublime nature, and individual rebellion, Romanticism represents a significant departure from previous literary periods and a significant influence on subsequent literary movements.

ENGL 341: Introduction to Afro-Caribbean Literature

Students of Introduction to Afro-Caribbean Literature study various genres and authors from West Indian countries, including Cuba, Haiti, Martinique, Jamaica, and Trinidad. Authors' works were originally written in English or translated into English. While students will examine selected Afro-Caribbean texts from within the traditional model of literary criticism, including writing style and skill, content significance, and thematic representation, they will also engage the text's informing agents, including the critical, socio-political, cultural, and historical motivations that influence the authors' texts.

ENGL 342: American Poetry in the Long 1960's

The course is devoted to analysis of poetry .and poetics written by American authors during the period currently referred to as the long nineteen-sixties, encompassing the late nineteen-fifties' intensification of the Cold War through the mid-nineteen-seventies, when the Vietnam War and Watergate hearings drew to a close. Students will read closely a variety of poetic forms, both free verse and traditional, produced by authors associated with numerous schools and movements, including the Beats, the confessional poets, the New York School, the language poets, and Black Arts. Students will examine significant poetics produced during the period, and will discuss those theories alongside popular cultural appropriations of poetical form. Students will read canonical and non-canonical texts, and will think through texts' social, political, and aesthetic contexts, situating the works in two turbulent decades of American culture.

ENGL 343: Victorian Poetry

Representative poetic works will be studied in order to perceive the manner in which the major Victorians both reflect and transcend their age. Students will analyze the poetry of Tennyson, Arnold, Browning, Barrett Browning, and other Victorian poets in relation to the cultural and historical context of the Victorian age.

ENGL 344: Nineteenth Century Studies: Prose 1840-1890

Study of representative prose works in the novel and the essay.

ENGL 345: Rhetoric, Democracy, Advocacy

The connection between rhetoric and democracy is an old one dating back to the origins of both concepts in Western traditions. Simply put rhetoric the skilled use of argument and persuasive discourse and democracy were seen as ways to replace violence as the primary means of governing and maintaining social order. However, the connections between democracy and rhetoric may not be immediately apparent indeed the two may appear to be in opposition in contemporary society. This course argues that the intimate connections between rhetoric and democracy are critical to retain and reclaim for the health of democratic society and culture. In the era of globalization and digital media these connections are even more important. A healthy democracy requires citizen advocates who are skilled in the analysis of public discourse as well as in the production of persuasive texts.

ENGL 347: Activists Writing Media: Composing Democratic Futures

The early twenty-first century has seen an explosion in the development, repurposing, and critical use of new media by political activists. Unlike theoretical debates regarding the relative merits of new media compared to more traditional media or the vigorous business interest in "web 2.0" for its marketing possibilities, activists have approached new media in a rhetorical fashion. For activists, new media are part of the "available means" with which political organizing and campaigning take place. This course explores the multiple and complex ways in which activists have made use of and rewritten what counts as media, who counts as an authorized writer, and even what counts as writing. The course will investigate examples of activist campaigns, emergent theories of literacy, and the role of literacy training for the development of activists and how this is often at odds with the literacy instruction students receive in secondary and post-secondary schooling.

ENGL 348: Contemporary Drama

Contemporary Drama examines works in English of the previous twenty years. The course includes original plays written in English, translations of plays from other languages into English, as well as new interpretations of revived works. The course discusses themes and subjects in plays relevant to contemporary life: the portrayal of politics, economics and business, treatment of the individual and family, philosophy, religion, sexuality, gender, ethnicity and race, for some examples. The course will also note developments in and illustrations of dramatic theories.

ENGL 349: Teaching of Adolescent Literature

This course will discuss the historical development of Adolescent/Children's Literature, focusing on the rising popularity of

contemporary Young Adolescent Literature (YA), which has made itself evident in the past few decades. In addition to recent texts of YA literature, it will also include the canonical texts that these recent texts are based on by grouping contemporary texts and canonical texts by theme such as dystopia/utopia, coming of age, gender studies, mythology, the American dream, and racial issues. These studies will also entail the application of literary theory in a high school setting and strategies for teaching literature to struggling readers.

ENGL 350: The Times of Melville and Whitman

A study in depth of Melville and Whitman as creative forces in the shaping of American poetry and prose. Consideration is given to the cultural background from which their works derive.

ENGL 351: American Literary Realism: 1865 - 1910

This course will focus on an analysis of Regionalism, Realism, and Naturalism in American literature between 1865 and 1910. Special attention will be paid to the works of Mark Twain, Henry James, Kate Chopin, Stephen Crane, and New England Regional writers.

ENGL 353: Development of the Drama

A comprehensive study of world drama from its beginnings to the late 19th century.

ENGL 355: Development of the Novel

The evolution of the world novel traced from its beginnings to World War I.

ENGL 356: International Cinema

This course is designed to explore the underlying structures of film as a communications medium and as an art form. This course will include both foreign and American films.

ENGL 358: The Rhetoric of Style

This course focuses on understanding historical and contemporary rhetorical conceptions of style in order to foster more sophisticated invention, analysis, and production of 21st century texts. Specifically, the course examines the idea of style from ancient understandings rooted in orality up to modern iterations rooted in multimodal composition, social media, and digital writing.

ENGL 359: Feminist Film Theory

In this course, students will investigate the intersections of feminist film theory and cinematic representations of gender as both subject and object. Gender equality, identity, fluidity, and freedom have been foregrounded in contemporary political and social conversations and accordingly in cultural products such as film. The course will examine the political, social, economic, and cultural implications of gender representations within the narrative, documentary and avant-garde traditions of feminist and anti-feminist film practices and theory. Special attention will be paid to marginalized and underrepresented communities to highlight conversations about human rights, civil rights, and equality.

ENGL 360: Contemporary British and Irish Literature

British and Irish poetry, drama, and prose fiction since 1965 analyzed in form and content with special attention to the relationship of literary techniques, and cultural, historical, and theoretical context.

ENGL 361: Tolkien and Lewis

J.R.R. Tolkien has been called "the Author of the 20th Century," and C.S. Lewis is likewise one of the best known names among literary and academic figures of the last 100 years. The main goal of this course is to try to explain why two rather marginalized Oxford professors now appear, posthumously, as dominant literary figures for their generation and succeeding ones. While the main concentration will be on the works of Tolkien and Lewis, and their impact on twentieth and twenty-first century fiction, we

will also consider the circumstances of their lives and friendship with each other and the group known as the Inklings.

ENGL 362: American Romanticism

This course provides an in-depth study of the essays, fiction, and poetry of canonical writers of the antebellum period (1820-1865), including Emily Dickinson, Herman Melville, and Edgar Allan Poe. Students will also read writings by non-canonical authors of the period, including abolitionists, Native American activists, women's rights activists, pseudoscientists, and commune leaders. They will learn about important events of authors' lives, from Melville's four-week captivity by cannibals in Nuku Hiva to Dickinson's (often caricatured) decades-long retreat to her bedroom. They will learn about the cultural phenomena (the fashion industry, phrenology, the museum) and the historical events (slavery, industrialization, expansion) that conditioned the texts they read.

ENGL 363: Modern Drama

Reading and analysis of selected plays from the time of Ibsen to the present, thus providing a comprehensive view of the best dramatic literature of the Modern American, British, and European theatre since 1870. Recordings, television productions, and stage performances are incorporated whenever possible.

ENGL 364: Modern Poetry

Representative poetry published since 1870 in England and America as the basis for a study of forms, aspects, and tendencies in contemporary verse, with particular reference to poetry as a criticism of modern life.

ENGL 365: Modern Novel

World War One, empires on the brink, and explosive developments in art, technology, and human consciousness: Modernism and modernist literature sought to respond to all of these factors, and many more. The course will examine fiction of the modernist avant-gardes, the high modernism of the interwar years, and other literary movements, like Surrealism, the Lost Generation, and the Harlem Renaissance. Novels from the United States and the United Kingdom provide the primary array of texts; given the importance of global social phenomena during the period, novels from other regions may be considered.

ENGL 368: Postmodernism

What is the postmodern? When did it begin-and is it over? Is it an artistic movement or a socio-cultural condition? And why do people get so agitated whenever its name is spoken? To work toward answers to these questions, the course examines representative postmodern literature and arts across a variety of media and genres, with an emphasis on texts produced in the late 20th century in America, with the occasional foray to continental Europe. Primary texts include novels, rock music, theory, films, comics, and visual arts-and some texts that try to incorporate all of the above.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ENGL 369: The American Autobiography to 1920

This course provides an in-depth study of the American autobiography from 1607 to 1920. Students will read conversion narratives, from the seventeenth-century spiritual autobiographies of Puritan women to the eighteenth-century confessions of condemned criminals. They will read bestselling success manuals, including those of journalist Fanny Fern and showman P.T. Barnum. They will read the life stories of major American activists, from Samson Occom and Olaudah Equiano to Sarah Winnemucca and Ida B. Wells. Students will think about these works in the context of contemporary historical events, from English colonial settlement and the Atlantic slave trade to the American Revolution, from the industrial revolution and expansion to the Trail of Tears, from the Civil War and Reconstruction to the nadir of race relations, from the Ghost Dance revival and the Gilded Age to the Progressive Era.

ENGL 370: Selected Topics in English

The course provides focus on a particular figure, period, or topic in language, literature, and/or rhetoric. Students may register for the course for up to six total semester hours of credit; students may not repeatedly register for a specific iteration of the

course.

ENGL 371: Independent Study

A course for students who wish to study the work of a particular literary figure or a special topic in language, literature, or communications in depth. Students may register for this course more than once, up to a maximum of six semester hours of credit, so long as they do not repeat the same topic.

ENGL 374: Nineteenth Century Women's Literature

This course covers selected literary texts by nineteenth-century British and American women writers. It also focuses upon gender-specific conflicts and changing perceptions about the nature, roles, and rights of women during this important era in the history of literature by women.

ENGL 379: Literary Theory

This course examines the major critical and theoretical texts of western civilization along with the major modern critical approaches to the study, interpretation, and evaluation of literature, and applies such theory to literary works from primarily western writers. This course explores a number of questions and issues that are central to literary studies. Namely, what is literature? What is the function of literature? Is it an aesthetic object that embodies universal truths or a socially constructed text that participates in the cultural discourses and power relations that create it. How do we analyze and evaluate literature in terms of what it represents? What is the role of the literary critic? Are there correct and incorrect ways to read literature? What is the relationship between writers, readers, society, and literature? What do our individual understandings of literature say about each of us as writers, readers, teachers, and literary scholars?

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ENGL 380: Professionalization Seminar

This course will provide students with the tools they need to make the transition from undergraduate academic study to professional application of skills, apply for and obtain internships, and identify and work towards specific post-graduation goals. Students will learn about internship and professional opportunities for English and Professional Writing majors, create professional resumes and cover letters, complete effective social media profiles, create a professional website, network with professionals, and apply for and obtain internships. Students will be required to update the professional website during the internship to include work done during this experience. This is a required course for all undergraduate English and Professional Writing majors and should be taken prior to the for-credit internship experience.

ENGL 390: Professional Writing/English Internship

The Professional Writing/English internship creates the opportunity for supervised, practical work experience in professional contexts wherein the skills attendant to English Studies are valued and can be developed. Internships are to be secured by the student under the advisement and coordination of English Department faculty, following ENGL/PRWR 380 Professionalization Seminar. The internship will extend the student's academic studies into the workplace and may fall into such professional categories as Editing, Journalism, Publishing, Public Relations, Social Media, Research, Campaign Organization, Communications, or Marketing. This internship may be taken for three, six, or nine credits.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ENGL 395: Honors Independent Study/Thesis

Honors Independent Study/Thesis.

ENGL 398: See Honors Supplementary Research

Supplementary research conducted by an Honors student in an upper-division (or 300 or 400-level) course in which the student is enrolled. The research is related to a topic in the course, but in addition to the standard requirements of the course, the research should exhibit advanced inquiry or investigation into the topic. The Honors student earns 1, 2, or 3 credits in addition

to the credits for the course itself. The number of additional credits depends on the amount and intensity of the supplementary research. Each department in the College of Liberal Arts and Sciences has a specific course number which uses the departmental prefix, but all courses will use a common number (398). The course title will read "Honors Supplementary Research" and will have a variable credit value from 1 to 3 credits, e.g. ENGL 398 Honors Supplementary Research.

ENGL 430: Rhetorical Traditions and Contemporary Renditions

This course studies the histories of rhetoric as well as contemporary intersections and applications across disciplines. Depending on the particular interests of the professor, one or more specific area(s) such as media, popular culture, sciences, feminisms and gender studies, composition studies, literary theories, literacies, global issues, pedagogy, arts, and political discourse will be chosen for a more detailed study. Critical to the course are the writing assignments that allow students to examine issues in more depth and explore alternative rhetorical stances and situations.

ENGL 470: Selected Topics in English

This course will deal in depth with a specific issue or area in English or a literary figure not covered or only covered briefly in another graduate English course. The course may be taken up to two times (6 credit hours), provided that the selected topic is different.

Engineering

ENGR 121: Engineering Drawing and Lettering

This course is an introduction to the elements of engineering drawing and design. Students will learn the history of design, the engineering design process, sketching and visualization techniques. 2D sketching and 3D solid modeling techniques utilizing feature-based and constraint-based parametric design will be utilized. This course encourages the student to visualize parts in the 3D world and have a “design intent” plan for each part they design. Advanced techniques including generative design, CAE, CAM, and rapid prototyping will be discussed. Course work will involve extensive programming using Fusion 360, AutoCAD, and/or Solidworks and/or other programming as appropriate.

ENGR 130: Engineering Mechanics

This course is an introduction to the study of both statics and dynamics with a concentration in engineering applications. Topics include statics and dynamics of particles and rigid bodies, analysis of structures and distribution of forces in beams and cables, work-energy, impulse-momentum, and systems of particles and rigid bodies.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ENGR 230: Strength of Materials

This course is an introduction to the study of the mechanical behavior of materials. Topics include transverse shear in beams, Mohr's circle for stress, plastic yield criteria, deflection of beams, fatigue and fracture, column buckling and stresses in thick-walled cylinders.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ENGR 330: Fluid Mechanics

This course is an introduction to the study of the fluid mechanics. Topics include kinematics of fluid flow and similarity concepts, equations of incompressible fluid flow with inviscid and viscous applications, turbulence, one-dimensional compressible flow, shock waves, boundary layers, separation, wakes and drag.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

ENGR 370: Research in Engineering

This course involves individual research on a specific problem in engineering or a related field under the advice of a faculty member. Students must discuss research opportunities with any faculty members whose areas of expertise interest them. This course can be repeated for credit.

ENGR 390: Internship in Engineering

Supervised, practical work experience in laboratory and/or field situations. Students interested in developing an individualized vocationally oriented program which may assist in future career options may structure a work-study experience with the cooperating agency or organization. A proposal outlining the work-study experience should be submitted to the student's supervising faculty member and the department chairperson. Clock hours will be determined by the cooperating agency or organization. Semester hour credit will be based upon the proposal and scheduled clock hours.

Environmental Science

EVSC 35: Powering Our Future: Energy, Climate Change, and Society

This course introduces our past, present, and future sources of energy and their advantages and limitation. Society's non-sustainable pattern of energy use from both a supply and environmental perspective will be discussed including the impacts of climate change. The technical, environmental, political, and societal problems associated with the eventual conversion to renewable energy resources will be investigated. A global perspective for the delicate interplay between energy and society will be gained. This course does not satisfy major, minor, or specialization requirements for Secondary Education and/or Liberal Arts Science Majors.

EVSC 100: Introduction to Environmental Science

A multi-disciplinary introduction to environmental problems and their potential solutions. Lecture and laboratory work are supplemented by field trips.

EVSC 200: Regenerative Field Lab

Regenerative Agriculture is a system approach to soil, ecosystem, human, environmental, and planetary health. Successful, sustainable outcomes depend on the practical application and integration of theory and knowledge from multiple associated disciplines. This course provides the integrative field experience necessary to prepare students to pursue those sustainable outcomes. This course is intended to be taken for 6 consecutive semesters by majors in the Environmental Science Regenerative Agriculture track. Students in other majors may take the course as an elective and an opportunity to learn more about agriculture, sustainability, climate change, and environmental science.

EVSC 201: Fundamentals of Regenerative Agriculture

Regenerative Agriculture is a system approach to soil, ecosystem, human, environmental, and planetary health. Successful, sustainable outcomes depend on the practical application and integration of theory and knowledge from multiple associated disciplines. This course provides the theoretical introduction to Regenerative Agriculture and is supported by application of that theory and integration with other, key disciplines, in 6 semesters of Regenerative Field Lab (EVSC 200) for majors in the Environmental Science Regenerative Agriculture track. Students in other majors may take the course as a brief, stand-alone introduction to the concepts of regenerative agriculture.

EVSC 202: Concepts of Food Justice

Truly regenerative agriculture, to be successful, cannot be only for the elite, but must reach all segments of society. To succeed in this, practitioners of regenerative agriculture need to understand the broader geographical, cultural, social, and political systems within which they operate. This course is intended as an introduction to concepts surrounding food justice

and food security in the context of agriculture and is supported by 6 semesters of Regenerative Field Lab (ENV 200) for majors in the Environmental Science Regenerative Agriculture track. Students in other majors may take the course as a brief, stand-alone introduction to the concepts of food justice.

EVSC 203: Concepts of Soil Science

Soils are complex systems. Each and every aspect of the soil is connected. This course focuses on developing knowledge of the description and interpretation of the fundamental physical, biological and chemical principles of soil generation and health in the context of agriculture and major nutrient cycles. This course is intended as a theoretical introduction to soils and biogeochemistry in the context of agriculture and is supported by application of soil science in 6 semesters of Regenerative Field Lab (EVSC 200) for majors in the Environmental Science Regenerative Agriculture track. Students in other majors may take the course as a non-lab introduction to the concepts of soil science and biogeochemistry.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

EVSC 204: Climate Change and Agriculture

Climate change is a complex and broad topic that poses many challenges to the physical, social, and economic realms. Climate change, driven largely by the anthropogenic burning of fossil fuels, will strain ecosystems and, more specifically, agriculture. This course focuses on understanding the natural and human processes behind climate change and how those processes interface with the agricultural practices. This course is intended as a theoretical introduction to climate change in the context of agriculture and is supported by application of climate science in 6 semesters of Regenerative Field Lab (EVSC 200) for majors in the Environmental Science Regenerative Agriculture track. Students in other majors may take the course as a brief, stand-alone introduction to the concepts of soil science.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

EVSC 205: Diseases of Food Crops

Plant diseases are a challenging issue for crop production. Some diseases, especially those caused by fungi, can result in devastating yield losses and are therefore a serious economic burden to farmers. In order to address the challenge of plant diseases in regenerative agriculture, understanding how, why and when diseases develop is very important. This course introduces students to the concepts of plant diseases in the context of agriculture and is supported by 6 semesters of Regenerative Field Lab (EVSC 200) for majors in the Environmental Science Regenerative Agriculture track. Students in other majors may take the course as a brief, stand-alone introduction to plant diseases of field crops.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

EVSC 206: Agricultural Entomology

It is difficult to overstate the impact that insects and related arthropods have on human agroecosystems. They are important recyclers of organic material in soils, required pollinators for hundreds of food crops, and are essential allies in managing agricultural pests. In their role as pests and vectors of plant diseases, insects are our greatest competitors for food; destroying a large proportion of our post-harvest stores and reaping untold pre-harvest damage to nearly all plant parts in every plant-based food system in the world. This course is fill introduction to beneficial and pestiferous insects and their management in the context of agriculture arid is supported by the application of applied entomology in 6 semesters of Regenerative Field Lab (EVSC 200) for majors in the Environmental Science Regenerative Agriculture track. Students in other majors may take the course as a brief, stand-alone introduction to the concepts of agricultural entomology.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

EVSC 207: Soil Analysis

Soils are complex and dynamic systems. To improve and maintain high soil quality, one must understand how the individual components of soil, from the water that flows through the pores to the elemental composition of the soil particles, change over

time under different conditions. This course focuses on developing knowledge of the physical, chemical, and biological measurements of soil, the techniques that are employed, and how the results aid in soil regeneration and identifying healthy soil. Understanding soil sampling schema is also an integral part of this course as analyses would be meaningless without knowing how to obtain a sample that is representative of a given space. This course is intended as a theoretical introduction to soil analysis in the context of agriculture and is supported by application of soil science in 6 semesters of Regenerative Field Lab (EVSC 200) for majors in the Environmental Science Regenerative Agriculture track. Students in other majors may take the course as a brief, stand-alone introduction to the concepts of soil analysis.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

EVSC 208: Biogeochemical Cycles

Biogeochemical cycles and processes are complex in that many factors influence the local to global flux and pools of nutrients and materials among the atmosphere, biosphere, and lithosphere. This course focuses on developing knowledge of the description and interpretation of the fundamental physical, biological and chemical principles of nutrient cycles at multiple spatial scales with a focus on impacts to agriculture. This course is intended as a theoretical introduction to biogeochemistry in the context of agriculture and is supported by application of these topics in 6 semesters of Regenerative Field Lab (EVSC 200) for majors in the Environmental Science Regenerative Agriculture track. Students in other majors may take the course as a brief, stand-alone introduction to the concepts of biogeochemistry.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

EVSC 210: Environmental Geology

A study of the relationship between man and his geological habitat. Problems hat society faces in using the earth are examined, including case histories of natural disasters and human interactions with earth materials. Geo-chemical cycles, geological materials, and land use will be examined as they relate to environmental quality.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

EVSC 220: Environmental Analysis

Qualitative and quantitative methods of analytical chemistry are explored by utilizing a "hands-on" approach applied to a variety of environmental samples. The course focuses on the basic components of each analytical technique or instrument, their range of environmental applications, their advantages and limitations, and the physical and chemical phenomena which form the basis of the analytical method. Basic sampling plans and designs are also discussed due to their complementary nature.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

EVSC 222: Environmental Biology

An introduction to the causes and symptoms of environmental deterioration. The effect of ecological perturbations on ecosystems especially the biota. Field experiences are an integral part of the course.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

EVSC 224: Applied Environmental Microbiology

This is an introductory microbiology course emphasizing prokaryotic functional anatomy, metabolism, and genetics. Principles of diseases and a basic introduction to immunology are included which provide a background for an overview of a variety of common diseases. Applied and environmental aspects of food, soil, and water microbiology are stressed in both the lecture and the laboratory. The laboratory is an integral portion of the course and emphasizes laboratory techniques, physiological testing, food and water analysis, and identification of unknowns.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

EVSC 270: Applied Environmental Science

This course provides students with the foundation to conduct environmental science research and develop skills related to career selection and acquisition. The course covers grant and research proposal writing, primary literature searches, critiques of journal articles, interdisciplinary collaboration within groups, research design and execution, data analysis, oral and poster research presentations, scientific writing skills, career search and networking strategies, resume and cover letter construction, and extra-curricular education opportunities.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

EVSC 370: Research in Environmental Science

This course involves laboratory work and/or a field study and/or library research on a selected topic in environmental science. The work will be supervised by one or more faculty members associated with the Environmental Science Program. The research topic will be acceptable to both the supervising faculty and the student. A written proposal outlining the research project must be submitted to the supervising faculty member's Department Chairperson.

EVSC 380: Senior Seminar in Environmental Science

An interdisciplinary seminar devoted to the analysis of selected environmental problems.

EVSC 390: Internship in Environmental Science

Students interested in pursuing practical laboratory or field work as part of their education may structure a work-study experience with a cooperating agency or organization. A written proposal outlining the internship experience must be developed and approved prior to participating in the experience.

EVSC 395: Honors Independent Study/Thesis

Honors Independent Study/Thesis.

EVSC 398: Honors Supplementary Research

Supplementary research conducted by an Honors student in an upper-division (or 300 or 400-level) course in which the student is enrolled. The research is related to a topic in the course, but in addition to the standard requirements of the course, the research should exhibit advanced inquiry or investigation into the topic. The Honors student earns 1, 2, or 3 credits in addition to the credits for the course itself. The number of additional credits depends on the amount and intensity of the supplementary research. Each department in the College of Liberal Arts and Sciences has a specific course number which uses the departmental prefix, but all courses will use a common number (398). The course title will read "Honors Supplementary Research" and will have a variable credit value from 1 to 3 credits, e.g. ENGL 398 Honors Supplementary Research.

Fine Arts Studio

FAST 230: Works on Paper Studio

This course affords students a wide range of practice and experimentation using various media on paper, including drawing (both wet and dry media), transparent and opaque watercolor, acrylic paint, collage, image transfer, etc. Work must be done on paper, or a paper-like support (ie. Mylar), or must include paper in its construction in a substantial way. No pastels may be used in class due to health concerns. Students are encouraged to pursue their own interests in both technique and concept. This is a repeatable studio course; requirements vary by studio level. Credit may be applied to either Drawing or Painting Concentration depending upon the mediums used. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 231: Works on Paper Studio II

This course affords students a wide range of practice and experimentation using various media on paper, including drawing (both wet and dry media), transparent and opaque watercolor, acrylic paint, collage, image transfer, etc. Work must be done on paper, or a paper-like support (ie. Mylar), or must include paper in its construction in a substantial way. No pastels may be used in class due to health concerns. Students are encouraged to pursue their own interests in both technique and concept. This is a repeatable studio course; requirements vary by studio level. Credit may be applied to either Drawing or Painting Concentration depending upon the mediums used. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 232: Works on Paper Studio III

This course affords students a wide range of practice and experimentation using various media on paper, including drawing (both wet and dry media), transparent and opaque watercolor, acrylic paint, collage, image transfer, etc. Work must be done on paper, or a paper-like support (ie. Mylar), or must include paper in its construction in a substantial way. No pastels may be used in class due to health concerns. Students are encouraged to pursue their own interests in both technique and concept. This is a repeatable studio course; requirements vary by studio level. Credit may be applied to either Drawing or Painting Concentration depending upon the mediums used. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 233: Works on Paper Studio IV

This course affords students a wide range of practice and experimentation using various media on paper, including drawing (both wet and dry media), transparent and opaque watercolor, acrylic paint, collage, image transfer, etc. Work must be done on paper, or a paper-like support (ie. Mylar), or must include paper in its construction in a substantial way. No pastels may be used in class due to health concerns. Students are encouraged to pursue their own interests in both technique and concept. This is a repeatable studio course; requirements vary by studio level. Credit may be applied to either Drawing or Painting Concentration depending upon the mediums used. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 234: Works on Paper Studio V

This course affords students a wide range of practice and experimentation using various media on paper, including drawing (both wet and dry media), transparent and opaque watercolor, acrylic paint, collage, image transfer, etc. Work must be done on paper, or a paper-like support (ie. Mylar), or must include paper in its construction in a substantial way. No pastels may be used in class due to health concerns. Students are encouraged to pursue their own interests in both technique and concept. This is a repeatable studio course; requirements vary by studio level. Credit may be applied to either Drawing or Painting Concentration depending upon the mediums used. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 235: Works on Paper Studio VI

This course affords students a wide range of practice and experimentation using various media on paper, including drawing (both wet and dry media), transparent and opaque watercolor, acrylic paint, collage, image transfer, etc. Work must be done on paper, or a paper-like support (ie. Mylar), or must include paper in its construction in a substantial way. No pastels may be used in class due to health concerns. Students are encouraged to pursue their own interests in both technique and concept. This is a repeatable studio course; requirements vary by studio level. Credit may be applied to either Drawing or Painting Concentration depending upon the mediums used. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 300: Time Based Experimental Media Studio I

This course is a continuation of the study of digital photography, digital video, web-based art, time-based art and related subjects beyond the introductory level. The emphasis is on continued development of personal imagery within the context of the digital arts. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Digital Media Studio. Specifically, students will develop their personal imagery, technical ability and increase their knowledge of relevant processes and techniques. They will increasingly show familiarity with contemporary and historical works [painting, printmaking, etc.] in the digital arts, especially that which relates to their work. At the more advanced levels of Studio, students will be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. (Repeatable up to 30 sh, no more than 6 sh in one semester.) This course is repeatable up to ten (10) times. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 301: Time Based Experimental Media Studio II

This course is a continuation of the study of digital photography, digital video, web-based art, time-based art and related subjects beyond the introductory level. The emphasis is on continued development of personal imagery within the context of the digital arts. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Digital Media Studio. Specifically, students will develop their personal imagery, technical ability and increase their knowledge of relevant processes and techniques. They will increasingly show familiarity with contemporary and historical works [painting, printmaking, etc.] in the digital arts, especially that which relates to their work. At the more advanced levels of Studio, students will be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. (Repeatable up to 30 sh, no more than 6 sh in one semester.) This course is repeatable up to ten (10) times. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 302: Time Based Experimental Media Studio III

This course is a continuation of the study of digital photography, digital video, web-based art, time-based art and related subjects beyond the introductory level. The emphasis is on continued development of personal imagery within the context of the digital arts. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Digital Media Studio. Specifically, students will develop their personal imagery, technical ability and increase their knowledge of relevant processes and techniques. They will increasingly show familiarity with contemporary and historical works [painting, printmaking, etc.] in the digital arts, especially that which relates to their work. At the more advanced levels of Studio, students will be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. (Repeatable up to 30 sh, no more than 6 sh in one semester.) This course is repeatable up to ten (10) times. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 303: Time Based Experimental Media Studio IV

This course is a continuation of the study of digital photography, digital video, web-based art, time-based art and related subjects beyond the introductory level. The emphasis is on continued development of personal imagery within the context of the digital arts. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Digital Media Studio. Specifically, students will develop their personal imagery, technical ability and increase their knowledge of relevant processes and techniques. They will increasingly show familiarity with contemporary and historical works [painting, printmaking, etc.] in the digital arts, especially that which relates to their work. At the more advanced levels of Studio, students will be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. (Repeatable up to 30 sh, no more than 6 sh in one semester.) This course is repeatable up to ten (10) times. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 304: Time Based Experimental Media Studio V

This course is a continuation of the study of digital photography, digital video, web-based art, time-based art and related subjects beyond the introductory level. The emphasis is on continued development of personal imagery within the context of the digital arts. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Digital Media Studio. Specifically, students will develop their personal imagery, technical ability and increase their knowledge of relevant processes and techniques. They will increasingly show familiarity with contemporary and historical works [painting, printmaking, etc.] in the digital arts, especially that which relates to their work. At the more advanced levels of Studio, students will be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. (Repeatable up to 30 sh, no more than 6 sh in one semester.) This course is repeatable up to ten (10) times. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 305: Time Based Experimental Media Studio VI

This course is a continuation of the study of digital photography, digital video, web-based art, time-based art and related subjects beyond the introductory level. The emphasis is on continued development of personal imagery within the context of the digital arts. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Digital Media Studio. Specifically, students will develop their personal imagery, technical ability and increase their knowledge of relevant processes and techniques. They will increasingly show familiarity with contemporary and historical works [painting, printmaking, etc.] in the digital arts, especially that which relates to their work. At the more advanced levels of Studio, students will be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. (Repeatable up to 30 sh, no more than 6 sh in one semester.) This course is repeatable up to ten (10) times. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 310: Painting Studio

This course is designed to further acquaint each student with painting knowledge, skills, and attitudes needed for their artistic development, critical voice, and self direction. This course is repeatable up to six times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Painting Studio. Specifically, students will develop their personal imagery, technical ability and increase their knowledge of relevant processes and techniques. They will also increasingly show familiarity with contemporary and historical art especially that which relates to their work. At the more advanced levels of Painting Studio, students will be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of three (3) hours of work per week is required outside of class.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 311: Painting Studio II

This course is designed to further acquaint each student with painting knowledge, skills and attitudes needed for the development of a personal imagery as well as the development of self-direction. (Repeatable up to 30 sh, no more than 6 sh in one semester). This course is repeatable up to ten (10) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Studio. Specifically, students will develop their personal imagery, technical ability and increase their knowledge of relevant processes and techniques. They will also increasingly show familiarity with contemporary and historical [painting, printmaking, etc.], especially that which relates to their work. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 312: Painting Studio III

This course is designed to further acquaint each student with painting knowledge, skills and attitudes needed for the development of a personal imagery as well as the development of self-direction. (Repeatable up to 30 sh, no more than 6 sh in one semester). This course is repeatable up to ten (10) times. Students are expected to set higher goals and achieve a higher

level of sophistication in successive levels of Studio. Specifically, students will develop their personal imagery, technical ability and increase their knowledge of relevant processes and techniques. They will also increasingly show familiarity with contemporary and historical [painting, printmaking, etc.], especially that which relates to their work. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 313: Painting Studio IV

This course is designed to further acquaint each student with painting knowledge, skills and attitudes needed for the development of a personal imagery as well as the development of self-direction. (Repeatable up to 30 sh, no more than 6 sh in one semester). This course is repeatable up to ten (10) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Studio. Specifically, students will develop their personal imagery, technical ability and increase their knowledge of relevant processes and techniques. They will also increasingly show familiarity with contemporary and historical [painting, printmaking, etc.], especially that which relates to their work. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 314: Painting Studio V

This course is designed to further acquaint each student with painting knowledge, skills and attitudes needed for the development of a personal imagery as well as the development of self-direction. (Repeatable up to 30 sh, no more than 6 sh in one semester). This course is repeatable up to ten (10) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Studio. Specifically, students will develop their personal imagery, technical ability and increase their knowledge of relevant processes and techniques. They will also increasingly show familiarity with contemporary and historical [painting, printmaking, etc.], especially that which relates to their work. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 315: Painting Studio VI

This course is designed to further acquaint each student with painting knowledge, skills and attitudes needed for the development of a personal imagery as well as the development of self-direction. (Repeatable up to 30 sh, no more than 6 sh in one semester). This course is repeatable up to ten (10) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Studio. Specifically, students will develop their personal imagery, technical ability and increase their knowledge of relevant processes and techniques. They will also increasingly show familiarity with contemporary and historical [painting, printmaking, etc.], especially that which relates to their work. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 320: Drawing Studio

This course is designed to allow the student to develop advanced skills and to explore the infinite possibilities of personal creative expression inherent in the art of drawing. The main emphasis of the course will be on studio activities supplemented by demonstrations, lectures, discussions and critiques, all of which help to define the nature of drawing. The repeatable aspect of the course allows for a continuum in the student's exploration of his/her artistic interest and creative ideas. (Repeatable for up to 30 hours credit; no more than 6 sh in one semester.) This course is repeatable up to ten (10) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Studio. Specifically, students will develop their personal imagery, technical ability and increase their knowledge of relevant processes and techniques. They will also

increasingly show familiarity with contemporary and historical [painting, printmaking, etc.], especially that which relates to their work. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 321: Drawing Studio II

This course is designed to allow the student to develop advanced skills and to explore the infinite possibilities of personal creative expression inherent in the art of drawing. The main emphasis of the course will be on studio activities supplemented by demonstrations, lectures, discussions and critiques, all of which help to define the nature of drawing. The repeatable aspect of the course allows for a continuum in the student's exploration of his/her artistic interest and creative ideas. (Repeatable for up to 30 hours credit; no more than 6 sh in one semester.) This course is repeatable up to ten (10) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Studio. Specifically, students will develop their personal imagery, technical ability and increase their knowledge of relevant processes and techniques. They will also increasingly show familiarity with contemporary and historical [painting, printmaking, etc.], especially that which relates to their work. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 322: Drawing Studio III

This course is designed to allow the student to develop advanced skills and to explore the infinite possibilities of personal creative expression inherent in the art of drawing. The main emphasis of the course will be on studio activities supplemented by demonstrations, lectures, discussions and critiques, all of which help to define the nature of drawing. The repeatable aspect of the course allows for a continuum in the student's exploration of his/her artistic interest and creative ideas. (Repeatable for up to 30 hours credit; no more than 6 sh in one semester.) This course is repeatable up to ten (10) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Studio. Specifically, students will develop their personal imagery, technical ability and increase their knowledge of relevant processes and techniques. They will also increasingly show familiarity with contemporary and historical [painting, printmaking, etc.], especially that which relates to their work. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 323: Drawing Studio IV

This course is designed to allow the student to develop advanced skills and to explore the infinite possibilities of personal creative expression inherent in the art of drawing. The main emphasis of the course will be on studio activities supplemented by demonstrations, lectures, discussions and critiques, all of which help to define the nature of drawing. The repeatable aspect of the course allows for a continuum in the student's exploration of his/her artistic interest and creative ideas. (Repeatable for up to 30 hours credit; no more than 6 sh in one semester.) This course is repeatable up to ten (10) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Studio. Specifically, students will develop their personal imagery, technical ability and increase their knowledge of relevant processes and techniques. They will also increasingly show familiarity with contemporary and historical [painting, printmaking, etc.], especially that which relates to their work. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 324: Drawing Studio V

This course is designed to allow the student to develop advanced skills and to explore the infinite possibilities of personal creative expression inherent in the art of drawing. The main emphasis of the course will be on studio activities supplemented by demonstrations, lectures, discussions and critiques, all of which help to define the nature of drawing. The repeatable aspect of the course allows for a continuum in the student's exploration of his/her artistic interest and creative ideas. (Repeatable for up to 30 hours credit; no more than 6 sh in one semester.) This course is repeatable up to ten (10) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Studio. Specifically, students will develop their personal imagery, technical ability and increase their knowledge of relevant processes and techniques. They will also increasingly show familiarity with contemporary and historical [painting, printmaking, etc.], especially that which relates to their work. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 325: Drawing Studio VI

This course is designed to allow the student to develop advanced skills and to explore the infinite possibilities of personal creative expression inherent in the art of drawing. The main emphasis of the course will be on studio activities supplemented by demonstrations, lectures, discussions and critiques, all of which help to define the nature of drawing. The repeatable aspect of the course allows for a continuum in the student's exploration of his/her artistic interest and creative ideas. (Repeatable for up to 30 hours credit; no more than 6 sh in one semester.) This course is repeatable up to ten (10) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Studio. Specifically, students will develop their personal imagery, technical ability and increase their knowledge of relevant processes and techniques. They will also increasingly show familiarity with contemporary and historical [painting, printmaking, etc.], especially that which relates to their work. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 340: Printmaking Studio

This course is a continuation of the study of printmaking beyond the introductory level. The emphasis is on the continued development of personal imagery within the context of printmaking. (Repeatable up to 18 sh, no more than 6 sh in one semester.) This course is repeatable up to six (6) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Studio. Specifically, students will develop their personal imagery, technical ability and increase their knowledge of relevant processes and techniques. They will also increasingly show familiarity with contemporary and historical [painting, printmaking, etc.], especially that which relates to their work. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 341: Printmaking Studio II

This course is a continuation of the study of printmaking beyond the introductory level. The emphasis is on the continued development of personal imagery within the context of printmaking. (Repeatable up to 30 sh, no more than 6 sh in one semester.) This course is repeatable up to ten (10) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Studio. Specifically, students will develop their personal imagery, technical ability and increase their knowledge of relevant processes and techniques. They will also increasingly show familiarity with contemporary and historical [painting, printmaking, etc.], especially that which relates to their work. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 342: Printmaking Studio III

This course is a continuation of the study of printmaking beyond the introductory level. The emphasis is on the continued development of personal imagery within the context of printmaking. (Repeatable up to 30 sh, no more than 6 sh in one semester.) This course is repeatable up to ten (10) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Studio. Specifically, students will develop their personal imagery, technical ability and increase their knowledge of relevant processes and techniques. They will also increasingly show familiarity with contemporary and historical [painting, printmaking, etc.], especially that which relates to their work. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 343: Printmaking Studio IV

This course is a continuation of the study of printmaking beyond the introductory level. The emphasis is on the continued development of personal imagery within the context of printmaking. (Repeatable up to 30 sh, no more than 6 sh in one semester.) This course is repeatable up to ten (10) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Studio. Specifically, students will develop their personal imagery, technical ability and increase their knowledge of relevant processes and techniques. They will also increasingly show familiarity with contemporary and historical [painting, printmaking, etc.], especially that which relates to their work. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 344: Printmaking Studio V

This course is a continuation of the study of printmaking beyond the introductory level. The emphasis is on the continued development of personal imagery within the context of printmaking. (Repeatable up to 30 sh, no more than 6 sh in one semester.) This course is repeatable up to ten (10) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Studio. Specifically, students will develop their personal imagery, technical ability and increase their knowledge of relevant processes and techniques. They will also increasingly show familiarity with contemporary and historical [painting, printmaking, etc.], especially that which relates to their work. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 345: Printmaking Studio VI

This course is a continuation of the study of printmaking beyond the introductory level. The emphasis is on the continued development of personal imagery within the context of printmaking. (Repeatable up to 30 sh, no more than 6 sh in one semester.) This course is repeatable up to ten (10) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Studio. Specifically, students will develop their personal imagery, technical ability and increase their knowledge of relevant processes and techniques. They will also increasingly show familiarity with contemporary and historical [painting, printmaking, etc.], especially that which relates to their work. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 350: Life Drawing Studio I

This course provides an opportunity to achieve a higher level of intensification by continuing the development in life drawing. This leads to the subjective conception of the figure and enables the student to develop a form of drawing he/she chooses to

pursue. This course is to further acquaint students with drawing knowledge; skills and attitudes needed for a personal imagery as well as the development of self-direction. (Repeatable up to 30 sh, not more than 6 sh per semester.) This course is repeatable up to ten (10) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Studio. Specifically, students will develop their personal imagery, technical ability and increase their knowledge of relevant processes and techniques. They will also increasingly show familiarity with contemporary and historical [painting, printmaking, etc.], especially that which relates to their work. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 351: Life Drawing Studio II

This course provides an opportunity to achieve a higher level of intensification by continuing the development in life drawing. This leads to the subjective conception of the figure and enables the student to develop a form of drawing he/she chooses to pursue. This course is to further acquaint students with drawing knowledge; skills and attitudes needed for a personal imagery as well as the development of self-direction. (Repeatable up to 30 sh, not more than 6 sh per semester.) This course is repeatable up to ten (10) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Studio. Specifically, students will develop their personal imagery, technical ability and increase their knowledge of relevant processes and techniques. They will also increasingly show familiarity with contemporary and historical [painting, printmaking, etc.], especially that which relates to their work. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 352: Life Drawing Studio III

This course provides an opportunity to achieve a higher level of intensification by continuing the development in life drawing. This leads to the subjective conception of the figure and enables the student to develop a form of drawing he/she chooses to pursue. This course is to further acquaint students with drawing knowledge; skills and attitudes needed for a personal imagery as well as the development of self-direction. (Repeatable up to 30 sh, not more than 6 sh per semester.) This course is repeatable up to ten (10) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Studio. Specifically, students will develop their personal imagery, technical ability and increase their knowledge of relevant processes and techniques. They will also increasingly show familiarity with contemporary and historical [painting, printmaking, etc.], especially that which relates to their work. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 353: Life Drawing Studio IV

This course provides an opportunity to achieve a higher level of intensification by continuing the development in life drawing. This leads to the subjective conception of the figure and enables the student to develop a form of drawing he/she chooses to pursue. This course is to further acquaint students with drawing knowledge; skills and attitudes needed for a personal imagery as well as the development of self-direction. (Repeatable up to 30 sh, not more than 6 sh per semester.) This course is repeatable up to ten (10) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Studio. Specifically, students will develop their personal imagery, technical ability and increase their knowledge of relevant processes and techniques. They will also increasingly show familiarity with contemporary and historical [painting, printmaking, etc.], especially that which relates to their work. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 354: Life Drawing Studio V

This course provides an opportunity to achieve a higher level of intensification by continuing the development in life drawing. This leads to the subjective conception of the figure and enables the student to develop a form of drawing he/she chooses to pursue. This course is to further acquaint students with drawing knowledge; skills and attitudes needed for a personal imagery as well as the development of self-direction. (Repeatable up to 30 sh, not more than 6 sh per semester.) This course is repeatable up to ten (10) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Studio. Specifically, students will develop their personal imagery, technical ability and increase their knowledge of relevant processes and techniques. They will also increasingly show familiarity with contemporary and historical [painting, printmaking, etc.], especially that which relates to their work. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 355: Life Drawing Studio VI

This course provides an opportunity to achieve a higher level of intensification by continuing the development in life drawing. This leads to the subjective conception of the figure and enables the student to develop a form of drawing he/she chooses to pursue. This course is to further acquaint students with drawing knowledge; skills and attitudes needed for a personal imagery as well as the development of self-direction. (Repeatable up to 30 sh, not more than 6 sh per semester.) This course is repeatable up to ten (10) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Studio. Specifically, students will develop their personal imagery, technical ability and increase their knowledge of relevant processes and techniques. They will also increasingly show familiarity with contemporary and historical [painting, printmaking, etc.], especially that which relates to their work. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 360: Photography Studio

The studio extends the photography experience to the student who wishes to pursue further work in the medium with more depth in a selected area. The emphasis will be on individual direction in terms of technique, craft, and image. (Repeatable up to 18 hours of credit; no more than 6 sh in one semester.) This course is repeatable up to six (6) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Studio. Specifically, students will develop their personal imagery, technical ability and increase their knowledge of relevant processes and techniques. They will also increasingly show familiarity with contemporary and historical [painting, printmaking, etc.], especially that which relates to their work. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 361: Photography Studio II

The studio extends the photography experience to the student who wishes to pursue further work in the medium with more depth in a selected area. The emphasis will be on individual direction in terms of technique, craft, and image. (Repeatable up to 30 hours of credit; no more than 6 sh in one semester.) This course is repeatable up to ten (10) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Studio. Specifically, students will develop their personal imagery, technical ability and increase their knowledge of relevant processes and techniques. They will also increasingly show familiarity with contemporary and historical [painting, printmaking, etc.], especially that which relates to their work. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 362: Photography Studio III

The studio extends the photography experience to the student who wishes to pursue further work in the medium with more depth in a selected area. The emphasis will be on individual direction in terms of technique, craft, and image. (Repeatable up to 30 hours of credit; no more than 6 sh in one semester.) This course is repeatable up to ten (10) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Studio. Specifically, students will develop their personal imagery, technical ability and increase their knowledge of relevant processes and techniques. They will also increasingly show familiarity with contemporary and historical [painting, printmaking, etc.], especially that which relates to their work. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 363: Photography Studio IV

The studio extends the photography experience to the student who wishes to pursue further work in the medium with more depth in a selected area. The emphasis will be on individual direction in terms of technique, craft, and image. (Repeatable up to 30 hours of credit; no more than 6 sh in one semester.) This course is repeatable up to ten (10) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Studio. Specifically, students will develop their personal imagery, technical ability and increase their knowledge of relevant processes and techniques. They will also increasingly show familiarity with contemporary and historical [painting, printmaking, etc.], especially that which relates to their work. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 364: Photography Studio V

The studio extends the photography experience to the student who wishes to pursue further work in the medium with more depth in a selected area. The emphasis will be on individual direction in terms of technique, craft, and image. (Repeatable up to 30 hours of credit; no more than 6 sh in one semester.) This course is repeatable up to ten (10) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Studio. Specifically, students will develop their personal imagery, technical ability and increase their knowledge of relevant processes and techniques. They will also increasingly show familiarity with contemporary and historical [painting, printmaking, etc.], especially that which relates to their work. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 365: Photography Studio VI

The studio extends the photography experience to the student who wishes to pursue further work in the medium with more depth in a selected area. The emphasis will be on individual direction in terms of technique, craft, and image. (Repeatable up to 30 hours of credit; no more than 6 sh in one semester.) This course is repeatable up to ten (10) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Studio. Specifically, students will develop their personal imagery, technical ability and increase their knowledge of relevant processes and techniques. They will also increasingly show familiarity with contemporary and historical [painting, printmaking, etc.], especially that which relates to their work. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 370: Sculpture Studio

Advanced studio study, research and application of specific materials, processes and concepts in the creation of sculptural form. (Repeatable up to 30 semester hours, not more than 6 sh per semester.) This course is repeatable up to ten (10) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Studio. Specifically, students will develop their personal imagery, technical ability and increase their knowledge of relevant processes and techniques. They will also increasingly show familiarity with contemporary and historical [painting, printmaking, etc.], especially that which relates to their work. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 371: Sculpture Studio II

Advanced studio study, research and application of specific materials, processes and concepts in the creation of sculptural form. (Repeatable up to 30 semester hours, not more than 6 sh per semester.) This course is repeatable up to ten (10) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Studio. Specifically, students will develop their personal imagery, technical ability and increase their knowledge of relevant processes and techniques. They will also increasingly show familiarity with contemporary and historical [painting, printmaking, etc.], especially that which relates to their work. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 372: Sculpture Studio III

Advanced studio study, research and application of specific materials, processes and concepts in the creation of sculptural form. (Repeatable up to 30 semester hours, not more than 6 sh per semester.) This course is repeatable up to ten (10) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Studio. Specifically, students will develop their personal imagery, technical ability and increase their knowledge of relevant processes and techniques. They will also increasingly show familiarity with contemporary and historical [painting, printmaking, etc.], especially that which relates to their work. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 373: Sculpture Studio IV

Advanced studio study, research and application of specific materials, processes and concepts in the creation of sculptural form. (Repeatable up to 30 semester hours, not more than 6 sh per semester.) This course is repeatable up to ten (10) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Studio. Specifically, students will develop their personal imagery, technical ability and increase their knowledge of relevant processes and techniques. They will also increasingly show familiarity with contemporary and historical [painting, printmaking, etc.], especially that which relates to their work. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 374: Sculpture Studio V

Advanced studio study, research and application of specific materials, processes and concepts in the creation of sculptural form. (Repeatable up to 30 semester hours, not more than 6 sh per semester.) This course is repeatable up to ten (10) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Studio. Specifically, students will develop their personal imagery, technical ability and increase their knowledge of relevant processes and techniques. They will also increasingly show familiarity with contemporary and historical [painting, printmaking, etc.], especially that which relates to their work. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 375: Sculpture Studio VI

Advanced studio study, research and application of specific materials, processes and concepts in the creation of sculptural form. (Repeatable up to 30 semester hours, not more than 6 sh per semester.) This course is repeatable up to ten (10) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Studio. Specifically, students will develop their personal imagery, technical ability and increase their knowledge of relevant processes and techniques. They will also increasingly show familiarity with contemporary and historical [painting, printmaking, etc.], especially that which relates to their work. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 380: Lithography Studio

This class investigates the possibilities of lithographic printmaking. Students are introduced to the materials and processes required to produce lithographic prints. Emphasis will be on stone lithography, but the course will also address the use of aluminum plates. Students will be expected to produce original works of art using this process. This course can be used to satisfy the requirements for print-making concentration. (Repeatable up to 30 sh, no more than 6 sh in one semester.) This course is repeatable up to ten (10) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Studio. Specifically, students will develop their personal imagery, technical ability and increase their knowledge of relevant processes and techniques. They will also increasingly show familiarity with contemporary and historical [painting, printmaking, etc.], especially that which relates to their work. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 381: Lithography Studio II

This class investigates the possibilities of lithographic printmaking. Students are introduced to the materials and processes required to produce lithographic prints. Emphasis will be on stone lithography, but the course will also address the use of aluminum plates. Students will be expected to produce original works of art using this process. This course can be used to satisfy the requirements for print-making concentration. (Repeatable up to 30 sh, no more than 6 sh in one semester.) This course is repeatable up to ten (10) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Studio. Specifically, students will develop their personal imagery, technical ability and increase their knowledge of relevant processes and techniques. They will also increasingly show familiarity with contemporary and historical [painting, printmaking, etc.], especially that which relates to their work. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 382: Lithography Studio III

This class investigates the possibilities of lithographic printmaking. Students are introduced to the materials and processes required to produce lithographic prints. Emphasis will be on stone lithography, but the course will also address the use of aluminum plates. Students will be expected to produce original works of art using this process. This course can be used to satisfy the requirements for print-making concentration. (Repeatable up to 30 sh, no more than 6 sh in one semester.) This course is repeatable up to ten (10) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Studio. Specifically, students will develop their personal imagery, technical ability and increase their knowledge of relevant processes and techniques. They will also increasingly show familiarity with contemporary and historical [painting, printmaking, etc.], especially that which relates to their work. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 383: Lithography Studio IV

This class investigates the possibilities of lithographic printmaking. Students are introduced to the materials and processes required to produce lithographic prints. Emphasis will be on stone lithography, but the course will also address the use of aluminum plates. Students will be expected to produce original works of art using this process. This course can be used to satisfy the requirements for print-making concentration. (Repeatable up to 30 sh, no more than 6 sh in one semester.) This course is repeatable up to ten (10) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Studio. Specifically, students will develop their personal imagery, technical ability and increase their knowledge of relevant processes and techniques. They will also increasingly show familiarity with contemporary and historical [painting, printmaking, etc.], especially that which relates to their work. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 384: Lithography Studio V

This class investigates the possibilities of lithographic printmaking. Students are introduced to the materials and processes required to produce lithographic prints. Emphasis will be on stone lithography, but the course will also address the use of aluminum plates. Students will be expected to produce original works of art using this process. This course can be used to satisfy the requirements for print-making concentration. (Repeatable up to 30 sh, no more than 6 sh in one semester.) This course is repeatable up to ten (10) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Studio. Specifically, students will develop their personal imagery, technical ability and increase their knowledge of relevant processes and techniques. They will also increasingly show familiarity with contemporary and historical [painting, printmaking, etc.], especially that which relates to their work. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FAST 385: Lithography Studio VI

This class investigates the possibilities of lithographic printmaking. Students are introduced to the materials and processes required to produce lithographic prints. Emphasis will be on stone lithography, but the course will also address the use of aluminum plates. Students will be expected to produce original works of art using this process. This course can be used to satisfy the requirements for print-making concentration. (Repeatable up to 30 sh, no more than 6 sh in one semester.) This course is repeatable up to ten (10) times. Students are expected to set higher goals and achieve a higher level of sophistication in successive levels of Studio. Specifically, students will develop their personal imagery, technical ability and increase their knowledge of relevant processes and techniques. They will also increasingly show familiarity with contemporary and historical [painting, printmaking, etc.], especially that which relates to their work. At the more advanced levels of Studio, students will increasingly be expected to pursue opportunities to exhibit their work through juried exhibitions and on-campus venues. A minimum of three (3) hours of work per week outside of class is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

Finance

FINA 200: Introduction to Finance

The course introduces students to the field of finance. The three areas of focus are financial management, investments, and financial markets and institutions. Recurring themes include shareholder wealth maximization, the risk/return tradeoff, and the continuing evolution of the financial system.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FINA 350: Financial Management

This course introduces students to the types of issues faced by financial managers and the analytical techniques available to make the best possible decisions. The primary goal of shareholder wealth maximization, as well as the constraints under which management must operate when pursuing this goal, are emphasized throughout the course. The course also provides thorough treatment of the analysis of financial statements, time value of money, stock and bond valuation, capital budgeting, and the management of working capital. The application of spreadsheet modeling to all of these areas is stressed.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FINA 351: Personal Financial Planning

This course takes an integrated approach to the management of personal financial resources. Topics include investments, taxation, insurance, retirement planning, and estate planning. This course gives students who are considering a career in the field of personal financial planning the opportunity to gain a detailed understanding of the processes involved in managing personal resources. The course also prepares students for the pursuit of professional certifications in the financial services industry.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FINA 352: Entrepreneurial Finance

This course applies financial thinking, tools, and techniques adapted to entrepreneurship.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FINA 354: Investments

The course covers various financial instruments including common stocks, bonds, stock options, and futures. We also discuss various security selection techniques including risk return tradeoff, security analysis, and implication of market efficiency on investment strategy and asset allocation among various financial instruments. The course is rigorous and approaches the subject from the point of view of investment practitioners.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FINA 355: Investment Portfolio Management

This is an advanced course in theory and application of portfolio management techniques. Topics include active and passive portfolio management, portfolio performance evaluation, bond portfolio management, portfolio insurance and hedging using derivative securities, and international diversification. Students also manage and evaluate stock portfolios.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FINA 360: Financial Markets and Institutions

This course examines the various financial markets and institutions that facilitate the trading of financial assets. Recurring themes include the history, regulation, internationalization, and management of these markets and institutions. In addition, the course provides insights into how current events are influencing the evolution of the financial system.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FINA 363: Intermediate Financial Management

The course focuses on development of a comprehensive understanding of risk-return models, financial options models, financial planning and forecasting, the cost of capital calculations, capital budgeting analysis including capital budgeting under risk and real options, and capital structure and dividend policy decisions. In addition, value based management, sources of long term financing for corporations including stocks, bonds, hybrid securities, and leasing are discussed. The course is structured around case studies and application of spreadsheets for analyzing the cases.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FINA 365: Multinational Financial Management

This course focuses on the international dimensions of financial management. All of the traditional areas of corporate finance are explored from the perspective of a multinational corporation, including working capital management, capital budgeting, cost of capital, financial structure, funds acquisition, investment evaluation, and risk analysis. This course emphasizes the unique decision variables faced by multinational firms, including: multiple currencies with exchange rate changes, differing tax systems, multiple money markets, cross-border restrictions, varying international diversification opportunities, segmented capital markets, and political risks such as nationalization or expropriation.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FINA 371: Selected Topics In Finance

This course allows students to study topics of current interest that are not covered in other finance courses. It also allows students additional time for more in-depth study of topics that are covered in other courses. The topic(s) covered will be announced each time the course is offered.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FINA 375: Applied Investment Management

A small group of students, guided by a faculty member, work as a committee to manage a portfolio of stocks and bonds with the goal of matching or achieving above average, risk adjusted returns relative to a benchmark. The students apply research, financial analysis, and portfolio management principles and tools to the management of a balanced portfolio (i.e., a portfolio containing both equities and fixed-income securities).

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FINA 379: Independent Study in Finance

The independent study allows for individualization of the Finance curriculum to meet the specialized needs/interests of students through studies outside the focus of existing courses. Under the direction of a faculty member from the Business Administration Department, the student will investigate an area of academic interest, to be approved by the department.

FINA 380: Senior Seminar in Finance

The course is designed to enhance the student's understanding by detailed discussion of practical concepts in financial

management. It increases students' financial decision making capability via financial simulation game. During the course of the game, students make capacity expansion, capital budgeting, stocks and bonds issuance and retirement, dividend payment, and working capital management decisions for their companies. Students' decisions interact with simulation's economic environment to determine stock price of their companies and give them real feel of the goal of stockholders' wealth maximization. In addition, students develop research capability by an in-depth empirical research on a topic of their choice.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FINA 385: Insurance Planning

This course focuses on the types of risks faced by individuals and owners of closely held businesses. It examines the various techniques available to manage identified risks. The course also covers the principles of insurance and the workings of the insurance industry. Topics include life, health, disability, long-term care, and property and liability insurance.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FINA 386: Retirement and Estate Planning

This course focuses on the process of creating and executing a plan that enables an individual to maintain their desired standard of living in retirement. It also examines the process of developing a plan to distribute an individual's assets after death in a manner consistent with their wishes and the needs of their beneficiaries.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FINA 389: Financial Planning Capstone

Students learn how to integrate the components (e.g., insurance, investment strategy) and apply knowledge gained in previous Personal Financial Planning track courses to create a comprehensive financial plan in a manner that is consistent with the CFP Board's Financial Planning Practice Standards. Students also learn how to present the financial plan in a professional manner both orally and in writing. This course is an integrative experience for students completing the Personal Financial Planning track in the finance major at Kutztown University of Pennsylvania. The preparation and presentation of a comprehensive financial plan is the culmination of a six-course program designed to prepare students to become financial planning professionals.

FINA 395: Honors Thesis in Finance

Completion of the honors thesis is a requirement for the KU Honors Program. This course enables the honors student to conduct a research project under the direction of a faculty member from the Finance Discipline. The student and faculty member will prepare a research proposal. A student can apply for 3-6 credits (s.h.). The proposal and number of credits must be approved by the discipline.

Fine Arts

FINE 14: Elements of Drawing For Non-Art Majors

This studio course introduces the basic principles and practices of drawing. Emphasis will be on developing the students' ability to draw objectively, and to perceive size, shape, proportion, value, and spatial relationships. A secondary emphasis will be on developing the students' ability to think critically about their drawing and understand drawing in a historical context. The bulk of class sessions will be dedicated to drawing from observation. This activity is supplemented by lectures, slideshows, demonstrations, discussions, and critiques. Minimum of three hours of work outside the classroom is required per week. This is a general education course. It is open to all students except visual art majors. Fine Arts, Communication Design, Art Education and Craft majors are not permitted to enroll in this course.

FINE 15: Drawing I

Graphic expression with various media based on individual sustained objective and subjective aesthetic concerns for human and nature forms. Emphasis is placed on physical as well as mental aspect of seeing. The courses cover two semesters (I, II) to be taken in sequence. Minimum of three hours of work outside the classroom required.

FINE 16: Drawing II

Graphic expression with various media based on individual sustained objective and subjective aesthetic concerns for human and nature forms. Emphasis is placed on physical as well as mental aspect of seeing. The courses cover two semesters (I, II) to be taken in sequence. Minimum of three hours of work outside the classroom required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FINE 61: Introduction to Darkroom Photography for Non-Art Majors

This course will introduce the basic skills and concepts of black and white Fine Arts photography, using traditional 35mm film cameras, film processing and darkroom printing methods. With an emphasis on creativity and inventiveness, students will explore the image-making potential and craft of gelatin silver photographic printing. A 35mm film camera with manual controls is required; some are available for loan. Minimum of three hours of work per week outside of the classroom is required.

FINE 62: Digital Photo for Non-Art Majors

This course is designed to introduce the aesthetic and technical fundamentals of digital photography with emphasis on creativity. STUDENTS ARE REQUIRED TO HAVE ACCESS TO A DIGITAL SINGLE LENS REFLEX CAMERA FOR THE DURATION OF THIS COURSE. This studio art class meets for six hours a week and requires a minimum of three hours work outside the classroom per week.

FINE 110: Studio Practices

"Studio Practices" is the first course in a sequence of three professional practices courses intended for Art majors. This particular studio course will introduce second-year students to the wide range of processes, materials and approaches in historical and contemporary art-making through trips to museums and galleries, and studio-based work. Students will develop their own habits of making and utilize their community of peers for support and insight through exposure to professional artists' studios, learning the dynamics of different art communities, studying artist interviews, and reading art journals, exhibition catalogues, and online publications. The importance of maintaining a sketchbook, documenting work throughout production, discussing and writing about art (their own, their peers and professional artists) will build a foundation for their own studio practice while encouraging experimentation and the development of a personal voice.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FINE 111: Introduction to Painting

This course involves the student with an introductory experience in painting. The course includes working with a variety of painting materials and techniques. Experiences will also include basic problems in color and composition. Minimum of three hours of work outside the classroom required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FINE 131: Introduction to Watercolor

A basic introduction to the materials and methods of transparent watercolor painting. Minimum of three hours of work outside the classroom required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FINE 141: Introduction to Printmaking

Introduction to the manipulation of materials and techniques of printmaking to create or transfer visual images. Intaglio,

lithographic monoprint, relief, stencil, rubbing, embossing, and printing processes will be explored. Minimum of three hours of work outside the classroom required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FINE 151: Introduction to Life Drawing

Drawing from the nude model, either male or female, with a realistic analytical concentration on the muscular and skeletal structure of the human body insofar as these are discernible. Minimum of three hours of work outside the classroom required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FINE 161: Introduction to Photography - Darkroom

This course will introduce the basic skills and concepts of black and white photography, using traditional film cameras, film processing and darkroom methods. With an emphasis on creativity and inventiveness, students will explore the image-making potential and craft of the photographic print, within a fine arts context. A 35 mm camera with manual controls is required. Minimum of three hours of work outside the classroom is required. (6 c.h., 3 s.h.)

FINE 162: Introduction to Photography Digital

This course will introduce the basic skills and concepts of photography using digital tools and methods within a Fine Arts context. With an emphasis on creativity and inventiveness, students will be exposed to the hardware and software necessary for each step of the digital image making process, from input (digital cameras, scanners, web) through manipulation (Photo Shop and other current software) to output (a variety of printers, papers, projections, and the web). Minimum of three hours of work outside the classroom is required. (6 c.h., 3 s.h.)

FINE 171: Introduction to Sculpture

Basic experiences in conceiving and creating three dimensional and sculptural forms in various media. Emphasis is placed on acquiring a firm knowledge of materials and techniques necessary for creating sculptural works of art. Minimum of three hours of work outside the classroom required.

FINE 182: Introduction to Time-Based Media

This course provides an introduction to the creation of images through computer-based technologies. During the course students will not only learn the use and basic capabilities of both still and time-based digital image-making equipment and software, they will also explore the unique ways in which computers facilitate artistic expression. Students will be introduced to art works, artists, alternative-viewing sites, cyber communities, aesthetics and criticism related to digital art. They will also consider digital tools as part of a continuum of technological innovation in the visual arts. This course serves as an introduction to digital media and prepares students for advanced digital art courses and other courses requiring a basic familiarity with these media. A minimum of 3 hours of work outside of class is required per week. (6 c.h., 3 s.h.)

FINE 210: Professional Practices

This course bridges the gap between the production of art and the business of art. This course will reinforce the development of a cohesive portfolio and provide students with practical skills applicable to the professional art world. Course material addresses writing about and presenting artistic work, developing a high-quality digital image portfolio, applying for opportunities and grants, preparing for graduate school, and developing a web presence through a website and social media. It will also address areas of professional concern such as economics and studio safety. Class time will be dedicated to lectures, demonstrations, field trips, consultations, and presentations in a studio situation.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FINE 221: Topics in Drawing II

This is an advanced drawing course for in-depth study of a single area of contemporary or historical drawing practice. Representative areas of inquiry include: color and the figure; the artist's sketchbook; digital drawing; mixed media and collage; contemporary landscape; experimental drawing; anatomy for the artist; and others. Within each umbrella topic, a range of techniques, concepts, and subject matter will be explored. Students will become more fully fluent in the aesthetic concepts associated with a specific topic and develop methods of presentation based on professional practices. Students will also expand their skills with drawing techniques and materials, and learn tools to articulate their ideas. Primary emphasis is on the development of an individual direction within the context of historical and contemporary techniques, ideas and images in drawing. Course can be repeated for credit and will count toward the drawing or printmaking concentration.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FINE 222: Topics in Drawing III

This is an advanced drawing course for in-depth study of a single area of contemporary or historical drawing practice. Representative areas of inquiry include: color and the figure; the artist's sketchbook; digital drawing; mixed media and collage; contemporary landscape; experimental drawing; anatomy for the artist; and others. Within each umbrella topic, a range of techniques, concepts, and subject matter will be explored. Students will become more fully fluent in the aesthetic concepts associated with a specific topic and develop methods of presentation based on professional practices. Students will also expand their skills with drawing techniques and materials, and learn tools to articulate their ideas. Primary emphasis is on the development of an individual direction within the context of historical and contemporary techniques, ideas and images in drawing. Course can be repeated for credit and will count toward the drawing or printmaking concentration.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FINE 223: Topics in Drawing IV

This is an advanced drawing course for in-depth study of a single area of contemporary or historical drawing practice. Representative areas of inquiry include: color and the figure; the artist's sketchbook; digital drawing; mixed media and collage; contemporary landscape; experimental drawing; anatomy for the artist; and others. Within each umbrella topic, a range of techniques, concepts, and subject matter will be explored. Students will become more fully fluent in the aesthetic concepts associated with a specific topic and develop methods of presentation based on professional practices. Students will also expand their skills with drawing techniques and materials, and learn tools to articulate their ideas. Primary emphasis is on the development of an individual direction within the context of historical and contemporary techniques, ideas and images in drawing. Course can be repeated for credit and will count toward the drawing or printmaking concentration.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FINE 224: Topics in Drawing V

This is an advanced drawing course for in-depth study of a single area of contemporary or historical drawing practice. Representative areas of inquiry include: color and the figure; the artist's sketchbook; digital drawing; mixed media and collage; contemporary landscape; experimental drawing; anatomy for the artist; and others. Within each umbrella topic, a range of techniques, concepts, and subject matter will be explored. Students will become more fully fluent in the aesthetic concepts associated with a specific topic and develop methods of presentation based on professional practices. Students will also expand their skills with drawing techniques and materials, and learn tools to articulate their ideas. Primary emphasis is on the development of an individual direction within the context of historical and contemporary techniques, ideas and images in drawing. Course can be repeated for credit and will count toward the drawing or printmaking concentration.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FINE 225: Topics in Drawing VI

This is an advanced drawing course for in-depth study of a single area of contemporary or historical drawing practice. Representative areas of inquiry include: color and the figure; the artist's sketchbook; digital drawing; mixed media and collage;

contemporary landscape; experimental drawing; anatomy for the artist; and others. Within each umbrella topic, a range of techniques, concepts, and subject matter will be explored. Students will become more fully fluent in the aesthetic concepts associated with a specific topic and develop methods of presentation based on professional practices. Students will also expand their skills with drawing techniques and materials, and learn tools to articulate their ideas. Primary emphasis is on the development of an individual direction within the context of historical and contemporary techniques, ideas and images in drawing. Course can be repeated for credit and will count toward the drawing or printmaking concentration.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FINE 307: The Visual Journal: Drawing and Designing Abroad

This is an off-campus class that will be taught while traveling abroad. It is a hands-on course. Each student will complete a portfolio of artwork documenting his or her personal response to the travel experience. Through direct observation, students will explore their personal relationship with the destination, and construct a meaningful document of their travels. Students will have the opportunity to see firsthand the work of artists and designers from other cultures. The course will include guided gallery and museum visits. (This course is also offered under the following designation: CODS 307.) [6 ch 3 sh]

FINE 309: Photogravure and Polymer Printmaking

Photogravure, popularized in the 19th century allowed for the first mass-produced photographic images. The history of Photogravure includes photo-manipulation, drawing, books, newspapers, and propaganda. The invention of polymer plates capable of achieving the wider range of tones original only produced by copper-plate etching has generated a renaissance of the Photogravure method, in both photography and drawing. Students will explore photographic, computer-aided, and hand drawing techniques. Learn how to go build and print digital negatives in the computer lab, make advanced UV exposure calculations using the zone system, and then continuing to on to printmaking press facilities. Taught through the historic lens of Photogravure this advanced studio course is open to all students interested in immersing themselves in the investigation and creation of "direct to plate" Intaglio printmaking.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FINE 310: Senior Seminar

"Senior Thesis" is a capstone course in which students will generate an art idea or thesis that will be pursued in their medium or media of choice. Students will build on previous years of coursework in a variety of media and research and develop a list of influential artists and others (writers, filmmakers, etc.) whose work will guide their own ideas and aspirations. The course will require students' immersion in this idea, as they generate sketches, produce preliminary and revised studio work, and create a plan for a year-long project that culminates in the senior exhibition. Through critiques and written analysis, they will utilize their community of peers to assess their accomplishment of goals and will work to document and disseminate their progress using social media. In addition, they will refine their resumes and websites, seek exhibition opportunities on and off campus, explore art residencies and other opportunities for artists that constitute professional engagement with our field. This course is designed to reinforce and punctuate the development of individual studio practices and professional skills acquired in the prerequisite courses FINE 110 and FINE 210.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FINE 318: Film And Video As Art

This hybrid course is a survey of avant-garde and experimental film and video from the early twentieth century to the present, and an interdisciplinary studio course. Students will view and critically analyze avant-garde films and videos, both in class discussions and in short papers, and consider the distinctive characteristics of time-based artworks. In addition, students will view artworks (paintings, prints, photos, etc.) contemporaneous to the films shown sometimes made by the filmmakers themselves and identify the formal and conceptual relationships between the films/videos and artworks. They will apply these critical perspectives to their own art making (in their medium or media of choice) and will develop the vocabulary to critically assess their peers' art works. (6 c.h., 3 s.h.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FINE 327: The Figure in Mixed Media

This is an advanced drawing course for in-depth study of representations of the figure using traditional and contemporary approaches to mixing media, substrates and styles. Representative areas of inquiry include: mixed drawing media, collage and working across disciplines. A range of techniques, concepts, and approaches to depicting the figure will be explored. Students will become more fully fluent in the aesthetic concepts associated with figurative work and develop methods of presentation based on professional practices. Students will also expand their skills with mixed media techniques and materials, and learn tools to articulate their ideas. Primary emphasis is on the development of an individual direction within the context of historical and contemporary mixed media techniques, ideas, and images. This course is repeatable up to six times for credit, for a maximum of 18 credits, and up to 6 credits per semester. It will count toward the drawing or printmaking concentration.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FINE 328: Renaissance Drawing Materials

This is an advanced drawing course for in-depth study of the techniques, materials, and history of Renaissance drawing. The class will focus on refining drawing skills and expressing both contemporary and traditional drawing ideas through the use of traditional drawing instruments and materials. Over the course of the semester, students will learn a range of traditional art materials and techniques. Class sessions will be divided between material workshops, structured drawing sessions from observation, and drawing sessions that you will use to build personal imagery. Time will also be set aside for technique demonstrations, slide lectures, and critiques. A minimum of six (6) hours of class time and three (3) hours of work outside of class is required per week.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FINE 329: Topics in Drawing

This is an advanced drawing course for in-depth study of a single area of contemporary or historical drawing practice. Representative areas of inquiry include: color and the figure; the artist's sketchbook; digital drawing; mixed media and collage; contemporary landscape; experimental drawing; anatomy for the artist; and others. Within each umbrella topic, a range of techniques, concepts, and subject matter will be explored. Students will become more fully fluent in the aesthetic concepts associated with a specific topic and develop methods of presentation based on professional practices. Students will also expand their skills with drawing techniques and materials, and learn tools to articulate their ideas. Primary emphasis is on the development of an individual direction within the context of historical and contemporary techniques, ideas and images in drawing. Course can be repeated for credit and will count toward the drawing or printmaking concentration.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FINE 337: Themes and Practices in Photography

This advanced photography course is an in-depth study of a singular area of contemporary photographic practice. Topics include The Body and the Lens; Documentary Strategies; Photo Book Works; Alternative Processes; History and Practice of Photography; The Portrait in Photography. Students will expand their skills using darkroom and/or digital photographic techniques and will develop methods of professional art practice and presentation. Through individual and group work, students will develop critical perspectives and become more fully fluent in the aesthetic concepts and historical precedents associated with a specific photographic theme or practice.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FINE 338: Themes and Practices in Photography

This advanced photography course is an in-depth study of a singular area of contemporary photographic practice. Topics include Contemporary Landscape; Constructed Image/Staged Photography; Documentary; The Body and the Lens; Image/Text; Photo Books Works, Alternative Processes and others. Students will expand their skills using darkroom and/or digital photographic techniques and will develop methods of professional art practice and presentation. Through individual and

group work, students will develop critical perspectives and become more fully fluent in the aesthetic concepts and historical precedents associated with a specific photographic theme or practice. This course is repeatable up to 9 s.h. and will count toward the photography concentration.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FINE 339: Themes and Practices in Photography

This advanced photography course is an in-depth study of a singular area of contemporary photographic practice. Topics include Contemporary Landscape; Constructed Image/Staged Photography; Documentary; The Body and the Lens; Image/Text; Photo Books Works, Alternative Processes and others. Students will expand their skills using darkroom and/or digital photographic techniques and will develop methods of professional art practice and presentation. Through individual and group work, students will develop critical perspectives and become more fully fluent in the aesthetic concepts and historical precedents associated with a specific photographic theme or practice. This course is repeatable up to 9 s.h. and will count toward the photography concentration.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FINE 360: Color in Photography

The course will instruct in making quality color prints from color negatives. Professional techniques for the color print using dichroic color-head enlargers and a color auto-processor will be used. Working knowledge of color transparencies will be incorporated through making a multi-image presentation. Emphasis will be placed on the creative potential of color photography. Minimum of three hours of work outside the classroom required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FINE 377: Independent Study: Art Studio I

Independent Study involves individual pursuit and self-determination in Fine Arts studio area not being offered by the University.

FINE 378: Independent Study: Art Studio II

Independent Study involves individual pursuit and self-determination in Fine Arts studio area not being offered by the University.

FINE 379: Independent Study: Art Studio III

Independent Study involves individual pursuit and self-determination in Fine Arts studio area not being offered by the University.

FINE 380: Independent Study: Art Studio IV

Independent Study involves individual pursuit and self-determination in Fine Arts studio area not being offered by the University.

FINE 383: Advanced Digital Photography

In this advanced course, digital photography students will expand their technical skills and become more fully fluent in the aesthetic concepts associated with digital fine art photography. Students can expect to engage in the production of digital photographs and related digital photographic media. They will explore creative solutions to aesthetic problems and develop methods of presentation and distribution practiced by artists who work with digital photographic imagery. Minimum of three hours of work outside the classroom is required. (6 c.h., 3 s.h.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FINE 385: Selected Topics in Studio Art

This course will provide opportunities for students to investigate specialized areas of study as the need or opportunity arises. Topics will cover studio processes and/or aesthetic issues not covered, or only superficially addressed in regularly offered courses. Minimum of three hours of work outside the classroom required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FINE 386: Digital Sculpture

Students in this course will examine new types of digital media by learning to operate a microcontroller (which is a small computer) and dismantling objects. Students will use the microcontroller to create either an interactive or non-interactive artwork. The course includes an overview of the history of digital art and some reading is required. Students will spend time building circuits, soldering, writing programs, and using these instruments to create sound, light and motion works. Students will gain a new understanding of the psychological, social and ethical opportunities digital media offers. A minimum of 6 hours of work outside of class is required per week.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FINE 387: Landscape and Location in Photography

Landscape photograph rooted in the salon category of landscape painting continues to be a poignant subject matter in contemporary photograph. This advanced studio course takes an in-depth look at landscape in contemporary photography and the range of cultural concerns is explores such as: feminism, global warming, manifest destiny and white supremacy, will be investigated under the auspices of landscape theory. Students will be expected to work comfortably with wide variety of camera models, engaging in a conversation of how the camera as apparatus has influenced our cultures vision of landscape. The course will focus on camera work in the field. All post-production skills will focus on a mastery of Lightroom as the main post-production software. Students will become immersed in written theory, while they engage in their creative production processes.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FINE 388: The Staged and Constructed Photograph

The constructed photograph can be viewed in many ways including as traditional photography made on of staged theatrical sets, digital composite photography and, the combination of both. This course will focus on how students can develop an advanced practice of the "staged photograph". Using lightning, props, set dressings, location scouting, models, and miniature maquette to achieve their compositional goals. Digital post-production methods will be employed to enhance in camera and studio work. Students will become immersed in written theory, while they engage in their creative production processes.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FINE 395: Honors Independent Study/Thesis

Honors Independent Study/Thesis.

FINE 398: The Business of Art

The course will focus on the business issues related to being a professional artist. It will also address the development of practical portfolio procedures through lectures, demonstrations, field trips, consultations, and AV presentations in a studio situation.

FINE 399: Student Exhibition

This student exhibition is a requirement for graduation. All BFA degree candidates, including Related Arts with a Visual Arts

Concentration, and all BS in Art Education degree candidates and certification students participate in a Senior Show. Seniors who will be graduated in December register for the senior exhibition held at the end of the Fall semester. Seniors who will be graduated in May or at the end of either of the two Summer Sessions register to participate in the senior shows held during the Spring Semester. Participation in a Senior Show is defined as showing at least one piece/documentation/record within the confines of the display area being used for the exhibition (usually the Sharadin Art Gallery). Showing work in alternate spaces on campus, and not in the Senior Show, will not satisfy the graduation requirement.

French

FREN 13: Elementary Conversation in French

Intensive oral practice covering vocabulary and structures of survival situations. One hour of class. Open to students of FREN 011 and 012 or with permission of the instructor. May be repeated.

FREN 23: Intermediate Conversation in French

Intensive oral practice covering topics that prepare the student for foreign travel and the encounter of French people. One hour of class. Open to students of FREN 103 and 104 or with permission of the instructor. May be repeated.

FREN 101: Elementary French I

A course for beginners to develop basic skills in pronunciation, aural comprehension, speaking and reading. The selection of course materials emphasizes social and cultural values. Offered in two semesters of three hours each.

FREN 102: Elementary French II

A course for beginners to develop basic skills in pronunciation, aural comprehension, speaking and reading. The selection of course materials emphasizes social and cultural values. Offered in two semesters of three hours each.

FREN 103: Intermediate French III

Students who have satisfactorily completed six hours of elementary French, or who have had at least two years of French in high school continue the development of the basic skills in aural comprehension, speaking, and writing. Emphasis is placed on independent reading. Offered in two semesters of three hours each.

FREN 104: Intermediate French IV

Students who have satisfactorily completed six hours of elementary French, or who have had at least two years of French in high school continue the development of the basic skills in aural comprehension, speaking, and writing. Emphasis is placed on independent reading. Offered in two semesters of three hours each.

FREN 138: French Culture Through Film

This course taught in English is an introduction to French and Francophone cultures through films by French and Francophone directors examining gender, ethnicity and global issues. It is designed for Freshmen and any student interested in the French-speaking world. Films will be in the original French with English subtitles. No knowledge of French language is required for this course.

FREN 212: French Composition

French 212 is designed for students completing a concentration in French, French minors and majors and other advanced students in French as an intensive grammar review and a writing workshop primarily to develop and enhance the student's capacity for written expression in French. Students will learn advanced writing techniques, all the stages of writing, basic research techniques, and the components of a classical French dissertation.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FREN 213: Advanced Conversation in French

FREN 213 is designed for nonnative speakers of French who have successfully completed intermediate levels of French instruction (FREN 103 and FREN 104) and who wish to further improve their oral proficiency in French. FREN 213 is an intensive course in oral/aural skills with a special focus on pronunciation and communication in culturally appropriate ways in French. The course will be conducted in French and the focus will be on providing oral opportunities to speak French in peer group activities, dialogs, role play situations and various techniques of oral presentation which afford students a chance to hone and perfect their French oral skills.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FREN 225: French Phonetics and Applied Linguistics

This course consists of a systematic and thorough study of French phonology, covering the three types of sounds, their alternation and combination specific to French; phonetic transcription; an overview of regional, dialectal and social variants. An initiation to linguistic analysis, including terminology and methods of investigation with an overview of morphology, syntax, semantics and sociolinguistics. The course is taught in French.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FREN 247: Modern French and Francophone Drama and Theater in English

Taught in English, this study of French drama from the Age of the Enlightenment to the present in the context of French and francophone cultures includes masterpieces that have both formed and influenced the development of contemporary theater.

FREN 253: Paris: Anatomy of a Cultural Capital

Explore the "city of light," capital of modernity! In the nineteenth century, Paris became a laboratory for modernity through history, architecture, urban planning, the visual and performing arts and the clash of capitalism vs. socialism. We shall take a tour of "the gay Paree" through consideration of revolutions, sewers, department stores, prostitution, "le demi-monde," anti-semitism, money, spectacle, the working class, bars and cafes, clothing, caricature, the birth of the camera and film industry, advances in medicine and other sciences. The course includes also a social and cultural historical view of Paris. This course is taught in English.

FREN 254: Francophone Legacies: Intercultural Inquiries

An Introduction to the French diaspora and the living cultures of the French- speaking World, this course emphasizes the diversity of interrelated Francophone issued it shows how that each community in the U.S., and in the rest of the world, has its own discrete set of issues. The Acadians in Maine struggle to maintain allegiance to their culture. Haitians have political and economic reasons for immigrating to the U.S.A. while maintaining emotional ties to their island. Recent North African immigrants struggle to survive in a post-9/11 culture that hold a mistrust of extremist Islam while balancing their blended cultures of French and Arabic. Francophone communities from Africa, Asia and Polynesia have also their distinctiveness. This course is taught in English.

FREN 290: The French Connection: Francophone Films in Context

This course surveys films from French-speaking countries outside of France and situates them in their cultural as well as cinematic contexts. The products, practices, and perspectives of the filmmakers' cultures as well as French terminology for the visual language of these filmmakers richly contextualize this study of the continued international role of French and connect the study of French to multiple disciplines. Taught in French.

FREN 300: French Classical Drama

The classical drama from its rise to its highest point of achievement. Masterpieces of Corneille, Moliere, and Racine. Precis written in French on the readings.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FREN 302: Survey of French Literature II

First semester: the development of French literature from its origin to the end of the 18th century. Second semester: continuation of the survey through the 19th and into the 20th centuries. Representative readings of varied literary types.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FREN 317: French in the Global Village

This course (taught in French) presents an overview of the history of the French language and culture. It provides a humanist perspective for a better understanding of the impact of the French language and culture on the rest of the world through the colonial enterprise. While emphasizing the post-colonial era and the advent of globalization, FREN 317 gives students a content-based approach to learning the language. Focus is placed on the communicative aspect of the language and aims at deepening students' understanding of the socio-linguistic aspect of the language.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FREN 327: Professional Translation Skills in French

This course is an introductory level course in translation to learn and practice skills needed to read critically and to translate from English to French and vice versa. We shall stress accuracy, precision, idiomacy, and subtlety in both languages. Furthermore, the proper use of a dictionary will be taught to avoid pitfalls of errors when words are taken out of context or as a single unit. A review of various kinds of specialized dictionaries (unilingual versus bilingual) will be presented. The interest in Translation Studies (Traductology), i.e. Comprehensive History of Translation, has grown since the 80s. We shall endeavor to present an overview of recent developments in this fast growing field.

FREN 331: Identity, Modernity and Text in New France

FREN 331 (formerly FREN 330) consists of the study of ideas and societal changes that shaped and continue to impact linguistic, artistic, political and cultural achievements of the French and the French-Speakers in the contemporary world. Focus is placed on modernity and identity formation to teach students how to think critically and develop research skills through specific exercises including Web resources. The course will be taught in French.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FREN 338: Aspects of French Popular Culture

French culture has traditionally been understood as both "high" and "low." And, in the past, French culture has most often been communicated to the outside world in terms of the artistic symbols of "high culture." But what is now understood by the term "French culture" has changed. Although traditional bias towards high-culture remains, the recent celebrity of what has been called "low culture" (and its inclusion under the general heading of "French culture") has generated much confusion. The idea of French culture, as now understood abroad, provides a distorted image of complex cultural realities of contemporary France. This course is designed to disentangle these historical complexities.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FREN 340: French Culture and Civilization

French life and culture as seen in literature, art, music and philosophy. The folklore, linguistic and social aspects of culture will also be covered to acquaint the student with the complexities of the national background. Required for Secondary Education majors with a concentration in French.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FREN 342: French Canada: Past and Present

This course is a panoramic exploration of the multifaceted and vibrant French culture in Quebec and the ROC (Rest of Canada) from the birth of New France to recent Quebec political turmoil. This course will incorporate a multidisciplinary approach to the historical, political, cultural, artistic, and socio-economic movements that have influenced and still impact Quebec and Canada as a nation, our neighbor to the North. Cultural manifestations such as creative art, cinema, music, folk songs, narrative texts and a brief overview of the economic sector to underline Quebec/U.S.A. special partnership will be examined. Oral and written practice in critical thought will further mastery of the French language. This course is taught in French.

FREN 343: France at the Dawn of the Twenty-First Century

FREN 343 consists of a study of contemporary France and French-Speaking societies, as manifested in present-day life and culture to provide a vivid overview of present day France at the dawn of the Twenty-First Century. Consideration will be given to their place within the enlarged European Union and the world, to political, economic and social structures to education and the Arts. We shall focus on the way French people are reacting as they are confronted with an increasingly complex world, the advent of the information revolution technology, and multiculturalism. Special attention will be given to the fabric of French society as a new mosaic of cultures, specifically the influx from former North African colonies: Algeria, Morocco and Tunisia, i.e. the Maghreb.

FREN 344: North-African Cultures and Literatures

In FREN 344, taught in French, advanced students of French examine the cultures and literature of the Maghreb and explore Frances complex relationship with its former North-African colonies. Students will also consider how the French Nation-State model has been masking ethnic differences and how French focus on Beurs (Arabs of the third generation) has shaken the ideological foundations of Republican and secular France.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FREN 345: Modern French Drama and Theatre

The study of French drama from the Age of Enlightenment to the present. Selected dramatists of the 18th, 19th and 20th centuries will be considered.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

FREN 360: Study Abroad Experience

This course permits approved study abroad experiences to be counted in the student's French major (B.A. and B.S. Ed.), minor or concentration. Prior to an approved study abroad experience, any students majoring in French may, with the input and approval of her/his advisor, request that 1-6 credit hours be granted toward her/his major based on the activities to be undertaken. Any student minoring in French or seeking a concentration in French may request that 1-3 credit hours be granted based on the activities to be undertaken. Students are required to prepare a written request to the advisor giving a description of activities and a rationale for requesting credit. This course is available only to students majoring, minoring or earning an Elementary Education concentration in French who complete an approved study abroad program and meet evaluation standards approved by the French advisor.

FREN 361: Women in French Literature

An Honors course to familiarize both the French major as well as the non-language student with the role of women in French literature from the Middle Ages through the Twentieth Century. Students will read selected works by women writers in several genres and will read a few works by men in which the woman is the primary character or focus. The course will survey the expanding and developing role of women through the centuries. All readings will be in English; the course will be taught exclusively in English and will meet three hours per week. Course does not satisfy the foreign language requirement for any degree, but can be used to satisfy humanities requirement.

FREN 370-379: Selected Topics in French

This course entails an intensive study of topics in French culture or literary topics, styles, trends, criticisms and writers not included or not covered in depth in other French courses. May be repeated for credit.

FREN 398: Honors Supplementary Research

Supplementary research conducted by an Honors student in an upper-division (or 300 or 400-level) course in which the student is enrolled. The research is related to a topic in the course, but in addition to the standard requirements of the course, the research should exhibit advanced inquiry or investigation into the topic. The Honors student earns 1, 2, or 3 credits in addition to the credits for the course itself. The number of additional credits depends on the amount and intensity of the supplementary research. Each department in the College of Liberal Arts and Sciences has a specific course number which uses the departmental prefix, but all courses will use a common number (398). The course title will read "Honors Supplementary Research" and will have a variable credit value from 1 to 3 credits, e.g. ENGL 398 Honors Supplementary Research.

FREN 470: Selected Topics In French

Selected Topics in French.

First Year Seminar

FYSM 100: First Year Seminar

First-Year Seminar is a required class that introduces students to the kind of academic work expected at the college level. In a small-class setting, students work closely with their professors and peers to explore a particular topic in depth and develop skills that are essential for success at the university. The specific topic of the seminar varies with the academic passion and expertise of the instructor. The course is designed to be taken very early in the student's course of study, ideally in the student's first semester at KU. The course is open to students who have earned or have transferred in fewer than 15 credits from an accredited college or university.

Geography

GEOG 10: Planet Earth Users' Guide: an Introduction to Physical Geography

Physical geography examines spatial elements of the physical environment - weather, climate, vegetation, soils, and landforms. Students analyze the nature and characteristics of these elements, the processes involved in their development, their distribution over the earth, and their inter-relationships. Students also examine the interrelationships between these elements and human activities. They use maps and other geographical data to locate, analyze, interpret, and solve geographical problems of a physical environmental nature. This course is useful to students seeking to better understand geographical aspects of environmental issues.

GEOG 20: Our Human Earth: Introduction to Cultural Geography

The purpose of this course is to teach students how to think geographically about culture. This involves considering how people's actions through social, economic, and political processes create and transform places. Topics include, but are not limited to, geographies of population, migration, language, religion, ethnicity, politics, urbanization, agriculture, and development. Students will study how peoples' culture affects the world around them, and in turn, how it is affected by the cultures and environments that surround it.

GEOG 25: Geofiction and Roleplaying

This course has students learn about geographic and cartographic elements in fictional worlds, create a fantasy world of their own design, and roleplay in these worlds with other students. Through the cartographic study of maps presented in film, television, literature, video games, graphic novels, and tabletop roleplaying media, students will develop an appreciation for geography through the crafting a unique fictional world that adheres to geographic principles and create a fictional character to explore and interact in group settings with others in the roleplaying environment. This class is for non-Geography majors.

GEOG 40: Descriptive Oceanography

A course to familiarize the non-scientific student with the marine environment and current developments in the marine sciences. Topics for study will include: the Physical Parameters of the Ocean; Ocean Basin Topography; Life in the Sea; and Resources in the Oceans. Students will be encouraged to participate in field activities at the Wallops Island Marine Center at Wallops Island, Virginia. This course is unacceptable for the Earth-Space Science major requirement.

GEOG 101: World Regional Geography

This introductory course is designed to give the student a broad overview of the world - its peoples, cultures, economic and social systems, and the physical environment over which all of these are superimposed and interact. The course is intended as a General Education social science elective.

GEOG 110: Geography of the United States and Canada

This introductory course is designed to give the student an understanding and appreciation of the North American cultural area. Canada and the United States will be analyzed from both topical and regional viewpoints.

GEOG 112: Geography of Pennsylvania

Man's cultural and economic development in relation to the factors of his physical environment are analyzed in the land use study of Pennsylvania. The areal extent, value and rise of the state's resources and related problems are studied as well as the need for a well-directed, coordinated program. Field trips are an integral part of this course.

GEOG 120: Geography of Sub-Saharan Africa

A comprehensive course of study of the physical and cultural geography of the African continent south of the Sahara Desert. Topics will include, but are not limited to: pre-colonial societies, slavery and colonialism, development issues, environmental problems, the geography of disease and health care, population, and current political geography issues.

GEOG 140: Geography of Europe

A regional course emphasizing the economic problems of European nations, it affords an opportunity to study the geographic relationships underlying land utilization, boundary disputes, economic organization, and the dominant international relations of Europe.

GEOG 204: Meteorology

Meteorology is the study which deals with the phenomena of the atmosphere. This includes not only the physics, chemistry, and dynamics of the atmosphere, but is extended to include many of the direct effects of the atmosphere upon the Earth's surface, the oceans, and life in general. Students will be given the opportunity to work with the basic instruments used in measuring atmospheric characteristics, learn how those characteristics are coded on weather maps, be presented with strategies to analyze the weather data, and learn the basics of forecasting the weather.

GEOG 210: Environmental Conservation

This course examines a wide variety of current environmental issues related to air, land and water resources. Emphasis is placed upon problems and practical solutions. Lectures are integrated with an extensive collection of audiovisual materials and World Wide Web sites.

GEOG 212: The Geography of Natural Hazards

The geography of natural hazards examines human landscapes, in areas prone to damaging environmental conditions, i.e., floods, droughts, earth-quakes, severe agricultural frosts, etc. Upon the identification of geographic areas where notable disasters have occurred, a study is made of (1) the individual and societal human responses and decisions, and (2) the resultant land use patterns which have evolved. The student will then examine and evaluate current plans and options designed to reduce future loss of life and property in hazard-prone regions.

GEOG 220: Economic Geography

The course will introduce the basic concepts and processes underlying the spatial distribution of economic activities. Natural resource distributions, population patterns and growth, and general development disparities will be examined. The evolution of different types of economic activities over time and space will be considered within the context of technological change, particularly in transportation and communications. Contrasts and comparisons will be made between urban and rural economic activities, and both inter-urban and intra-urban patterns in different regions of the world will be examined. Industrial location will be considered, ranging from the small firm to the multinational organization. International trade and factor movement and world trading patterns will be examined, as well as problems resulting from the globalization of economic activity.

GEOG 223: Introduction to Transportation Geography

Transportation and its role in the development of the economic and geographic landscape are analyzed at the national, regional and urban level. This will be accomplished by considering the questions of how, where and why movements occur through geographic space.

GEOG 225: Spaces of Globalization

This course examines the complex array of economic, cultural, and political forces known as globalization. Topics will include the historical roots of globalization, as well as the positive and negative impacts of this diverse phenomenon on cultural, political, environmental, and economic geographies. Emphasis will be not only on the geographic effects that globalization has at the global level, but also the implications that it has for the geography of local places.

GEOG 230: Map Reading and Interpretation

This course examines how maps locate, represent, summarize and communicate geographic information. Students develop an appreciation for using maps to learn about physical and cultural landscapes. Emphasis is on the interrelationships of map design, symbolization, and visual communication; functions of map projections; use of coordinate systems of maps; techniques for measuring and calculating scale, distance, direction, slope, elevation, area, volume, and object height from maps; and analysis of spatial trends and landscape change using maps. Students also use the magnetic compass with maps to solve problems of direction and scale. Map critiquing and writing assignments challenge them to evaluate potential misuse and misinterpretation of maps. Laboratory exercises involve analysis of topographic, road, weather, air photo, historical, land use, and zoning maps. This course provides a basis for advanced techniques courses in geography. It is also helpful to education majors concentrating in geography and majors in fields dealing with either physical or human-built environments.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

GEOG 274: Introduction to GIS

Geographic information systems (GIS) are a major tool for the analysis of spatial data. This course introduces the student to the theoretical, conceptual and practical aspects of the collection, storage, analysis and display of spatial data. The applications of GIS by geographers, educators, scientists, planners, and businessmen to real-world problems will be emphasized.

GEOG 304: Weather Analysis

This course introduces the practice of observing and diagnosing synoptic- and meso-scale weather systems and the theories behind the development and movement of these systems. The course culminates on an application of these diagnostic techniques on the various components of the mid-latitude cyclone; including but not limited to, cyclone lifecycles, fronts, and jet streams.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

GEOG 310: Urban Geography

Urban Geography is concerned with promoting a greater understanding of the development, structure, functioning, and distribution of centers of human social, economic, and political activity, cities, through the application of spatial theories and models of human behavior. Although there are no course prerequisites, this course (as with virtually all other 300-level courses) is not recommended for freshmen.

GEOG 322: Climatology

The focus is on causes of climate, climate regions, climate change, and advantages and limitations of climate to human geography. The influences that the climate system has on plants, soils, water supply, human adaptations, urban living, and agricultural economics are examined. This approach provides valuable background material to other advanced courses in geography and to other related courses in the natural sciences. This course is a general education, natural science elective.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

GEOG 323: Global Warming and The Science of Climate Change

This course concentrates on the climatologically and spatial aspects of global warming and the growing importance of the science of global warming to policymakers. The aim is to introduce the causes, methods of analysis, and policy implications of global warming. This course is a general education natural science elective.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

GEOG 330: Cartography

This course serves as an introduction to Cartography. The successful student will become proficient in the collection, manipulation, generalization, and the proper visual presentation of geographic data. Emphasis is placed on the proper use of the graphic elements and visual variables, and on appropriate means of data manipulation. Students study the nature of cartography, the geographic coordinate system, map scale, map projections, map design, symbolization, data manipulation, the major classes of maps, and map reproduction. This course is laboratory intensive and emphasizes cartography in the ArcGIS computer environment. (4 c.h., 3 s.h.)

GEOG 333: Advanced GIS

Geographic information systems (GIS) are a major tool for the analysis of spatial data. Based on the material covered in Introduction to GIS, this course considers in depth the theoretical, conceptual and practical aspects of the collection, storage, manipulations, analysis and display of spatial data. Laboratory projects involving student use of vector-based GIS systems to develop, implement and analyze geographic databases are required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

GEOG 335: Political Geography

Current world and national problems are analyzed within the framework of systematic political geography. Attention will be focused on world trouble spots, elections, boundary friction, resource allocation, population pressure, and military strategy from a geographical stand-point. Elements of Cultural Geography or a basic Political Science course would be valuable preparation for this course, but are not prerequisite.

GEOG 338: Geography of Population

This course is designed to give the student a basic, systematic background in population geography with in-depth analysis of certain selected demographic factors as they specifically relate to areal phenomena. Special attention will be given to selected areas and their current population problems and the geographic factors which have produced or modified these problems.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

GEOG 341: Environmental Planning

Emphasis on the concepts and techniques used to study and evaluate the air and water environments, solid waste, toxic and hazardous wastes for the purpose of achieving environmental quality. Predominant attention will focus on planning and management principles, but administrative, economic and legal constraints will also receive due consideration.

GEOG 343: Land Use Planning

An examination and application of the methods associated with land use planning, especially in the small town and rural context. Emphasis is placed upon the tools and techniques associated with land use planning such as interpretive maps, soil surveys, remote sensors, and computers. Legal aspects of land use planning will also be presented.

GEOG 347: Remote Sensing of the Environment

Remote Sensing of the Environment is a course designed to introduce the field of remote sensing, as well as teach you the fundamentals of analysis of remotely sensed images. The primary focus in lecture will be on the variety of remote sensing platforms, the fundamentals of image acquisition, and the physical laws dictating satellite orbits and energy transfers used in remote sensing. In laboratory, the focus will be on applying the fundamentals learned in lecture to analysis data and interpret various types of images.

GEOG 371: Independent Study in Geography

Students who meet minimum qualifications and who can demonstrate a need or purpose will be permitted to pursue study topics within the field of geography at their own pace, but under direction of a member of the geography staff. Topics which parallel current offerings are not acceptable; however in-depth studies of any area or topic can be considered. Minimum qualifications: junior or senior standing, and the completion of 12 semester hours of geography. Permission of the department is required.

GEOG 372: Selected Topics in Geography

This course is designed to permit the department to offer a course of study based on the timeliness of the topic. The course content will vary with the topic and the instructor, but a research paper or equivalent will be required. The course may not be repeated for credit.

GEOG 375: Research Methods in Geography

An examination of the research methods of current importance in the discipline of Geography. Topics to be emphasized include: the nature of scientific research; the development and implementation of geographic research design, the acquisition and analysis of data, and the preparation of written reports.

GEOG 380: Senior Seminar in Geography

The major student activity in this course will be discussing, proposing, researching, and writing a Senior Thesis. The successful completion, and acceptance of the thesis by the Department of Geography Faculty, will provide the student with experience in the several areas noted above. As well as being the culminating undergraduate experience for the student, it will satisfy the College of Liberal Arts and Sciences' Comprehensive Examination requirement.

GEOG 394: Internship in Geography

The student will be placed in a supervised professional work environment with cooperating public or private organizations such as consulting firms as well as local, regional, state, and federal agencies. Periodic conferences with the intern will provide orientation and opportunity for review of issues and procedures relevant to the internship experience.

GEOG 395: Honors Independent Study/Thesis

Honors Independent Study/Thesis

GEOG 398: Honors Supplementary Research

Supplementary research conducted by an Honors student in an upper-division (or 300 or 400-level) course in which the student is enrolled. The research is related to a topic in the course, but in addition to the standard requirements of the course, the research should exhibit advanced inquiry or investigation into the topic. The Honors student earns 1, 2, or 3 credits in addition to the credits for the course itself. The number of additional credits depends on the amount and intensity of the supplementary research. Each department in the College of Liberal Arts and Sciences has a specific course number which uses the departmental prefix, but all courses will use a common number (398). The course title will read "Honors Supplementary Research" and will have a variable credit value from 1 to 3 credits, e.g. ENGL 398 Honors Supplementary Research.

Geology

GEOL 1: Dinosaurs

This course is an introduction to the paleontology of dinosaurs. The evolution, systematics, origin, history of their discovery, and current topics concerning dinosaurs are discussed. This course does not satisfy major, concomitant, or specialization requirements for Secondary Education and/or Liberal Arts and Science majors. PREREQUISITES: None.

GEOL 5: Earth Resources and Processes

An introduction to the principles of geology and their application to earth resources and processes. Emphasis is placed on understanding the origins of metallic, non-metallic, and energy resources and the geological factors which influence both natural and man-induced disasters. NO PREREQUISITE. This course does not count toward graduation credit for Geology, Marine Science or Environmental Science-Geology majors, nor does it satisfy the laboratory science requirement under general education.

GEOL 20: Introduction to Geology

An introduction to the study of the earth, physical geology includes the study of the formation of common rocks and minerals, of the structure of the surface of the earth, and of geological processes that create the surface landscape. Human considerations such as energy, mineral deposits and environmental hazards are also examined. Laboratory work includes the study of rocks and minerals, and the study of topographic maps and landforms. This course does not satisfy major, concomitant or specialization requirements for Secondary Education Science and/or Liberal Arts Science Majors.

GEOL 31: Geology of the National Parks and Monuments

This course is a tool for learning geology and processes in the context of something familiar: the National Parks and Monuments of the U.S. By focusing on the spectacular examples of places students are most likely to visit, students will better identify with the material. This course helps students build a framework understanding of Earth's geologic processes by first establishing an underlying theme of plate tectonics (i.e., the driving force for many large-scale geologic events). The course then focuses in on specific geologic environments in detail ranging from deep-earth formation of magmas that feed volcanoes to surficial processes such as coastal erosion and causes of ice ages. This course does not satisfy major, concomitant, or specialization requirements for Secondary Education and/or Liberal Arts and Science majors.

GEOL 50: Water Wars

This course is an introduction to the study of hydrology, geology, and scientific principles from the perspective of water as a natural resource. Both surface and subsurface hydrogeological processes are examined in an example-oriented teaching method that incorporates an evaluation of the political and environmental ramifications of each situation. This course does not satisfy major, concomitant, or specialization requirements for Secondary Education and/or Liberal Arts and Sciences majors.

GEOL 100: Physical Geology

An introduction to earth processes, physical geology includes the study of the formation of common rocks, minerals and economic mineral deposits, the structure of the earth's interior, and geological processes that create the surface landscape.

Human and environmental hazards are also examined. Laboratory work includes the study of rocks, minerals, topographic maps, landforms, and geologic maps. Field trips may also be required.

GEOL 102: Historical Geology

An introduction to the geological and biological evolution of the earth, historical geology traces the history of the earth as recorded in the rock record. The scientific methods by which geologists interpret the earth history are introduced. Field trips may be required. Required of majors in the Earth-Space Sciences. Offered Spring Semester.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

GEOL 110: Introduction to Oceanography

An introductory course designed to introduce students from diverse backgrounds to the physical, chemical, biological and geological aspects of the oceans and to the methods and techniques of this rapidly expanding field. Emphasis is placed on lab and at-sea assignments which focus the students' attention on the interrelationship and unity of oceanography, and its relation to other environmental sciences.

GEOL 200: Field Geology

Methods of geological survey involving field practice, interpretation of selected areas, and preparation of maps, and reports. Lectures and laboratories.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

GEOL 205: Planetary Surface Processes

This course examines the physics of processes that break solid rock into transportable materials and the physical and chemical mechanisms behind the movement and deposition of that material on planetary surfaces. Using quantitative analysis, laboratory, remote sensing, field experiments, and qualitative assessment, this course links the physical and chemical weathering of planetary surfaces, including the fundamentals of fluid flow, sediment transport, erosion, and deposition to processes ranging from microscopic to mountain building. A laboratory course, planetary surface processes focuses on collecting and using actual data sets and applying them to the sedimentary, tectonic, and atmospheric history of a planet.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

GEOL 210: Environmental Geology

A study of the relationship between man and his geological habitat. Problems hat society faces in using the earth are examined, including case histories of natural disasters and human interactions with earth materials. Geo-chemical cycles, geological materials, and land use will be examined as they relate to environmental quality.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

GEOL 220: Mineralogy

An introduction to the structure and chemistry of minerals allows development of an understanding of how minerals form and why they have specific physical and chemical properties. Laboratory work emphasizes a wide variety of practical techniques for the identification of minerals both in the lab and in the field.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

GEOL 230: Paleontology

This course is a study of invertebrate and lower vertebrate life as revealed in the fossil record. The invertebrate phyla are used to illustrate evolutionary patterns, speciation, and the use of fossils in stratigraphy. The invertebrates and lower vertebrates are

treated systematically. Chief emphasis is on organic hard parts. Fossils are collected in the field, then prepared and identified in the laboratory.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

GEOL 237: Field Methods in Oceanography

A course to familiarize students with the dynamic marine environment and field work on board small research vessels; to instruct in the use and application of standard oceanographic instruments and sampling devices; to promote and encourage independent research through the initial stages of a scientific project.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

GEOL 302: Economic Geology

All metals, many raw chemicals, and other materials in our daily lives, including glass, ceramic, aggregate, and cement, are won from the earth by mining mineral deposits. Economic geology is the study of how these mineral deposits form within the earth and how we explore them. This course in economic geology will investigate both the processes that form mineral deposits, as well as practical exploration strategies currently used in industry.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

GEOL 304: Structural Geology

Structural geology studies the way rocks deform on scales ranging from the microscopic to plate tectonic. This course investigates how rock fold, fracture, and even flow. This knowledge leads to an understanding of how mountain ranges form, where natural resources occur, where groundwater pollutants migrate, and what controls ground stability in construction. The course also explores the history of the earth from a plate tectonics perspective. Projects include both laboratory studies and mapping exercises of deformed rocks in the field.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

GEOL 316: Petrology and Geochemistry

This course introduces the fundamentals of geochemistry in the context of igneous and metamorphic petrology. Understanding the basic principles of the chemical processes within the earth sets the stage for investigations of how magmas form and crystallize, and how pressure, temperature, and fluid-rock interaction change rock mineralogy and texture. Understanding the environments in which rocks form leads to the development of models of geologic processes that form these kinds of rocks. Laboratory work focuses on practical application of these concepts to mapping rocks in the field and studies of rock suites from all over the globe using petrographic microscopes.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

GEOL 320: Optical Mineralogy

The unique interactions between crystals and light allow the use of specialized microscopes for the study of rocks and minerals. This course investigates these fascinating phenomena and applies them toward the microscopic determination of minerals and their intergrowths. Projects focus on basic mineral identification and application of that data toward solving basic petrology problems.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

GEOL 324: Geomorphology

This course involves the study of the evolution of landforms. Tectonic forces, climates and biological forces, the processes of

weathering, mass wasting, and erosion in the formation of the surface features of the earth are considered. The interpretation of geologic and topographic maps, laboratory exercises, as well as individual field studies are an important part of the course. Laboratory work and field trips are required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

GEOL 346: Sedimentology and Stratigraphy

The basic composition, transport, diagenesis and distribution of sediments are introduced along with the principles governing the classification, correlation, interpretation, of stratified rocks are presented by means of lectures, laboratory exercises and field trips. Laboratory exercises demonstrate procedures used in analyzing and presenting stratigraphic data. Field trips are employed to introduce the student to stratigraphic principles and local stratigraphic problems.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

GEOL 358: General Geophysics

The study of applied near-surface geophysical methods such as gravity, magnetics, seismic refraction, seismic reflection, electrical resistivity, electromagnetic induction, ground penetrating radar, and borehole logging. The laboratory exercises and field work using portable geophysical equipment will familiarize the students with the various methods used to collect and interpret geophysical data. (This course is also offered under the MRSC 358 designation.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

GEOL 362: Hydrogeology

This course deals with the study of the subsurface waters of the Earth, their occurrence, circulation and distribution, their chemical and physical properties and their relation to the geologic environment. The laboratory exercises and field work will familiarize students with various methods used to collect and interpret hydrological data.

GEOL 366: Marine Geology

A study of the structural and sedimentary environments of the continental shelf, slopes, and ocean basins. The crustal structure of the earth and its relation to the sedimentary record and geologic history of the ocean is examined. Sampling and laboratory procedures used by the marine geologist are introduced.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

GEOL 368: Research in Geology I

This course involves field, laboratory and library research on a topic of geological nature. The work will be supervised by a faculty member and the research topic will be acceptable to both the supervising faculty member and the student. The combined credit total for Research in Geology I and II is up to 6 semester hours. Prerequisite: 12 semester hours of geology courses and consent of the instructor.

GEOL 369: Research in Geology II

This course allows a student to continue working on a project which was started in GEOL 370 or to investigate a new topic. The work will be supervised by a faculty member and the research topic will be acceptable to both the supervising faculty member and the student. The combined credit total for Research in Geology I and II is up to 6 semester hours.

GEOL 370: Seminar: Selected Topics in Geology

Via independent study or small group seminars, the student learns academic self discipline and how to gather, interpret, evaluate and collate the large amount of knowledge available in the literature.

GEOL 371: Seminar: Selected Topics in Geology

Through individualized instruction or in small group seminars, the student will study a timely or specialized topic in Geology. The most appropriate media of instruction will be chosen to meet the specific goals of student and instructor, and these may include faculty and guest lectures, discussion, problem sets, completion of a review paper, student oral presentations, field trips, and student projects which do not fall into the category of laboratory research. Prior to registration, the student must arrange for a faculty supervisor and obtain the permission of the Department Chairperson. May be repeated for a maximum of 6 total hours credit.

GEOL 372: Seminar: Selected Topics in Geology

Through individualized instruction or in small group seminars, the student will study a timely or specialized topic in Geology. The most appropriate media of instruction will be chosen to meet the specific goals of student and instructor, and these may include faculty and guest lectures, discussion, problem sets, completion of a review paper, student oral presentations, field trips, and student projects which do not fall into the category of laboratory research. Prior to registration, the student must arrange for a faculty supervisor and obtain the permission of the Department Chairperson. May be repeated for a maximum of 6 total hours credit.

GEOL 373: Seminar: Selected Topics in Geology

Through individualized instruction or in small group seminars, the student will study a timely or specialized topic in Geology. The most appropriate media of instruction will be chosen to meet the specific goals of student and instructor, and these may include faculty and guest lectures, discussion, problem sets, completion of a review paper, student oral presentations, field trips, and student projects which do not fall into the category of laboratory research. Prior to registration, the student must arrange for a faculty supervisor and obtain the permission of the Department Chairperson. May be repeated for a maximum of 6 total hours credit.

GEOL 376: Seminar: Selected Topics in Geology

Through individualized instruction or in small group seminars, the student will study a timely or specialized topic in Geology. The most appropriate media of instruction will be chosen to meet the specific goals of student and instructor, and these may include faculty and guest lectures, discussion, problem sets, completion of a review paper, student oral presentations, field trips, and student projects which do not fall into the category of laboratory research. Prior to registration, the student must arrange for a faculty supervisor and obtain the permission of the Department Chairperson.

GEOL 380: Senior Seminar in Geology

Readings and discussions in the area of the individual student's interest in preparation for the comprehensive examination in Geology. Required of all Liberal Arts students majoring in Geology.

GEOL 390: Internship in Geology

Supervised, practical work experience in laboratory and/or field situations. Students interested in developing an individualized vocationally oriented program which may assist in future career options may structure a work-study experience with the cooperating agency or organization. A proposal outlining the work-study experience should be submitted to the student's supervising faculty member and the department chairperson. Clock hours will be determined by the cooperating agency or organization. Semester hour credit will be based upon the proposal and scheduled clock hours, but a maximum of 4 credits may be applied toward Arts and Sciences electives. Additional credit cannot be applied to the 128 credit hour graduation requirements.

GEOL 395: Honors Independent Study/Thesis

Honors Independent Study/Thesis

GEOL 398: Honors Supplementary Research

Supplementary research conducted by an Honors student in an upper-division (or 300 or 400-level) course in which the student is enrolled. The research is related to a topic in the course, but in addition to the standard requirements of the course, the research should exhibit advanced inquiry or investigation into the topic. The Honors student earns 1, 2, or 3 credits in addition to the credits for the course itself. The number of additional credits depends on the amount and intensity of the supplementary research. Each department in the College of Liberal Arts and Sciences has a specific course number which uses the departmental prefix, but all courses will use a common number (398). The course title will read "Honors Supplementary Research" and will have a variable credit value from 1 to 3 credits, e.g. ENGL 398 Honors Supplementary Research.

GEOL 400: PASSHE Geology Field Experience

The PASSHE Geology Field Experience is an opportunity for students to apply their knowledge and skills to the investigation of Pennsylvania's unique and varied geology. Students will prepare surficial and bedrock geologic maps, construct stratigraphic columns and geologic cross sections, conduct stream monitoring, and perform geochemical analyses. They will work independently and in groups to analyze field collected data and develop scientific reports. The course is offered throughout Pennsylvania at select locations with field-based modules taught by experts from across the state system.

German

GERM 101: Elementary German I

A course for beginners to develop basic skills in pronunciation, aural comprehension, speaking and reading. The selection of course materials emphasizes social and cultural values. Offered in two semesters of three hours each.

GERM 102: Elementary German II

A course for beginners to develop basic skills in pronunciation, aural comprehension, speaking and reading. The selection of course materials emphasizes social and cultural values. Offered in two semesters of three hours each.

GERM 103: Intermediate German III

Students who have successfully completed GERM 101 and GERM 102 or the equivalent (per the CAPE language placement test) continue the development of basic language skills (speaking, listening, reading and writing) and the exploration of German-speaking cultures. Course content is based on the "5C's" of second language acquisition: communication, cultures, connections, comparisons and communities. This course is taught in German.

GERM 104: Intermediate German IV

Students who have satisfactorily completed six hours of elementary German, or who have had at least two years of German in high school, will continue the development of the basic skills in aural comprehension, speaking and writing, with emphasis on independent readings. Offered in two semesters of three hours each.

GERM 211: German Composition and Conversation I

This is the first course in a two-course sequence of German Composition and Conversation. It will provide advanced oral and written training aimed at improving and refining your creative writing and speaking abilities. It also provides a review of grammar.

GERM 212: German Composition and Conversation II

This is the second course in a two-course sequence of German Composition and Conversation. It continues to provide advanced oral and written training aimed at improving and refining creative writing and speaking abilities.

GERM 213: Business German

Business German is the study of German business terminology and phrasing and of the formal aspects of conducting business in German speaking countries. It covers such topics as banking, transportation, telecommunication, and tourism. The study of the geography and sociology of the German speaking countries will be included. Translation, correspondence, and

telecommunication skills will be practiced, as well.

GERM 217: German Comics in English

German Comics in English examines German-language comics and graphic novels as reflective of cultural, social, and historical conditions. The course also focuses on aspects of comics theory, artistic practices, and narrative form. Students produce an original graphic novel at the conclusion of the course. Taught in English.

GERM 220: Applied Linguistics In German

This course is an introduction to general linguistics, emphasizing the practical application of the basic structural and phonetic patterns of German to good language teaching.

GERM 230: The German Fairy Tale

This course reintroduces students to Grimm fairy tales in contexts quite different from their reputations as mere bedtime stories for children. The course will treat both well-known and more obscure fairy tales, focusing on their genesis, commonalities, differences, violence, gender bias, and the excisions and revisions undertaken by the Grimm brothers. Feminist and modern reworkings of the traditional tales will also be studied. Tales by other German authors will be examined. (In German)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

GERM 232: The German Graphic Novel

The German Graphic Novel implements the alternative text format as a linguistic and cultural product in order to help students continue building German language skills and cultural knowledge, including history and contemporary cultural trends and criticism. The course is designed to support a cognitive transition between basic courses (100 level) and more advanced literature and cultural courses (300 level). (Taught in German)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

GERM 253: German Literature in English Translation I

GERM 253 This course is an in-depth study in English translation of some outstanding works in German literature. It is devoted to German writers from Lessing to E.T.A. Hoffmann. Its sequel, ENGL/GERM 254, is a continuation of ENGL/GERM 253 and treats outstanding writers from Realism through the 20th century. Either semester may be taken independently.

GERM 254: German Literature in English Translation II

GERM 254 This course is an in-depth study in English translation of some outstanding works in German literature from Realism through the 20th century. It is a continuation of GERM 253. Either semester may be taken independently.

GERM 260: German Cinema in English

This course investigates German cultural and historical impulses as told through 20th and 21st century German film. Students survey films from selected periods, and discuss predominant themes as well as aspects of film technique that support critical interpretations.

GERM 301: Survey of German Literature I

This course designed to offer an introduction to the most important periods and movements in German literary history. It also serves as an introduction to key methods of literary interpretation and tools for understanding literary genres such as poetry, drama, and narrative. In a broad approach, we will interpret literary works against the backdrop of German history, the arts and sciences, politics, and economics. This course covers works from the Middle Ages, Reformation, Baroque and Classic periods.

GERM 302: Survey of German Literature II

This course is a continuation of GERM 301 and proceeds with the study of the major epochs in German literary history. It

resumes the study with the fairy tale, modernism, post-war, postmodern, East German, and into the present day, considering works of new German literature. The course also includes an introduction to major movements in literary theory.

GERM 304: German Culture Through Film

This course investigates German cultural and historical impulses as told through twentieth- and twenty-first century German film. Students survey films from selected periods, and discuss predominant themes as well as aspects of film technique that support critical interpretations.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

GERM 312: German Literature of the 19th Century

This course focuses on the Romantic period in German literature and introduces students to a range of German Romantic texts (drama, prose and verse) spanning the periods from the 1770s to the 1850s. The course also offers opportunities for students to engage critically with a variety of literary responses to the ethical, aesthetic and theoretical problems that emerge during this period.

GERM 313: German Literature of the 20th Century

In this course, students read contemporary (20th and 21st century) German literary selections. Additionally, we will regard film versions or adaptations of those same texts. An overarching theme will be how film and literature advance social comment and promote critical confrontation with contemporary issues through satire, humor and social criticism. Visual literacy will also play a role in interpretation and analysis.

GERM 320: German Short Story

Designed to acquaint students with the wealth of material represented in the German short story tradition and afford students a panoramic view of this (mostly post WW II) genre. Taught in English.

GERM 324: Race and Gender in the German-speaking World

This course explores traditional, historical, and current concepts of race and gender in German speaking countries. Taking an interdisciplinary approach, the course investigates evolving definitions of race and gender in a changing Europe. Employing historical, political and gender theoretical texts as well as examining artistic and popular cultural productions, the course examines ways that politics, economics, and cultural representations influence developing trends. Taught in English.

GERM 325: Advanced Syntax and Style I

This course is designed for those who have successfully completed either GERM 211 or GERM 212, but who need additional work toward mastering the finer points of grammar and syntax. It is the purpose of this course to help students acquire more sophisticated aspects of syntax and style, to enhance their fluency and flexibility to express themselves in idiomatically correct spoken and written German. Varying the style to suit particular modes of expression, and focusing on the appropriate choices within given contexts are skills to be polished in this course.

GERM 326: Advanced Syntax and Style II

This course is designed for those who have successfully completed GERM 325, but who need additional work toward mastering the finer points of grammar and syntax. It is the purpose of this course to help students acquire more sophisticated aspects of syntax and style, to enhance their fluency and flexibility to express themselves in idiomatically correct spoken and written German. Varying the style to suit particular modes of expression, and focusing on the appropriate choices within given contexts are skills to be polished in this course.

GERM 340: German Culture and Civilization

In addition to supporting the four language skills—listening, reading, writing, speaking—this course introduces students to major epochs, trends, and influences associated with German culture and civilization. It will challenge students to critically engage with the topics and develop analytical and research skills.

GERM 355: Read and Perform German Drama

In this course, students identify and characterize major works and playwrights of German-speaking drama in the twentieth and twenty-first centuries. Students also summarize content and plot of selected dramas in the target language, as well as identify and evaluate elements of dramatic technique and aesthetics. Students regard the plays as performance art by creating, diagramming and proposing potential blocking patterns. The course also considers major cultural differences between theatre of German-speaking countries (format, industry) and that of the native culture.

GERM 360: Study Abroad Experience

This course permits approved study abroad experiences to be counted in the Student's German major (B.A. and B.S.Ed.), minor or concentration. Prior to an approved study abroad experience, any students majoring in German may, with the input and approval of her/his advisor, request that 1 6 credit hours be granted toward her/his major based on the activities to be undertaken. Any student minoring in German or seeking a concentration in German may request that 1-3 hours be granted based on the activities to be undertaken. Students are required to prepare a written request to the advisor giving a description of activities and a rationale for requesting credit. This course is available only to students majoring, minoring or earning an Elementary Education concentration in German who complete an approved study abroad program and meet evaluation standards approved by the German advisor.

GERM 370-379: Selected Topics In German

Selected Topics in German.

GERM 380: Senior Seminar In German

This course consists of extensive readings, intensive oral work in the form of discussions and in-class presentations, and written paper(s) for the comprehensive exams in German. The content of the course will revolve around solidifying the students knowledge of historical and cultural content. Taught in German.

GERM 390: International Internship in German

This course is designed for the student wishing to spend an extended period of time abroad or at an approved domestic agency/organization in either an internship situation or non-traditional studies. Students must demonstrate that the internship or non-traditional program will be conducted in the foreign language of study and will be adequately supervised. They must present written details of the program including objectives and method of study, to their academic advisor, for approval prior to the period of study. Students must present a written journal, paper or other material to the Program Director on their return and be prepared to make a presentation about their experiences.

GERM 395: Honors Independent Study/Thesis

Honors Independent Study/Thesis

GERM 398: Honors Supplementary Research

Supplementary research conducted by an Honors student in an upper-division (or 300 or 400-level) course in which the student is enrolled. The research is related to a topic in the course, but in addition to the standard requirements of the course, the research should exhibit advanced inquiry or investigation into the topic. The Honors student earns 1, 2, or 3 credits in addition to the credits for the course itself. The number of additional credits depends on the amount and intensity of the supplementary research. Each department in the College of Liberal Arts and Sciences has a specific course number which uses the departmental prefix, but all courses will use a common number (398). The course title will read "Honors Supplementary Research" and will have a variable credit value from 1 to 3 credits, e.g. ENGL 398 Honors Supplementary Research.

GERM 420: Professional Translation Skills in German

This course supports continued growth and development of German vocabulary, structures and style, while also promoting specialized skills and techniques required for translation. The student will confront translation challenges related to culture and language in the context of various authentic text types, such as technical, literary, or commercial. The student will also acquire basic knowledge of translation theory and will be introduced to the current translation industry, including job offerings, titles and skills required.

GERM 470: Selected Topics In German

Selected Topics in German.

History

HIST 14: History of Civilization A

This course will examine the origins, development and interconnectedness of major world societies to ca. A.D. 1600, focusing on the evolution of Western Europe and its importance in shaping the modern world.

HIST 15: History of Civilization B

This course will examine the development and interaction of major world societies from the sixteenth century to the present, focusing on the evolution of Western Europe and its importance in shaping the modern world.

HIST 25: U.S. Formative Years And The Federal Republic

This is an introductory course in American History covering the period from the nation's colonial beginnings to its threatened destruction in the Civil War. The central part of the course deals with the development of American habits of thought, institutions and culture from 1607 - 1865. Focus is given to the development of slavery and the role of men and women from different ethnic groups in shaping the American experience.

HIST 26: History of The United States: The Emergence of Modern America

This is an introductory course in American history beginning with Reconstruction following the Civil War and stressing the emergence of a dominantly urban-industrial society, the expanded role of government and America's increased role in world affairs.

HIST 33: Conspiracies and Modern American History

This course will examine some of the major conspiracies of the past century, such as the Kennedy assassination, the September 11th attacks, and more recent controversies surrounding geoengineering and climate manipulation. The truth is out there. To find it, we will seek out, find, and evaluate the evidence underpinning some of the most important events in modern times.

HIST 34: Families and Personal Lives in American History

This course surveys the changing ways that social groups have utilized families to fulfill fundamental practical, psychological and cultural functions from colonial times to the present. In particular, the course explores how codes of power and obligation have been challenged by the heightening of individuals' aspirations for autonomy and happiness and the ways that family celebrations and rituals, such as wedding ceremonies, have been relied upon to reconcile the ideal of family commitments with the ideal of personal fulfillment.

HIST 36: History of Science: From Ancient to Modern Times

This course will introduce students to the key trends and developments in the history of scientific thought in the Western World.

HIST 72: Selected Topics in History

Study of selected topics in history. Students may take the course for credit an unlimited number of times provided they are

different topics.

HIST 106: History and Culture of Turkey

Spanning two continents, Turkeys stands as a crossroads of some of the most important historical and cultural trends in the world. This course will explore the cultural history and current developments in turkey, through readings, lectures and study abroad experience in Turkey itself. Students will gain knowledge of the multiple historical influences on the development of Turkey by visiting major architectural, historical and archeological sites in various parts of the country. Students will also have an opportunity to experience and observe modern Turkish culture through lectures, participation in events, and visits to important Turkish institutions. This course will serve as a basis for a study abroad program in Turkey.

HIST 111: The World Turned Upside-Down: Early Modern Europe

This course is designed to study the political, economic, social, and intellectual development of Europe in the 17th and 18th centuries.

HIST 112: Revolution, Progress and Conquest: Europe in the 19th Century

This is a survey of political, economic, social and diplomatic developments in Europe from the Congress of Vienna to the outbreak of World War I.

HIST 120: History of Pennsylvania

This course examines Pennsylvania from its colonial beginnings to the present time. Special attention is given to the peculiar institutions and problems of the state, the diversity of the people, and the place of Pennsylvania in the American political and economic scene.

HIST 121: American Environmental History

This course will investigate major trends in the American environmental history from European contact with North America to the present. Focusing on the period after Columbus, this course explores the influence of nature, including climate, topography, plants, animals, and microorganisms, on human history, and the reciprocal influence of people on nature. Field experiences will provide opportunities to learn outside the classroom. Topics include the biological consequences of the European encounter with the Americas, the taming of the wilderness in the colonial era, the environmental impact of technology, the "wire use" ethic of resource management, changing attitudes towards nature at the turn of the twentieth century, and the roots of the current environmental concerns.

HIST 125: America in the Sixties

The course will examine the 1960s, an era that brought great social change to America, and will cover, in depth, the era that began with the election of John Kennedy in 1960 and concludes with the ending of the Vietnam War on January 27, 1973. Social, political and cultural themes will be taught through coverage of topics including: the presidencies of Kennedy, Johnson, and Nixon; the Civil Rights Movement, the Vietnam War and the antiwar movement; the New Left and the Right; the rise of Black political consciousness and radicalism; the countercultural and the surge of the youth culture; the emergence of an array of social movements including feminism, gay liberation, and environmentalism. Attention shall be paid to the music and films that portray contemporary culture. Be forewarned that the materials that will be read and viewed will include language and imagery that one may find disturbing, startling, or shocking and may be seen by today's standards as ageist, sexist, racist, violent, or even obscene.

HIST 126: Hitler's Rise to Power

This course will offer students an opportunity to learn about Adolf Hitler's and Nazism's rise to power in the context of the history of Germany's Weimar Republic (1918-1933).

HIST 131: History of Latin America: Colonial

This course begins with a survey of the Iberian and American backgrounds of the Latin American peoples. This is followed by a study of the Pre-Colombian Indians, exploration and colonization, colonial institutions and the Wars of Independence.

HIST 145: Search For Social Justice In America

A study detailing changing American attitudes toward poverty with particular emphasis upon the development of social legislation, social reform, the changing nature of welfare institutions, the emergence of social work as a profession, and the rise of the welfare-state. Some of the questions which will be examined are the following: What were some of the tensions in the relationships between upper class social reformers and their lower class clients? How did ethnic attitudes affect patterns of work and recreation?

HIST 150: Minorities in American History

This course examines the experience of various minority groups - European, Black, Indian, Puerto Rican - in America.

HIST 151: East Asia to 1800

This course will survey the development of the people of East Asia with special emphasis on their traditional ideas, social trends and political institutions to about 1800.

HIST 155: History of the Middle East

This is a study of civilization that developed in the Middle East, culminating with the zenith of the Ottoman Empire in 1683. Similarities and differences with Western cultures will be stressed. The rise and spread of Islam as the major religion of the area will be of special interest in this study.

HIST 157: American Population History

This course traces how the size of population of the territory that now constitutes the United States has changed from the pre-colonial era to contemporary times. Population size reflects migrations, births and deaths. To investigate those three factors, the course explores topics such as the slave trade, war, disease, patterns of economic and sexual behavior and the ways in which gender, ethnicity/race and class are embedded in America's population dynamics. The course utilizes quantitative information as well as other types of evidence. Students need only basic math skills to master the course's quantitative content.

HIST 168: Selected Topics in U.S. History

Study of selected topics in history. Students may take the course for credit an unlimited number of times with different topics.

HIST 169: Selected Topics in European History

Study of selected topics in history. Students may take the course for credit an unlimited number of times with different topics.

HIST 170: Military History of the United States

This course will consider the evolution of the American military system, its employment in domestic and international affairs and its impact on American society.

HIST 172: Selected Topics in African/Middle Eastern/Latin American/Asian

Study of selected topics in history. Students may take the course for credit an unlimited number of times with different topics.

HIST 204: History of Gender Dynamics in Africa

This course examines the roles women have played within the diverse African societies and over the long historical periods in Africa. African women, as historical players, will be studied from the origins of early human history to post-colonial Africa. This

course will challenge students to understand that gender has been historically conceptualized and that in Africa a diverse range of societies have developed gender systems that accord significant power and prestige to women.

HIST 205: Selected Topics in U.S. History

Study of selected topics in history. Students may take the course for credit an unlimited number of times with different topics.

HIST 206: Selected Topics in European History

Study of selected topics in history. Students may take the course for credit an unlimited number of times with different topics.

HIST 207: Selected Topics in African/Middle Eastern/Latin American/Asian

Study of selected topics in history. Students may take the course for credit an unlimited number of times with different topics.

HIST 208: History of Racism: Since 1500

This class will start with a frank discussion of the social construction of race and the latest scientific data which shows that race is not biological. This class will examine the history of racism from the enlightenment to Apartheid. The course will allow students to learn about how major institutions within the United States show racial bias and how the struggle against racism and racial injustice in recent times is part of a long history.

HIST 209: The Early American Republic, 1789-1848

This course will investigate major trends in the American history from the election of George Washington to the close of the Jacksonian era, 1789-1848. Attention will focus on significant political, diplomatic, economic, social and cultural developments during the period.

HIST 210: History of Russia and the Soviet Union

This course is a study of the internal development and external relations of Russia, the Soviet Union, and its successor states from the 9th through the 20th centuries. Topics of inquiry include geographic and climatic factors shaping Russian history; early Kievan Rus; religious, political, and economic influences on the development of Russian autocracy; Westernization in Tsarist Russia; reform and revolution in the nineteenth and early 20th centuries; the Soviet system and its cultural borrowings from the past; the East-West confrontation; nationalism and separatism in the Soviet republics; and recent developments in Russia and the Commonwealth of Independent States (CIS).

HIST 215: History of England

The rise and development of England and the British Empire will be surveyed from the pre-Roman era to the twentieth century. The course will emphasize the evolution of British political institutions.

HIST 217: Making of Modern England

This course will present the political, economic, social, intellectual, and religious history of England from 1830 to the present.

HIST 218: The Age Enterprise 1865-1939

Designed to explore the emergence of the United States as a major economic and industrial power, this course examines various factors contributing to its industrial growth, benefits and problems accompanying this development, and consequences resulting from the economic changes.

HIST 219: The History of the French Revolution, 1760-1815CE

This course will examine the History of the French Revolution from its origins in the Age of Enlightenment until the collapse of Napoleons empire (1760-1815 CE). It will have a particular focus on how the French Revolution fits into a context of social and

cultural developments throughout the Western world, and how it influenced the development of modern Europe.

HIST 220: Ancient World

This course is a survey of civilization as it emerged and developed in the Ancient Near East, followed by a detailed study of classical Greece and Rome.

HIST 221: Ireland Since 1798

This course will examine the evolution of Ireland from a colony to an independent state. Chronologically the course begins with the 1798 rebellion against English rule and then considers the Great Famine of the 1840s, the War of Independence and the partition of Ireland from 1916 to 1922. Other twentieth-century topics include the Troubles in Northern Ireland and Ireland's membership in the European Union. Thematically the course will focus on the nature of Irish nationalism, the effects of the Irish Diaspora at home and abroad, and the transformation of Ireland from an impoverished colony to one of the richest states in the European Union at the start of the twenty-first century.

HIST 225: A History of the Jewish People in Modern Times

The course begins with an introductory unit focusing on the emergence of the people of Israel and their traditions and the medieval meeting of Christians, Moslems, and Jews. Attention will then turn to an investigation of selected topics in the history of the Jewish people in modern times. Such topics include the socio-economic development of Jewish communities in Europe and America, anti-Semitism in 19th century Europe, Hitler's attempted "final solution" - the Holocaust, and the creation of the modern state of Israel.

HIST 227: History of the Holocaust

This course is a study of the Holocaust in Nazi-dominated Europe. It focuses on Nazism's mass murder of European Jewry and other targeted groups that produced a mosaic of ethnic, social and political victims. Special attention centers on Germany's pursuit of genocide, and how that quest was heavily dependent upon foreign help provided by Nazi allies, vanquished states, and collaborationist governments constituting much of Europe.

HIST 229: American Urban History

This course analyzes the transformation of American society from a rural to an urban nation. It will examine the roles that cities have played in the United States' economic, social, cultural, and political evolution from colonial times to the present. The course will pay particular attention to the class and gender dynamics, the ethnic/racial conflicts and accommodations, and the reform movements that incubated in American cities and reshaped the nation.

HIST 230: Topics in the History of American Popular Culture

This course examines American popular culture throughout the history of the United States, focusing on popular culture as an important means of public expression and as an indicator of major social trends. By addressing the origins of past cultural events, this course will also provide students with a better historical context to understand the current dynamics of contemporary American popular culture.

HIST 231: History of Africa to 1800

This course will survey the development of the peoples of Africa with special emphasis on their traditional ideas, social trends and political institutions to about 1800.

HIST 232: History of Latin America: Modern

This course is a study of the history of the Latin American nations which have emerged since the Wars of Independence, 1825. Emphasis will be placed on the social, economic, political, cultural, and religious developments of these nations as well as the relationships of these nations to others in the hemisphere and the world.

HIST 233: 20th Century Latin American Revolutions

This course will examine the origins and evolution of five twentieth century Latin American revolutionary movements. It will trace the circumstances that produced rebellion, the ideology that guided them, and the attempts to transform revolution into sovereignty. This course will try to discern common features and important departures that have characterized Latin American revolutions in the last one hundred years. In doing so, it will offer the student a better means to interpret the history of the hemisphere and its people.

HIST 234: The History of France, c. 100 BCE to the Present

This course will examine the history of France from ancient to modern times, tracing its course of development from a collection of diverse regions to a modern nation-state. It will give particular focus to France's unique contributions to Western culture and its enormous influence on other nations including the United States.

HIST 235: Europe of the World Wars

This course begins with a survey of European conditions at the opening of the twentieth century. This is followed by a study of World War I and its settlement, the rise of the totalitarian states and their rivalries with the democratic states of Western Europe, the outbreak of the Second World War, the post-war settlement and the beginnings of the Cold War.

HIST 238: Europe During the Reformation: 1500-1650 CE

This course will examine the history of Europe during the religious Reformations that occurred between roughly 1500 and 1650 CE. It will focus on the cultural origins and consequences of the reform movements in the Protestant and Catholic worlds, as well as the role of religious violence and warfare in shaping the modern West.

HIST 240: African American History

This course examines the Black American experience to present times. Topics for consideration include the African heritage, the slave trade, slavery as an institution, the civil and political status of Blacks during the Civil War and Reconstruction eras, the full development of economic, social and political segregation and the modern protest movement.

HIST 241: History of Women in America

This course is a study of woman's role in American life tracing her effect on the nation's history.

HIST 243: Business History of US

A study of the historical development and influence of business in the United States from the colonial period to the present with an emphasis on the nineteenth and twentieth centuries.

HIST 244: Immigration and Ethnicity in American History

This course surveys the ways in which immigration has helped shape American history from the colonial era to present. The course examines homeland conditions and cultures and the processes of migration that resulted in the "peopling" of America as well as the evolution of ethnicities, races and "American" nationality. While the course emphasizes the pre-1965 period, that emphasis provides a basis for a fuller comprehension of the implications of the post-1965 wave of immigration to the U.S.

HIST 245: The United States 1900-1945

This course is a topical examination of modern America from the times of Theodore Roosevelt through the end of World War II focusing on significant domestic, diplomatic, economic and social developments.

HIST 246: The United States Since 1945

This course will investigate major trends in American history from the Second World War to the present. Attention will focus on significant political, diplomatic, economic, social and cultural developments during the period. Selected topics for consideration will include the growth of and challenges to presidential power, America's changing role in world affairs, the meaning for the United States of the war in Vietnam, and the impact of prominent social movements on American society.

HIST 247: Work and Workers in American History

This course reviews the work that American people have performed from colonial times to the present and explores the evolving roles played by workers in shaping American history. The course devotes special attention to analyzing ways in which social class interacts with race/ethnic and gender dynamics. Finally, the course explores the ways in which workers have organized and struggled to improve the conditions of their own lives and promote social equality.

HIST 252: American Colonial History

This course provides an overview of the founding of the American colonies through 1763. The European influence on the colonial experience will be examined along with the establishment of social, political, and economic institutions.

HIST 254: History of China and Japan since 1800

This course will examine the political, social and economic factors which have contributed to the modernization of China and Japan.

HIST 256: The Modern Middle East

This course is concerned with developments in the Middle East in the modern era, with an emphasis on the nineteenth and twentieth centuries. The interaction of the various national and religious groups and their impact on the modern world will be considered.

HIST 257: Introduction to Public History

This course will provide an introduction to selected areas of the public history field for those students who would like to know more about career and employment opportunities outside of academic teaching and research.

HIST 258: China's Golden Age

This course will lead students through the history of China from the Tang through the Qing dynasties. Students will gain a greater understanding of the evolution of Chinese society during this period through a study of political, economic and social developments. This course will also provide students with and in-depth look at this area's involvement in world trade with a particular focus on the region's connection to the West.

HIST 259: America and World War II

This course examines World War II as an event that created U.S. superpower status, prompted a permanent expansion of the federal government in everyday life, and initiated a rights revolution in American society.

HIST 260: Historic Preservation Studies

Students in this class will learn about the origins of the Historic Preservation movement, discover the impact of the 1876 Centennial on sparking an interest in our own history, learn about the development of period rooms in American museums, study the rise of regional historic preservation organizations, become acquainted with the Federal role in historic preservation, understand the rapid expansion of the preservation movement in the 1960s, and discuss the historical and theoretical issues in historic preservation studies.

HIST 261: History of Africa Since 1800

Africa has played an increasingly prominent role in world history since 1800. Imperialism, the two world wars, decolonization, and the Cold War all had important African phases, as do contemporary issues, such as HIV, ethnic conflict, and the debt crisis in the developing world. This course will provide undergraduates with the historical context to understand current international developments.

HIST 262: The History of Africans in the Americas

This course presents the history of people of African descent in North, Central and South America and the Caribbean from 1500 to the present. It also analyzes the major impact of peoples of African descent on the histories and cultures of these regions. This class begins with the arrival of enslaved Africans to the Americas; studies their struggles and final liberation; examines

how they maintained their lives post-slavery; as well as explains their modern descendants' embrace of African heritage.

HIST 268: Serial Killers in American History

This course will investigate the phenomena of serial killers in modern American history. It will examine specific case studies from the late 19th century to the present in order to understand historical context, social, political and media interpretations of the crime, and their impact on subsequent public policy.

HIST 274: Honors: Tudor-Stuart England

The course will examine social and political developments in sixteenth and seventeenth century England, focusing on the changing nature and institutions of power and authority in English society.

HIST 276: The Pennsylvania German Landscape

This course examines the development and evolution of the rural Pennsylvania German landscape from 1682 through the present. Students completing this course shall engage in readings discussions, visit museums, conduct fieldwork, and engage in a hands on restoration project. Students will gain a broad understanding of the social history and visual culture of the Pennsylvania Germans as they study their architecture, rural way of life, decorative arts, and material culture.

HIST 300: Diplomatic History of the United States

This course traces the evolution of American foreign policy from the era of the American Revolution through the post-Cold War contemporary era with a study of the major problems in foreign relations, which arose during that period.

HIST 310: Constitutional History of the United States

This course is a study of American constitutionalism and constitutional development from the debates of the Philadelphia Convention in 1787 to the civil rights issues of the post-World War II period. Constitutional issues such as states rights, the rights of minorities, and the expansion of executive power will be examined within the context of American cultural and economic development and governmental practice.

HIST 311: Revolutionary America

This course provides a comprehensive study of the period from the French and Indian War to the ratification of the Constitution. It will examine the origins of the Revolution, along with the major social, political, military, and cultural developments of the era.

HIST 325: The Middle Ages

This course is a study of the historical evolution of medieval European civilization, focusing on political and religious developments, economic and social changes, and intellectual and cultural achievements.

HIST 328: Europe During the Renaissance: 1300-1550 CE

This course will examine the history of Europe during the period commonly known as the Renaissance. It will look at the long-term significance of the culture of humanism, its complex relationship with medieval society, and its role in shaping the modern West.

HIST 335: Civil War and Reconstruction

This course will discuss the crisis of the Ante Bellum period, the conflict of the "War Between the States" and the successes, failures and legacies of Reconstruction.

HIST 341: Problems in Slavery and Abolition

This course is an intensive investigation of the institution of American slavery and the attempts to eliminate it. The course content will emphasize some of the major controversies in historical literature regarding slavery.

HIST 350: Local and Community Studies

The Local and Community Studies course offers a unique opportunity for students, community members, and faculty to develop and accomplish a local history research project as a team. The nature of this course is that as it unfolds we will work together making the adjustments necessary to complete a variety of professor and student derived project before the end of the semester. Therefore, it is not viable to predict exactly what will happen in each class week to week. There will be reading, researching, photography, data entry, presentation, and writing responsibilities over the course of the semester. The research pursued in this course, and the means of presenting one's findings, is only limited by each student's drive and imagination.

HIST 353: Communist Revolution in China

This course will examine the history of the Chinese Communist Party (CCP) from its formation in 1921 to the defeat of the Guomindang (GMD) in 1949. Students will gain a better understanding of the political circumstances under which Marxism developed in China, the tensions between the GMD and the CCP, and the development of CCP policies during the 1930s and 1940s. The course will also spread beyond 1949 to consider how close to the original revolutionary ideas China has remained as it emerged as a world economic power.

HIST 357: The Missionary Enterprise in China

This course will critically evaluate the Christian missionary enterprise in China from the sixteenth century to the immediate post-1949 period. Students will examine the contributions missionaries made to China's development by studying their work in religious and secular enterprises.

HIST 368: Selected Topics in History

Study of selected topics in history. Students may take the course for credit an unlimited number of times provided they are different topics.

HIST 369: Selected Topics in History

Study of selected topics in history. Students may take the course for credit an unlimited number of times provided they are different topics.

HIST 372: Selected Topics in History

Study of selected topics in history. Students may take the course for credit an unlimited number of times provided they are different topics.

HIST 378: Seminar in Historical Methods

The seminar will provide a general introduction to the nature and methods of history. Students will develop and improve their skills in historical research, communication, and methodology. The course is required of all B.A. history majors in their Junior year.

HIST 379: Independent Study in History

Independent Study affords any qualified student the opportunity to pursue a subject in history that either is not treated in sufficient depth to satisfy the student's academic interest or is not addressed in existing history courses. After securing approvals at the department and college levels for a program of study, the student works under the direction of a faculty member who will assign the grade. A student may take six semester hours of Independent Study but only three hours for three credits per semester. This course is restricted to students who have completed at least 24 credits.

HIST 380: Senior Seminar in History

Through reading, research, writing and discussion, students will systematically examine significant topics in the history of historical writing, the methodologies employed by historians in their craft and the nature of history as a field of study. They will

focus attention, primarily, on various schools of thought and interpretation concerning specific historical problems. This course is a requirement for all Liberal Arts students majoring in History.

HIST 390: History Internship

Internships are designed to give the student a supervised, work-study experience in the functions and day-to-day operations of public or private historical agencies, archives, museums, sites, or businesses. Internships are open to qualified students who have completed 24 credits and are majoring in history or other related fields. The number of semester hours will vary according to the program needs of the student and the requirements of the employing agency, from a minimum of 3 c.h. to a maximum of 15. Approval for an internship requires the completion of a History Department Internship Proposal form for review and approval by the department.

HIST 395: Honors Independent Study/Thesis

Honors Independent Study/Thesis.

HIST 398: Honors Supplementary Research

Supplementary research conducted by an Honors student in an upper-division (or 300 or 400-level) course in which the student is enrolled. The research is related to a topic in the course, but in addition to the standard requirements of the course, the research should exhibit advanced inquiry or investigation into the topic. The Honors student earns 1, 2, or 3 credits in addition to the credits for the course itself. The number of additional credits depends on the amount and intensity of the supplementary research. Each department in the College of Liberal Arts and Sciences has a specific course number which uses the departmental prefix, but all courses will use a common number (398). The course title will read "Honors Supplementary Research" and will have a variable credit value from 1 to 3 credits, e.g. ENGL 398 Honors Supplementary Research.

HIST 423: The American West

This course studies American migration from the Atlantic seaboard to the Mississippi Valley, together with Spanish and French penetrations in the West. The course also examines explorations, acquisition and settlement of the Trans-Mississippi West, and the American Southwest with evaluation of the influence of the frontier and its institutions on the total history of the United States.

HIST 437: Indian-White Relations

This course will deal with Indian-White relations from the first contacts in the late 10th century through the empire-building attempts of the Spanish, Dutch, English and French in North America. Of primary concern is the expansion of the European Frontier at the expense of Indian Tribal lands and culture, and the resulting intra-tribal warfare as the eastern Woodland tribes were removed west of the Mississippi River by the Government Removal Act and Allotment Policy of the 1830's.

HIST 438: United States History Since 1914

This course is designed to investigate selected topics such as World War I, the 1920s, the Great Depression and the New Deal, World War II, post-war America and the Cold War.

HIST 462: Germany in the Twentieth Century

This course is a survey of Germany in the Twentieth Century. Emphasis will be given to major intellectual developments, World War I and the collapse of the Empire, the Weimar Republic and the rise of Hitler, the cataclysm of the Second World War and the divided Germany of the Cold War.

Health

HLTH 102: Introduction to Health and Wellness

This course is designed to provide an overview of current issues impacting the health and quality of life of adults, to develop and expand a base of knowledge upon which to make informed health decisions, and to encourage development and implementation of proactive personal health management strategies.

HLTH 3: Rhythmics I

This course attempts to develop the fundamental movements of dance and rhythmics: axial and locomotor techniques, movement exploration (use of space, time and energy release) and rhythmic form. Emphasis is placed on creative, spontaneous group movement experiences

HLTH 4: Rhythmics II

In this courses, an attempt is made to develop the coordination of the body so that it becomes a vital instrument of communicative expression through creative individual dance compositions. Attention is given to staging techniques, lighting, use of props of stage area, and rhythmic accompaniments.

HLTH 370: Selected Topics in Health

This course presents an in-depth, analytical study of a selected topic in Health. Content will vary depending upon the timeliness and relevance of subject material, interests of the professor and/or student demand. The course may be taken for credit twice provided the same topic is not repeated.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

HLTH 380: Independent Study in Health

Independent Study provides an opportunity for students to pursue scholarly activity in an area germane to the discipline of Health Education not covered within the context of a regularly offered undergraduate course in Health or Wellness. Undergraduate students may schedule this course for one to three credits in a single semester, with no more than six credits for Independent Study overall. Permission of the faculty of the Health, Physical Education and Dance Department is required.

HLTH 395: Honors Independent Study/Thesis

Honors Independent Study/Thesis.

Homeland Security

HOSE 100: Homeland Security

This course explores the many facets of homeland security, including terrorism, critical infrastructure, the environment, public health, the military, intelligence, civil liberties, and the criminal justice system.

HOSE 200: Homeland Security and Emergency Management

This course examines the impact of man-made and natural disasters on the homeland, and explores how terrorism has affected American society and the criminal justice system. Both the government and private industry must be able to respond to threats and disasters.

HOSE 300: Homeland Security and Intelligence

This course examines the role of Intelligence in Homeland Security and the Criminal Justice System. It explores the increasing role of federal, state, local and tribal law enforcement agencies involved in the collection and sharing of several forms of intelligence. Major topics will include: the development of intelligence, the USA PATRIOT Act, the Foreign Intelligence Surveillance Act, and other changes in the law relating to national security and law enforcement intelligence issues.

HOSE 310: Terrorism and Counterterrorism

Examination of the history, methods, and causes of terrorism with a focus on homeland security and law enforcement. Review the increased roles of government and business in preventing, investigating, and responding to terrorism.

HOSE 323: Development of National Security and The Judiciary

This course will examine how constitutional law has been raised, defended, defined and avoided both before and after the events of September 11, 2001. This course will examine how the three branches of government currently and have historically addressed the issues raised by threats to the national security of the United States. This course will give students a legal and historical context for understanding the current issues raised by national security needs in a post 9/11 world.

Human Kinetics

HUKN 115: Health Maintenance/Nutrition and Exercise

The course is designed for students interested in the theoretical and practical aspects of losing weight or maintaining one's ideal weight. Recent medical and behavioral literature is reviewed and opportunities exist to make application of these theories to one's own health practices. This is accomplished by participation in a wide range of enjoyable activities to increase one's energy output and through discussion

Humanities

HUMN 211: Women in the Arts

This course will provide an overview of women's creative achievements, experiences and status in the visual arts. The focus of this course is on gender; however, issues relating to the intersections of gender with race, class, national origin, ethnicity, age, and sexual orientation will also be discussed. As well, the course will explore the portrayal of women and the way in which cultural definitions of gender shape women's aesthetic expression.

Instructional Technology

INTC 300: Instructional Media and Technology

The sensory techniques and materials employed in the learning process together with the principles involved in their utilization are discussed. Skills in specific techniques, criteria used for selecting sensory aids as well as methods of evaluation are studied. Activities include actual production of instructional materials.

INTC 331: Media and Technology in Education

The sensory techniques, technology and media employed in the learning process together with the psychological principles involved in their utilization are discussed. Skills in specific techniques and the criteria used for selecting technologies of instruction as well as methods of evaluation are studied. Activities include the production and application of instructional media.

INTC 336: Theories and Processes of Instructional Design and Tec

The course will analyze aspects of the instructional design process involved with designing effective technology rich lessons. Starting with a foundation of learning theory principles, and a sensitivity to curricular standards, the course will focus on two or three instructional design models to determine which would be the best to use for a particular design problem.

INTC 362: Digital Citizenship

This course is an introduction to digital citizenship and how it can be supported in K-12 schools and libraries. It provides a basis for understanding digital citizenship, the current trends in this area, and the potential needs students will face in the future. The course will help future educators and technology leaders see the importance of digital citizenship and identify ways it can improve teaching and learning with technology.

INTC 433: Synergetic Teaching with Technology

Student teacher and in-service educators will cooperatively develop and implement technology based instructional modules. Development of the modules will be founded on the technology training and background of the undergraduate participants and the practical pedagogical experience of the in-service participants. While the primary teaming goal is to combine a student teacher and in-service educator, two in-service educators, with prior permission of the instructor, could constitute a synergistic team. Distance learning technologies will be employed to deliver the content.

INTC 446: Development of Multi-Image Productions

The planning, production, and presentation aspects of multi-image productions are studied. The student will participate in all phases of developing a multi-image program. Recommended background: ability to operate a 35mm camera and familiarity with basic photography techniques.

International Studies

INTL 10: Introduction to International Studies

Students will examine and analyze contemporary world issues and events. Topics include global interdependence, the environment, modernization, intercultural understanding, nationalism, and international conflict and cooperation. This course is required for the International Studies minor. Offered fall and spring semesters.

INTL 101: Intercultural Communication

This course focuses on the newly emerging field of intercultural communication. The essential feature of the course is a presentation of the socio-psychological aspects of interaction among peoples who hold different values and assumptions. It emphasizes the analytic and comparative study of human communication in international settings in order to facilitate the learning of skills and techniques essential for successful cross cultural interaction. Subjects examined include variations and similarities in communication across cultures; the role of beliefs, customs, values, and norms in intercultural communication; and the interrelationships of society, culture, language and communication.

INTL 111: International Environmental Issues

This course will examine environmental topics from an international perspective. Emphasis will be placed on selected major environmental problems and their related social, economic and political ramifications. An analysis of the linkages between and among population size and food supplies, living conditions and health, the potential for climate change, water and energy resources, and the role of technology in global inter-dependence will be presented.

INTL 201: Selected Topics in International Studies

This course is an analytical study of a selected topic in international studies. Topics will vary depending upon the timeliness of the subject matter, the interests of the instructor, and/or student demand. The course may be taken for credit twice provided that the same topic is not repeated. 3 semester hours.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

INTL 310: European Union Simulation

This course involving the reenactment of international relationships introduces students to the history, policies and structure

of the European Union through their class's preparation for and participation in the European Union Simulation held annually in Washington, DC. Each year students assume the perspective of a minister or another delegate on a team of representatives from one country to the European Union. The viewpoint of the member country emerging from this role-play is analyzed in detail in preparation for debates at the Simulation's European Parliament. In addition to a thorough understanding of the member country's political system and the views of its political parties on the social, political, economic or educational issues to be debated, preparation for the three-day simulation also includes studying the historical evolution of the European Union, and an examination of its political, social, economic, and institutional dynamics. A participation fee is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

INTL 375: Independent Study in International Studies

The Independent Study allows for individualization of the curriculum to meet legitimate, specialized needs of students through studies outside of the focus of existing courses within their programs. Under direction of a faculty member approved by the Director of International Studies, the student will investigate an area of academic interest that fits in one of the four major theme areas of the International Studies Minor.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

INTL 380: Seminar in International Studies

Under the supervision of selected faculty, students will be encouraged to integrate their studies from their major program with their minor area of concentration (international studies). Students will pursue a research project in their areas of interest and experience as evidenced by the courses they selected to fulfill the basic requirements for the minor in International Studies. Students will have the opportunity to discuss their research in class as well as to explore timely issues in international studies.

INTL 390: International Studies Internship

The internship is designed to provide students with first hand, practical experiences in a variety of International contexts. An internship will normally consist of an overseas project or an appropriate domestic project having a substantial international component. Examples include working for an international agency at an overseas site, for the United Nations and for a domestic agency servicing immigrants or refugees. The internship is open to students with a declared minor in International Studies who have completed sixty-four credit hours (Junior status) by the start of the internship. Minors may take the internship for three or six semester hours.

INTL 395: Honors Independent Study/Thesis

Honors Independent Study/Thesis.

Library Science

LIST 125: Microcomputers in Education

The course presents undergraduate education students with a basic knowledge of how to effectively utilize microcomputers in education. Students are involved in "hands-on" experiences with computer operation and software programs that include word processing and desktop publishing, graphics, spreadsheets, databases, authoring systems and telecommunications. Microcomputer technologies utilized in the contemporary classroom are examined. No previous knowledge or experience with microcomputers is necessary.

LIST 130: Folk Literature and Storytelling

A study of the principles of selection, adaptation and techniques of story-telling. Includes practical experience in storytelling to

groups and planning story hour programs. A survey of folk literature, mythology, fables and modern stories provide the basis for stories to tell.

LIST 222: Resources for Young Adults

This course is designed as an exploration of print and digital resources that are relevant to the young adult and indispensable to public and school libraries. Students will study the evolution of young adult literature and resources, and young adult library resource and emerging genres, integration of digital resources, and young adult library resource promotional programs. Students will be reading young adult titles, writing, and sharing professional-style corresponding reviews based on the Children's Literature Comprehensive Database guidelines. Young adult library program activities will be examined.

LIST 310: English Language Learners in the Library

This course focuses on considerations including collection development, accessibility, and activities and/or instruction to address the information needs of the English Language Learner.

LIST 313: Cataloging and Classification of Information

This course is an introduction to the theory, concepts, and procedures of analyzing and organizing various formats of information including print and digital. Knowledge and skills are applied in a practical, hands-on lab environment.

LIST 326: Technologies in Libraries

This course is an overview of current and emerging technologies for libraries (i.e., integrated library systems (ILS), Internet, digital library resources, peripheral equipment and networks). Students will be introduced to the practical use of technology in libraries, and learn how to evaluate individual technologies. They will recognize the importance of a librarian's involvement in the overall technology program.

LIST 329: Instructional Strategies for the School Librarian

Students in this course will investigate the pedagogies, theories of educators and school library experts, and the perspectives that frame standards-based education. The focus will be on classroom management strategies and effective teaching strategies that will help the library science candidate meet the needs of diverse learners. Fieldwork: 30 hours.

LIST 350: Reading Interests of Adults

This course focuses on the critical evaluation and analysis of print and digital resources for adult library users. Emphasis is given to reading interests and popular culture.

LIST 362: Digital Citizenship

This course is an introduction to digital citizenship and how it can be supported in K-12 schools and libraries. It provides a basis for understanding digital citizenship, the current trends in this area, and the potential needs students will face in the future. The course will help future educators and technology leaders see the importance of digital citizenship and identify ways it can improve teaching and learning with technology.

LIST 405: Genealogical Research

Genealogical Research prepares students to assist patrons as they perform genealogy research, define family history writing objectives, and produce genealogy results for professional or personal needs in both traditional and electronic formats. The course is designed for librarians and other researchers interested in family histories.

LIST 420: Library Resources for Preschoolers and their Families

This course will provide an introduction to the development of the child from birth to age six, focusing on language acquisition and emerging literacy. It addresses the role of the family, care-givers and library in developing early literacy skills. The course will focus on library program planning, selecting of materials, and outreach and programming for preschool audiences, their families and care-givers.

LIST 471: Information Analysis and Retrieval

The basic principles and tools for information analysis and retrieval are considered in relation to database analysis, terminology control, question analysis, search strategy development, conducting searches, and the delivery of search results.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

Library & Learning Technology

LLTC 118: Introduction to Information Search Strategies and Digital Literacy

Intended for a general education audience, this course explores information search strategies for successful research of student chosen topics. Software applications that support research, such as bibliographic generators, and collaborative listservs will also be discussed. Furthermore, this course will explore the impact of students' online presence and help them become more digitally literate to maximize their professional strengths.

LLTC 200: Foundations of Information Science

This course explores historical approaches to knowledge gathering, theoretical foundations for the creation of organizational systems and current practices for organizing and efficiently retrieving knowledge. Historical and contemporary innovators and their contributions will be discussed. This class will explore the most commonly utilized organization systems in libraries, archives and information centers including classificatory schemes, finding aids and metadata. This class will also consider the variety of environments in which an information professional may be employed, including public, school, academic and special libraries, corporations, historical societies and museums and discuss the different roles, ethical practices, and responsibilities of professionals in these environments.

LLTC 310: Information Resources and Services

This course presents the fundamental knowledge associated with the delivery of reference services to library users. The primary emphasis is on the evaluation, selection, and utilization of information sources used in reference service to respond to ready reference, research, and reader's advisory questions. Information sources will be identified, categorized, and contrasted to identify their chief values in providing reference service.

LLTC 317: Integrating Assistive Technology into the K-12 Curriculum

Intended for pre-service teachers, this course explores research-proven strategies for using technology to assist those who have learning differences beyond those addressed by regular instruction and curricula. Discussions of research studies, awareness of innovative software and hardware that allows for greater flexibility in the learning environment, and development of useful course materials will provide teachers with a toolkit to implement and assess which technologies may maximize students' strengths.

LLTC 320: Resources for Children and Young Adults

This course explores strategies for using literature and related materials for children and young adults in library settings. Students will examine the broad range of genres and discuss methods for incorporating literature into various curricular areas and public programming.

LLTC 321: Technologies for the 21st Century Educator

This course explores teaching and learning with technology. Students will develop a variety of technology-based teaching and learning resources to support face-to-face, blended and on line learning environments.

LLTC 324: Librarian's Role in Reading Strategies

This course is an introduction to the school librarian's role in ensuring students' reading success. The roles include the selection of materials that address the diverse needs of the learners including English as Second Language Learners,

identification of resource materials that serve as tools for interactive think-alouds, and reinforcement of reading strategies within the information literacy curriculum.

LLTC 330: Makerspaces and Technology Enhanced Programming

This course explores the evolution of the Makerspace movement as it applies to STEM and STEAM education. Students will investigate and actively engage in the facility, tools, resources, and technology as components that translate into creative project-based learning.

LLTC 340: Management of Information and Technology Centers

This course provides an overview of management theory, policy and practice with an emphasis on the role of the librarian or technology coordinator as manager in library, school, academic and independent information center settings.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

LLTC 342: Public Librarianship

This course exposes students to the organization and operation of the public library. This includes administrative and financial control, governmental relationships, personnel management, administration of services, standards, buildings and equipment, library extension services, current and emerging technologies, resource sharing, fundraising, and public relations.

LLTC 345: Problem-Based Learning Through Instructional Technology

The goal of this course is to prepare education students to effectively integrate instructional technologies into the K-12 curriculum. Students will construct a theoretical foundation and rationale for integrating instructional technologies. Integration models and successful teaching strategies will be examined.

LLTC 347: Selected Topics

Topics that are of current interest in the field of librarianship will be selected for in-depth study. Course content will change each time the course is offered. The course may be repeated once for credit. (Permission of the instructor.)

LLTC 350: Collecting and Curating Print and Digital Collections

This course provides an overview of the processes, policies, and procedures associated with developing, evaluating, and utilizing a library collection. Emphasis is placed on the development of a working philosophy which recognizes the interrelationships of principles, policy, and management. The basic techniques and materials used by librarians to provide reference and readers' advisory services in a library will be introduced.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

LLTC 360: Organization of Information, Metadata and Library Technologies

Through the use of an Integrated Library System (ILS) students will learn the essential components of library management functions using the technology of circulation, cataloging and classification, and use of necessary reports. Students will learn how to create metadata to apply to online cataloging and classification as it pertains to various and emerging text and digital resources. With the focus on the librarian's role as a technology leader this course is also an overview and evaluation of current and emerging technologies for libraries.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

LLTC 364: Preservation, Digitization, and Archiving

This course introduces current theory and practice in the areas of preservation and digitization of library materials. Primary topics are: environmental standards for archival areas; storing, organizing and cataloging special collections; repair and stabilization or paper-based items; digitization of unique materials; metadata standards; and online exhibition of images.

LLTC 365: Emerging Technologies for Educators

Students will explore a variety of emerging Internet options suitable for use in the classroom and library settings. Students will discuss the history, theory, communication facilities, and educational activity structures relevant to the process within a standards based educational setting. The Internet will be the primary resource examined.

LLTC 370: Educational Program of the Library

This course is designed to focus on the curriculum-related responsibilities of the library program. Emphasis is placed on information and digital literacy instruction and curriculum support services. The role of the librarian as teacher, technology leader, collaborator, and program administrator in the contemporary school, public, and academic library program is investigated.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

LLTC 380: Independent Study

Independent Study is based on a student's pursuit of a subject in Library Science not covered within a regularly offered undergraduate course in Library Science. Undergraduate students may schedule this course for one to three credits in a single semester, with no more than six credits for Independent Study overall. Permission of the faculty of the Library Science Department is required.

LLTC 385: Digital Portfolios

The goal of this course is to prepare and present an electronic professional portfolio that demonstrates the students' accomplishments in the graduate program. This is a culminating course for the program. The role of portfolios, standards, and reflection in education will be examined, as well as the types and components of portfolios. Students will investigate technologies that enhance electronic portfolios.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

LLTC 390: Internship

This course is designed to provide experience in the practical application of library and information center routines and procedure under the supervision of a qualified professional. The student is required to spend 40 hours per credit in a library or information center under the direction of a qualified professional. This course can be taken for 1-9 credits and is repeatable up to a total of 9 credits.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

LLTC 395: Honors Independent Study/Thesis

Honors Independent Study/Thesis.

LLTC 398: Clinical Experience and Practicum I

The clinical field experience provides the prospective school librarian the opportunity to observe and participate in the school library program under the guidance of a certified school librarian. This experience is designed in two phases (I and II within one semester). Candidates are scheduled in both elementary and secondary school libraries during these phases. Concurrent with each phase is a practicum which provides for an exchange of ideas, information, and assistance from their peers and the supervising teacher. Admission to this course is limited to those candidates who have completed the necessary program requirements. These requirements have provided the candidate with knowledge base domains in liberal education, teaching specialty knowledge, and professional education knowledge. (6 s.h., 3 c.h.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

LLTC 399: Clinical Experience and Practicum II

The clinical field experience provides the prospective school librarian the opportunity to observe and participate in the school library program under the guidance of a certified school librarian. This experience is designed in two phases (I and II within one semester). Candidates are scheduled in both elementary and secondary school libraries during these phases. Concurrent with each phase is a practicum which provides for an exchange of ideas, information, and assistance from their peers and the supervising teacher. Admission to this course is limited to those candidates who have completed the necessary program requirements. These requirements have provided the candidate with knowledge base domains in liberal education, teaching specialty knowledge, and professional education knowledge. (6 s.h., 3 c.h.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

Mathematics

MATH 3: Intermediate Algebra

The topics include a review of the real number system, linear equations and applications, linear inequalities and absolute value, graphs and functions, exponents, polynomial functions, factoring, rational functions, root functions, exponential and logarithmic functions. Students who have previously received credit for a higher-numbered mathematics course may not receive credit for this course without permission of the instructor. This course does not fulfill the mathematics requirement in general education but may be used as a free elective.

MATH 17: Introduction to Mathematics

The goal of this General Education introductory-level course is to acquaint the student with the nature and spirit of mathematics -terminology, fundamental principles, generalizations, and their application to problem solving -through study of a broad spectrum of topics. The underlying thrust of the course will be to bolster the students' analytical and critical thinking skills, and to develop the ability to effectively communicate the rationale behind this thinking. Areas of coverage will include Problem Solving Strategies and Techniques, Set Theory, and at least three additional appropriate areas of Mathematical Inquiry. Applications of the mathematical concepts and techniques taught in this course will also be illustrated. This course cannot be used by mathematics majors to fulfill mathematics major program requirements.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MATH 40: Geometry

An informal, intuitive study of topics in geometry. Non-metric geometry of the plane and space; measurement; error in measuring; simple closed curves; area; congruence; similarity; graphing in the plane and space; modern geometries; groups of geometric transformations. Open to all majors.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MATH 45: Women In Mathematics

This course examines women and minorities who have made significant contributions to the field of mathematics. Both their lives and their work will be explored as well as gender and multicultural issues surrounding their endeavors. Furthermore, mathematical topics related to their contributions will be discussed.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MATH 89: The Art of Mathematics

This General Education introductory-level course will examine mathematics as art. The work of both historical and contemporary mathematicians will be studied with a focus on their content and form as well as those who influenced their mathematical work. Mathematical topics related to their contributions will be discussed with an emphasis on developing an appreciation of the beauty of mathematics. This course cannot be used by mathematics majors to fulfill mathematics major program requirements.

MATH 103: Fundamentals of Mathematics I

This is the first course in a two-course sequence that is required for all Elementary Education and Special Education majors. It is restricted to only Education majors or permission of the department. Topics include problem solving; logic; set theory; mathematical systems; systems of numeration; number theory; equations and inequalities; and properties of whole numbers, integers, rational numbers, and real numbers. A calculator is required for this course. This course cannot be used by mathematics majors to fulfill mathematics major program requirements.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MATH 104: Fundamentals of Mathematics II

This is the second course in a two-course sequence that is required for all Elementary Education and Special Education majors. It is restricted to only Education majors or permission of the department. Topics include informal geometry; measurement; probability; statistics; and computer applications. A calculator is required. This course cannot be used by mathematics majors to fulfill mathematics major program requirements.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MATH 105: College Algebra

Topics include properties of the real numbers, problem-solving using equations and inequalities, algebraic functions, graphing, and systems of equations. A graphing calculator is required for this course. This course cannot be used by mathematics majors to fulfill mathematics major program requirements. This course is designed for students who have two years of high school algebra.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MATH 106: Trigonometry

This course is intended for students with an elementary knowledge of algebra who need more work in trigonometric topics before taking more advanced mathematics courses. Topics include properties of and operations with functions, inverse functions, exponential and logarithmic functions, angle measurement, trigonometric functions and their inverses, graphing functions, and problem solving with equations that use the functions covered in the course. This course cannot be used by mathematics majors to fulfill mathematics major program requirements. This course is designed for students who have completed MATH 105-College Algebra or have a minimum Math SAT score of 500. A graphing calculator is required for this course.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MATH 115: Precalculus Mathematics

This course is designed to give students a thorough review of the mathematics background needed for calculus courses. The course covers all the topics listed in the descriptions of MATH 105 and MATH 106. A graphing calculator is required for this course.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MATH 121: Mathematics for Business and Information Science

This course focuses on the application of mathematical concepts and methods to problems that arise for students who major in Business or Computer Science. The topics include systems of linear equations, matrix algebra, linear programming with graphical and simplex method solutions, mathematics of finance, set theory and probability. This course cannot be used by mathematics majors to fulfill mathematics major program requirements. This course is designed for students who have completed MATH 105-College Algebra or have completed a minimum of two years of high school algebra. A graphing calculator is required for this course.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MATH 122: Applied Calculus

This course focuses on the application of concepts and methods of calculus to problems that arise for students who major in Business or Computer Science. The topics include functions and models; differential and integral calculus; applying derivatives, differentials, and integrals to problem-solving; and applied optimization. This course cannot be used by mathematics majors to fulfill mathematics major program requirements. A graphing calculator is required for this course.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MATH 123: Discrete Mathematics

This general Education course is an introduction to discrete mathematics, a branch of mathematics that solves problems such as finding the probability of being dealt a straight flush in 5-card poker, protecting financial information from hackers, and enabling error-free communication with astronauts in space. Course material is drawn from areas of mathematics such as number theory, combinatorics, probability, and abstract algebra. This course serves students who are interested in introductory mathematics that is not in the same vein as precalculus and calculus.

MATH 140: Applied Statistical Methods

This course is an introduction to quantitative methods as applied to statistical reporting and data analysis. It will incorporate some or all of the following: Techniques for obtaining, analyzing and presenting data in numerical form; measures of central tendency and dispersion; the normal distribution curve; standard scores; applicability of probability and sampling theory to statistical research; interpretation of confidence intervals; hypothesis testing; correlation; linear regression. Students cannot receive credit for both MATH 140 and MATH 150. This course cannot be used by mathematics majors to fulfill mathematics major program requirements. This course is designed for students who have completed MATH 105-College Algebra or have completed a minimum of two years of high school algebra. A graphing calculator is required for this course.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MATH 150: Introduction to Biostatistics

This course in an introduction to the study of Biostatistics intended for students of the life science disciplines. It is an overview of the statistical methods for obtaining, analyzing and presenting data in numerical form that are most often used in the area of life sciences. A problem-based approach using real data in various life science fields will be used to illustrate various statistical procedures as well as basics of elementary applied statistics. Students cannot receive credit for both MATH 140 and MATH 150. This course cannot be used by mathematics majors to fulfill mathematics major program requirements. This course is designed for students who have completed MATH 105-College Algebra or have completed a minimum of two years of high school algebra. A graphing calculator is required for this course.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MATH 175: Mathematical Investigations

This course is applicable in the Honors Program and is open to any student in the honors program as well as to any student having completed at least 15 s.h. of study at Kutztown University with a grade point average of 3.00 or greater. This course, divided into three to five segments, provides for study of concepts, procedures and applications in several mathematical disciplines. Topics studied will be drawn from the following areas: mathematical thought processes, history of mathematics, mathematics of finance, statistics, operations research, number theory, graphs as mathematical models, and finite geometries. This course cannot be taken for credit by mathematics majors in Secondary Education or the College of Liberal Arts and Sciences. Credit for the course can be applied in Categories IV or V in General Education.

MATH 181: Calculus I

This course is one of a series intended for students who major in mathematics, the sciences, or engineering. The topics include

the definition and calculation of limits, continuity and differentiability, differentials, derivatives of algebraic and transcendental functions, the application of derivatives to graphing, antiderivatives, and the introduction of the definite integral, applications of definite integrals; and some techniques of integration. A graphing calculator and use of a Computer Algebra System are required for this course. At least two years of high school algebra and/or trigonometry is strongly recommended.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MATH 182: Calculus II

This course is one of a series intended for students who major in mathematics, the sciences, or engineering. The topics include the definition, properties, and applications of definite integrals, properties, derivatives, and integrals of exponential, logarithmic, trigonometric, inverse trigonometric, and hyperbolic functions with applications; techniques of integration; indeterminate forms and improper integrals; sequences, series, and convergence tests; differentiation and integration of power series; and polar integrals. A graphing calculator and use of a Computer Algebra System are required for this course.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MATH 190: Introductory Directed Reading in Mathematics

This course involves individual independent study in mathematics under the direction of a mathematics faculty member. This study can be carried out in any area of mathematics or its application that is not a topic covered in depth in any regular mathematics course offering at the University. The student works with a faculty tutor who advises the student in choice of material. The student meets with the advisor frequently to discuss the topic studied. This course may be repeated for a total of up to 2 credits cumulative and for a total of up to 6 credits cumulative combined with credits from MATH 290, 390, and MATH 490.

MATH 210: Mathematical Computing and Typesetting

This course is an introduction to mathematical computing and typesetting. Topics will include the syntax and programming interface of a computer algebra system that is commonly used in mathematics, methods to solve mathematical problems, and document preparation in the typesetting language LaTeX. The computer algebra system will be used to solve problems drawn from algebra, calculus, differential equations, probability, statistics, discrete mathematics, and modeling. Problems may involve root-finding, solving equations, splines, graphics, power series, numerical integration, numerical approximations of solutions of differential equations, mathematical modeling, data analysis and curve fitting, cryptography, graph theory, number theoretic computations, and possibly others depending on the interests of the students and instructor. Results from the projects will be typeset in LaTeX.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MATH 220: History of Mathematics

This course explores the development of mathematics over a period of four millennia--from the time of ancient civilizations to the present. It studies how diverse cultures from almost all parts of the world-Babylonia and Egypt, Greece, China, India, The Middle East, Europe and later the Americas, have contributed to the growth of the discipline of mathematics. This course addresses mathematical methods that were used and contributions that were made by specific mathematicians and cultures. The diverse perspectives at different periods of history that contributed to, and at times hindered, the growth of mathematics are studied.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MATH 224: Foundations of Higher Mathematics

This course is designed to prepare the student for the study of advanced mathematics. Topics include fundamentals of logic, proof strategies, the algebra of sets; relations, including equivalence relations; functions and their properties; countable sets and counting techniques; ordered and well-ordered sets. This course should be taken only after the student has taken at least two college-level mathematics courses.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MATH 240: Synthetic Geometry

This course is designed for students who have, in addition to an interest in geometry, some previous experience in this subject area, either on the high school or college level. Topics include Euclidean geometry using Hilbert's axioms; neutral geometry; the historical development of non-Euclidean geometries; and hyperbolic geometry.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MATH 250: Applied Regression Analysis

This course presents the fundamental knowledge of linear regression analysis with real world applications. The course will include simple linear regression, multiple linear regression, one-way ANOVA, two-way ANOVA, simple logistics regression, multiple logistic regression, and time-series. It will also include additional topics from each category including, but not limited to, variable selection, model comparison, generalized linear model, and experimental design. Statistical packages will be used for data analysis.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MATH 260: Linear Algebra I

This course gives the student an opportunity to make an in-depth investigation of a specialized area of mathematics which has wide-spread practical applications in the arts and sciences but still allows work with abstract concepts. Topics include a study of the properties of vector spaces; matrix theory with applications using systems of equations and determinants; linear transformations and invariants under such mappings. Students will be required to use appropriate computer software.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MATH 270: Biostatistics

This course focuses on enhancing students' abilities in problem solving in statistics with a concentration on applications to biology. The course is a calculus-based course in biostatistics emphasizing methods for collecting, graphing, examining, and interpreting data. The course provides both the theoretical framework and the analytical tools for performing data analysis. Special emphasis will be placed upon using available statistical methods for both exploratory and confirmatory data analysis. Topics include discrete and continuous random variables, mean and variance, hypothesis testing and confidence limits, nonparametric methods, Student's t-test, analysis of variance, correlation, and ordinary least squares. It may include a subset of further topics which may include, but not be limited to, contingency table analysis, random effects models, mixed models, regression, sensitivity and specificity.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MATH 280: Cooperative Internship in Mathematics

The internship consists of 6 to 12 weeks of full-time employment that provides students with a supervised industrial experience in mathematics. The internship is supervised by a member of the Mathematics and Computer Science Department. This internship is available only to Mathematics majors, and is taken on a pass/fail basis. (3 - 6 s.h.)

MATH 283: Calculus III

This course is one of a series intended for students who major in mathematics, the sciences, or engineering. The topics include vectors in two and three dimensions; operations on vectors; limits, derivatives and integrals of vector functions; three-dimensional surfaces; the definition, properties, and partial differentiation of functions in more than on variable with applications; finding the extrema of functions in two variables; Lagrange multipliers; multipliers; multiple integrals in various

coordinate systems; Jacobians; line integrals in vector fields; and the application of Green's Theorem, The Divergence Theorem, and Stokes' Theorem. A graphing calculator and use of a Computer Algebra System are required for this course.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MATH 290: Intermediate Directed Reading in Mathematics

This course involves individual independent study in mathematics under the direction of a mathematics faculty member. This study can be carried out in any area of mathematics or its application that is not a topic covered in depth in any regular mathematics course offering at the University. The student works with a faculty tutor who advises the student in choice of material. This course may be repeated for a total of up to 2 credits cumulative and for a total of up to 6 credits cumulative combined with credits from MATH 190, 390, and 490.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MATH 300: Problem Solving in Mathematics

This course focuses on enhancing students' abilities in problem solving in mathematics and presenting their ideas effectively through writing down logical proofs in a precise and concise manner. This course will discuss problems coming from a broad range of topics, including but not limited to, precalculus, calculus, analysis, and linear algebra. This course is designed for students with a strong desire to solve challenging mathematical problems.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MATH 301: Probability and Statistics I

Elementary probability spaces; conditional probability; general probability spaces; random variables; expectation; variance; multivariant distributions; the algebra of expectation.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MATH 302: Probability and Statistics II

Probability distributions; sampling; estimation of parameters; Central Limit Theorem; confidence intervals; correlation and regression; sampling from a normal population; testing hypotheses; Markov chains. Students will be required to use appropriate computer software.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MATH 304: Statistical Programming

This course is meant to provide in depth exposure to statistical programming, while focusing on modern statistical practices employed in the data science field. An introduction to programming in the desired software package will take place followed by hands-on experience in implementing modern statistical principles on real world datasets. The course will conclude with simulation and data management.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MATH 305: Mathematics Of Finance

This course is an introduction to mathematics of finance. The main topics include measurement of interest, time value of money, annuities, amortization and sinking funds, bonds, capitalized cost, net present value, yield rates, yield curves, duration, immunization. A financial calculator (BA II Plus or BA II Plus Professional preferred) is required for this course.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MATH 306: Mathematics of Finance II

This is an introduction to financial mathematics and is a continuation course of Financial Mathematics I. The main topics include bonds, capitalized cost, net present value, yield rates, yield curves, duration, immunization, derivative products including calls, puts, forwards, and swaps. A financial calculator is required for this course.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MATH 311: Abstract Algebra I

Sets, relations, and functions; groups; rings; integral domains; fields; elementary theory of groups.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MATH 312: Abstract Algebra II

Extension of Abstract Algebra I topics; permutation groups; normal sub-groups and quotient groups; rings and ideals; ring homomorphisms; quotient rings, integral domains and their fields of quotients; fields; polynomial rings.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MATH 321: Combinatorics

This is an introductory course in combinatorics. Topics include introductory and advanced counting techniques, graph theory, and selected topics chosen from recurrence relations, generating functions and integer partitions, and extremal combinatorics.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MATH 325: Applied Time Series Analysis

This course presents the fundamental knowledge of time series analysis for both theory and applications. Topics include exploratory data analysis tools, methods for detrending, and seasonal adjustment of data, smoothing techniques such as exponential smoothing, modeling and forecasting based on the ARIMA models. Examples will be drawn from a variety of disciplines including business, finance, economics, and biology. Statistical packages will be used for data analysis.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MATH 327: Design and Analysis of Experiments

This course presents proper design and analysis of experiments, including completely randomized designs, designs with factorial treatment structure, random and mixed effects, complete and incomplete blocked designs, Latin Squares, confounding, split plots, fractional factorials, and response surfaces. Examples from a broad range of subject areas will be presented.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MATH 330: Theory Of Numbers

This is an introductory course in number theory. The topics covered begin with divisibility and factorization, the Fundamental Theorem of Arithmetic, prime numbers, greatest common divisor, and least common multiples. The course continues with congruences and arithmetic functions. The remainder of the course introduces one or more advanced topics such as quadratic residues, primitive roots, Diophantine equations, continued fractions, and cryptography.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MATH 332: Numerical Analysis

Numerical methods fundamental to scientific computing are developed. Topics include finite difference calculus; zeros of a function; matrix computations; solutions to systems of linear equations; approximation by polynomials; numerical differentiation and integration; numerical solutions of ordinary differential equations; rounding errors and other types of errors. Selected algorithms will be run on the computer. Students will be required to use appropriate computer software.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MATH 337: Introduction to Cryptography

The course is an introduction to cryptography, the study of securing communication and information. This course will cover the mathematical, algorithmic, and historical aspects of classical and modern cryptography. We will also introduce students to personal encryption software as well as programming libraries and computer algebra systems that allow one to perform large computations necessary for cryptographic applications. Topics will include classical and modern symmetric ciphers, public-key cryptography (e.g. RSA), various cryptographic protocols, and any other topics of interest to the instructor and students. All necessary theoretical background will be reviewed, but some background in number theory, abstract algebra, probability, or computer science will be expected.

MATH 340: Differential Equations

In this course students will develop an understanding of the basic theory, applications and connections of linear algebra and differential equations. Topics include: first, second, and higher order ordinary differential equations; methods of solutions include exact, substitution reduction, undetermined coefficients, variation of parameters, power series solutions, the Laplace Transform, and system of linear differential equations. Consideration is given to applications to the physical and natural sciences. Students will be required to use appropriate computer software.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MATH 347: Introduction to Dynamical Systems

This course is meant to provide an introduction to nonlinear dynamics and chaos theory. An emphasis will be placed on qualitative analysis for both continuous and discrete dynamical systems. Key concepts will include fixed/ equilibrium points and periodic solutions, linear stability analysis and asymptotic behavior, bifurcation analysis for parameterized families, and existence of periodic orbits. The latter part of the course will focus on chaos theory with topics including period-doubling bifurcations, strange attractors, and Lyapunov exponents. Classic and real-world models will be stressed. Throughout the course, programming in scientific computing software (e.g. MATLAB) will be introduced and reinforced.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MATH 351: Real Analysis I

Introduction to the structure of the real number system and its topology; metric space and its topology; basic theorems of real analysis; differentiable functions.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MATH 352: Real Analysis II

Introduction to the theory of Reimann-Stieltjes integration; functions of bounded variation; Lebesgue measure and Lebesgue integrals; uniform convergence of sequences and series of functions.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MATH 361: Mathematical Methods in Operations Research I

Operations Research uses quantitative methods to determine the best decision for an operating system. A mathematical

approach to studying methods as applied to the decision process in industry is taken. The methods studied are selected from among: linear programming; game theory; graph theory and network analysis. Students will be required to use appropriate computer software.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MATH 362: Mathematical Methods in Operations Research II

Operations Research uses quantitative methods to determine the best decision for an operating system. A mathematical approach to studying methods as applied to the decision process in industry is taken. The methods studied are selected from among: linear programming; game theory; integer programming; graph theory and network analysis; nonlinear programming; and metaheuristics. Students will be required to use appropriate computer software.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MATH 369: Introduction to Graph Theory

This course is an introduction to the theory of graphs. The main topics include definitions and examples of graphs and subgraphs, trees, connectivity, Euler tours and Hamilton cycles, matchings, edge and vertex colorings, planar graphs, directed graphs, networks, and its applications.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MATH 370: Selected Topics in Mathematics

This is a seminar in advanced topics of mathematics. Content will vary dependent upon interest of instructor and students, and the course may be repeated once for additional credit.

MATH 372: Independent Study and/or Projects in Mathematics

This course involves individual or small group independent study in mathematics under the direction of a mathematics staff member. This study can be carried out in any area of mathematics or its application. A student may register for this course more than once up to a maximum of six semester hours of credit.

MATH 380: Senior Seminar in Mathematics

Readings and discussions in areas of student interest and background. The student reviews and structures the mathematics he/she has learned and also explores mathematical topics not covered in the usual course offerings. The comprehensive examination for Arts and Sciences Mathematics majors is given in conjunction with this course. Required of all arts and sciences mathematics majors.

MATH 390: Directed Reading and Research in Mathematics

This course involves individual independent study in mathematics under the direction of a mathematics faculty member. This study can be carried out in any area of mathematics or its application that is not a topic covered in depth in any regular mathematics course offering at the University. The student works with a faculty tutor who advises the student in choice of material. This course may be repeated for a total of up to 4 credits cumulative and for a total of up to 6 credits cumulative combined with credits from MATH 190, 290, and 490.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MATH 395: Honors Independent Study/Thesis

Honors Independent Study/Thesis.

MATH 400: Complex Variables

This is an introductory course in Complex Analysis. Topics include properties of complex numbers, analytic functions,

mappings, contour integrals, Cauchy's residue theorem, and the geometric properties of complex functions.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MATH 403: Analysis of Data Sets

This course continues the development of the concepts and procedures of MATH 230 or both MATH 301 and MATH 302 with an emphasis on practical applications to science, business, and industry. A review of basic statistical concepts, regression analysis, categorical data analysis, analysis of variance, and nonparametric statistics will be presented. Up-to-date examples using computer statistical packages will be used. The student is expected to apply the above techniques to real-world problems. Students will be required to use appropriate computer software.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MATH 431: Topology I

Set theory; functions; metric spaces; basic topological concepts; topologies and neighborhood systems; open and closed sets; accumulation points and closures; bases and subbases for a topology; separation and connectedness; nets; continuity and homeo-morphisms; compactness; product and quotient spaces.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MATH 451: Introduction To Fractals

Through hands-on activities, computer experiments, visual readings, discussions, and lectures, this course will examine the concepts of iteration, fractals, and chaos, as well as the history and people involved in this fascinating field. The course will begin by looking at the basic concept of iteration: repeatedly applying some specified operation. Iteration leads naturally to, among other things, the geometric representation of a fractal, self-similarity, fractal dimension, and the notion of mathematical chaos. Students will learn concepts from classical mathematics and ways in which these concepts can be applied to model and explain real-world scenarios. Additionally they will be shown that mathematics is a current, active, useful, and dynamic field of study.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MATH 460: Linear Algebra II

This course is a study of advanced topics in Linear Algebra. Topics include: review of the properties of vector spaces; study of inner product spaces; factorization of a matrix in QR, diagonalized, and singular value decomposition forms; eigenvalues and eigenvectors of matrices with applications to solving differential equations; positive definite matrices and their applications; and numerical linear algebra.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MATH 470: Selected Topics In Mathematics

This course is designed to provide mathematics students an in-depth study of a topic in mathematics that is not normally covered in the curriculum. May be repeated with different topics.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MATH 473: Partial Differential Equations

Equations of first order, Hamilton-Jacobi theory; the Cauchy Problem; the Dirichlet and Newman problems, Existence Theorems;

Green's Functions; Equations of mathematical physics; integral equations.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MATH 490: Advanced Directed Reading and Research in Mathematics

This course involves individual independent study in mathematics under the direction of a mathematics faculty member. This study can be carried out in any area of mathematics or its application that is not a topic covered in depth in any regular mathematics course offering at the University. The student works with a faculty tutor who advises the student in choice of material. This course may be repeated for a total of up to six semester hours and for a total of up to 6 credits cumulative combined with credits from MATH 190, 290, and 390.

Multicultural Studies

MCST 10: Introduction to Multicultural Studies

This course is an introduction to the perspectives, histories and contemporary issues of diverse cultures in the United States as presented from the voices of those within the cultures. An interdisciplinary approach is used to examine various groups' struggles, traditions, and aesthetics. The course gives a foundation for further study in history, literature, sociology, music, art, business, and education.

MCST 370: Selected Research Topics in Multicultural Studies

This course is designed to allow students to do independent research under the direction of a faculty member. The topic must be accepted by the faculty member with whom the student will work. (Offered for 3 s.h. or 6 s.h.)

MCST 380: Seminar in Multicultural Studies

This is an important culminating activity which provides for the integration of the students' studies from their major program with the minor area concentration (multicultural studies). Students will complete a research project in their areas of interest and experience as evidenced by the courses selected to fulfill the basic requirements for the minor in Multicultural Studies. Students will have the opportunity to discuss their research in class as well as to explore timely issues in multicultural studies. Students will be encouraged to present their research at conferences and colloquia.

MCST 390: Internship in Multicultural Studies

Students with a minor in Multicultural Studies are provided with an opportunity to apply skills and knowledge gained in the minor on a supervised work experience in an agency that addresses issues in this field.

Medical Technology

MEDT 320: Clinical Microbiology

Identification and clinical pathology of bacteria, fungi, viruses and parasites. Techniques to isolate, stain, culture and determine antimicrobial susceptibility. Instrumentation; quality control.

MEDT 330: Clinical Chemistry

Enzymology, endocrinology, biochemistry of lipids, carbohydrates and proteins, metabolism of nitrogenous end products, physiology and metabolism of fluids and electrolytes, and toxicology as related to the body and diseases. The technical procedures include colorimetry, spectro-photometry, electrophoresis, chromatography, automation and quality control.

MEDT 340: Clinical Hematology/Coagulation

The composition and function of blood; diseases related to blood disorders; the role of platelets and coagulation. Manual and automated techniques of diagnostic tests for abnormalities.

MEDT 350: Clinical Immunohematology

Blood antigens, antibodies, cross-matching, hemolytic diseases, and related diagnostic tests. An in-depth study of blood donor service and its many facets such as transfusions, medico-legal aspects, etc.

MEDT 360: Clinical Immunology/Serology

Immune response, immunoglobulins, autoimmunity and complement and related tests and diseases. Survey and demonstration of serological diagnostic tests.

MEDT 370: Clinical Seminar

Other courses which are not included in the above (such as orientation, laboratory management, education, clinical microscopy) and/or are unique to the individual hospital program.

MEDT 395: Honors Independent Study/Thesis

Honors Independent Study/Thesis.

Management

MGMT 210: Principles of Management

Management 210 is an introduction to the field of management, giving a basic understanding of the processes of working with people and resources to accomplish organizational goals. In today's business world, organizational leaders adapt to change, apply the fundamental management principles of planning, organizing, leading, staffing and controlling. This course explores the nature and application of these fundamental principles in the present environment of globalization, technological change, and increased competitiveness.

MGMT 315: Management Science

This course presents various quantitative techniques and models which are being utilized in today's modern business organizations. Coverage areas include model formulation, Markov theory, PERT/cost networks, linear programming (simplex method), the transportation model, and inventory control. It will employ test and case situations to provide the student with decision making experience as well as exposure to concepts necessary for successful management in the present complex and dynamic business environment.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MGMT 318: Gender and Diversity in Organizations

The purpose of this class is to introduce students to theoretical and practical ideas about managing gender and diversity issues in organizations. The course covers gender-and diversity-based perceptions, stereotyping and prejudice, diversity in teams, and practices for successful recruitment, staffing, leadership, and organizational culture.

MGMT 327: Small Business Management

A study of the rewards and problems experienced in starting and operating a small business. Emphasis is placed on those aspects of management, marketing, accounting, and finance that are uniquely important to small firms.

MGMT 328: Entrepreneurship: From Concept to Launch

This course examines entrepreneurship by focusing on the unique challenges associated with a new venture. This course will

emphasize entrepreneurship as a process that includes a well thought out business plan and planned growth. Attention is given to the characteristics of entrepreneurs, the identification and evaluation of new venture opportunities, business concept and entry strategies, the role of marketing, personal selling and finance in the new business, business plan development, implementation, and launching a new business. An emphasis of this course involves contact with successful, practicing entrepreneurs and touring best-practices businesses.

MGMT 330: Employment Law

This course focuses upon contemporary issues in U.S. employment law. Students will study and analyze major employment laws, regulations, and legal doctrines affecting the workplace including: the employment relationship, equal employment opportunity, discrimination, sexual harassment, wage and hour laws, family and medical leave, safety and health regulations, employee privacy and surveillance protections, labor laws, and employer termination and post-termination responsibilities.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MGMT 335: Human Resource Management

Human resource management (HRM) involves the development and maintenance of an effective workforce in an organization. Students will consider the legal framework affecting various HRM functional areas such as human resource planning, human resource development, performance management, compensation, and employee relations.

MGMT 337: Management of Labor Relations

Emphasis is placed upon the identification and analysis of the mechanics of the relationship between labor and management. The theory and environmental factors that affect the quality and content of union management relations will also be studied. Students study the history, legal and institutional framework, strike tactics, and contract administration process as they apply to management options.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MGMT 338: Managing Compensation

This course will examine the design and delivery of compensation practices to attract, motivate, retain and reward employee performance. Topics include employee engagement and the strategic use of compensation to meet the organizational missions. Topics include total compensation strategy, compensation systems, pay structure, job evaluations, intrinsic and extrinsic rewards, perceived equitable payments, employee satisfaction, employee benefits and employee incentive programs.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MGMT 340: Talent Acquisition and Development

This course will examine how to effectively recruit, select, develop and retain employees in an increasingly challenging diverse labor market. The course will explain the costs of ineffective recruiting strategies, poor selection decisions, and how weak development and feedback strategies/programs lead to expensive turnover of top, critical talent. The focus of the course will be on creating recruiting, selection, training and development as well as performance management strategies and programs based on sound best practices targeted at the needs of the organization(s) and the expectations of a changing workforce.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MGMT 345: Organizational Theory and Design

An examination of intraorganizational patterns, processes and structures. The class focuses on how an organization's environment and technology interact with its structure and processes (such as decision making, power and politics, and organizational culture) to impact its performance. This course surveys concepts, theories and techniques that aid in analyzing this complex relationship.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MGMT 350: Organizational Behavior in Management

This course examines the interaction and interdependence between the formal organization and its members, emphasizing how human behavior and organizational processes can be integrated to achieve organizational effectiveness. The course draws on research in management and from psychology, sociology, and anthropology, to explore individual, interpersonal, group and organizational issues.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MGMT 351: Operations Management

This course is designed as an introduction to the operation problems of a business organization with emphasis on the decision making function of the manager. This course takes an analytical approach to important operational issues, including forecasting, capacity planning and allocation of resources (linear programming), quality control, inventory management, scheduling and project management.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MGMT 352: International Management

This course presents an analysis of the unique managerial problems encountered by international, multinational and global business enterprises. Emphasis is placed on the economic, technological, socio-cultural and political aspects of multinational operations and their effects on the managerial objectives, processes and strategic decision-making.

MGMT 360: Business and Social Environment

A study of the environmental factors that interface business decision-making in contemporary society. A conceptual framework is developed to analyze and integrate the social, governmental, and economic issues that impact on the business community. Cases form an integral part of the course.

MGMT 361: Principles of Business Logistics

This course gives students knowledge of logistics principles and functions and enables them to apply this knowledge in enterprises and organizations of all types. It surveys all the fundamental elements of the supply chain and provides a framework for analysis and understanding of logistics systems. It addresses organization and functions of the elements of the supply chain, processes within the supply chain, and strategic issues, including globalization of supply chains.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MGMT 362: Supply Chain Analytics

This course presents various analytical approaches that are often utilized by businesses to design, manage, and improve their supply chains. The optimization techniques such as linear programming (LP), integer programming (IP), mixed integer programming (MIP), and nonlinear programming are discussed in the course. The course focuses on the process of creation of analytical models and solution techniques (algorithms) in the context of supply chain management. The use of Queuing theory and simulation approaches are also explored in the course. Students use a variety of software (Spreadsheet, etc.) and algorithms for modeling and problem solving.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MGMT 363: Global Transportation Management

Global Transportation Management is a course of current concepts, theory and issues in the global supply chain context. This course is a study of the systems used to move goods and people and their role in business and the global economy. It

addresses the economic and operational characteristics of the domestic and international transportation modes, intermodal operations, transportation prices and rate theory, the management of for hire and private transportation resources, the procurement of transportation -services, and regulatory and public policy issues.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MGMT 365: Sustainability in Supply Chain

This course provides an understanding of sustainability issues and opportunities that companies face today. It also delivers a set of tools and skills to identify. evaluate, and improve the sustainability of supply chain operations. It enables students to understand core sustainability concepts of industrial and commercial activities, in this way they will be able to design sustainable supply chain management practices. The course addresses the value of sustainability in supply chain management as a new source of competitive advantage for the firm.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MGMT 371: Selected Topics in Management

This course will permit the exploration of specialized subjects that are not covered in the regular management classes. The course will emphasize a variety of current topics and contemporary issues in management which are taking place in a dynamic business environment. Students will review current literature, observe current management practices and improve their ability to analyze and express their thoughts in the area.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MGMT 380: Senior Seminar in Management

This course is designed to be taken late in the student's degree program. Students will develop career strategies necessary to enter the modern workforce, use current management decision making techniques to solve current business problems, develop an expertise in teamwork, and explore current issues in management.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MGMT 395: Honors Independent Study/Thesis

Honors Independent Study/Thesis.

MGMT 399: Business Strategy and Policy

This is the capstone course for all Business majors. Concepts and skills developed in the prerequisite courses are integrated and applied to the overall management of an organization. This course is also a study of the determination and implementation of strategies by top management. Emphasis is placed on the integration of corporate, international, business unit, and functional areas strategies of modern business organizations. Topics will include setting objectives, designing strategic plans, allocating resources, organizational structuring and controlling performance.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

Marketing

MKTG 210: Principles of Marketing

Principles of Marketing is a broad study of the field of marketing as seen from a managerial perspective. Emphasis is on demand analysis, customer need satisfaction, product planning and development, distribution selection, promotional decision making, price determination and social responsibility.

MKTG 312: Consumer Behavior

This course is a study of the processes of planning, purchasing and the consumption of goods and services by consumers. The course examines the links between behavioral concepts, marketing strategy and consumer decision making. The influences culture, subculture, group dynamics and intra-personal on decision-making will be emphasized. The focus of the course is the application of consumer behavior to the elements of strategic marketing - including market segmentation, product positioning, product development, marketing communications, distribution and pricing. Social and ethical considerations of marketing responsibility to consumers will also be addressed.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MKTG 315: Marketing Ethics in Society

This course will explore the fundamental concepts and practical applications of marketing ethics. The global ethical environment of market exchanges has remained a constant issue in terms of both strategic and short-range marketing activities. In addition, ethical standards and institutional relations will be assessed from the perspective of various social science elements including: culture, religion, society, ethnic distinction, socio-economic factors, and language.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MKTG 320: Marketing Management

This course emphasizes managerial decision-making and problem-solving in the areas of channels distribution, integrated marketing communication, product, and pricing. Focus is on the concepts and techniques organizations and businesses employ to anticipate and satisfy customer needs and wants.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MKTG 330: Personal Selling and Sales Management

The course provides an introduction to the role and nature of selling and examines the elements of effective sales management in a contemporary business environment. Topics include theories, functions, and the techniques associated with real world selling. Elements of personal selling and sales management include: (1) understanding the sales process (prospecting, preparing sales dialogue and presentations, communicating value, addressing concerns and handling complain, and closing the sale), (2) issues in recruiting, selecting, training, motivating, compensating, and retaining salespeople, (3) building trust, earning commitment, and expanding customer relationship and (4) understanding ethical behavior in relationship selling and sales management.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MKTG 340: Retail Management

This course is a study of the administration and control of retail merchandise operations, or their equivalents, in the offerings of services. It covers the fundamental principles of store management, location, selection and training of personnel, budgeting, buying and processing merchandise, pricing, and sales promotion. In addition, some attention is given to the increasing role and numbers of service and not for profit retailers.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MKTG 347: New Product Management

This course is intended to provide the student with an opportunity to develop an understanding of marketing decision making for new and mature products. Students will review current literature and improve their ability to analyze and express their thoughts in the area. The course emphasizes the role of strategic market planning, organizing and planning new products, the new product development process and marketing program, new service development, controlling and managing the product or service line, and the future of new product management. Textbooks, readings and group projects will be utilized in order to

develop a total concept of new product management.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MKTG 350: Advertising Management

This course is designed to provide a comprehensive introduction to the integrated marketing communication (IMC) field with an emphasis on advertising. Fundamental principles and concepts of persuasive marketing communication are mainly examined as (1) an element in our social system; (2) a business system; (3) an art and communication form; and (4) a science. Areas of concentration include IMC in customer relationship marketing, consumer behavior, IMC research and planning, the campaign development process, advertising agencies, creative strategies, basic media choices, target audience analysis, and the legal and ethical aspects of advertising.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MKTG 351: Media Concepts and Planning

This course is designed to help students understand the fundamentals of media planning and the role of media in the process of developing effective integrated marketing communication (IMC) campaigns. Following the advent of new types of media, this course aims to immerse students in the issues that occur in the media industry today. It also fosters students' understanding and application of various types of media including digital media such as social media, websites, and mobile to suggest effective and efficient IMC strategies for corporations. In addition, media formulas and media research will be addressed.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MKTG 357: Integrated Marketing Communication Campaigns

This course aims to provide theoretical and pragmatic approaches to help students gain knowledge to develop an effective, successful integrated marketing communications (TMC) campaign. Combining the steps of developing an IMC campaign and studying the process step-by-step, students will develop an actual IMC campaign for a company. As an upper-division IMC course, this course is less about students learning new materials and more about them experiencing the culmination of all they have learned. Specifically, the whole development process or a campaign beginning with reviewing a company's mission and values and ending with a pitch will be covered. As a subset of IMC, sales promotions, public relations, sponsorships, brand event planning, personal selling, and direct-response marketing are incorporated into the class.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MKTG 358: Marketing Communication Management

This course considers the managerial impact of Marketing Communications (MARCOM); public relations/publicity; sales promotion, advertising, cyber-marketing and direct marketing; personal selling; and the impact of the promotional mix on marketing communication.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MKTG 360: Marketing Research

Marketing Research is the systematic and objective search for and analysis of information relevant to the identification and solution of problems in the field of marketing. The course deals with how information is supplied that is required on a continuing basis for developing and adjusting marketing strategies and tactics; for identifying problem areas; and for providing feedback for management control. This course utilizes both project-type and marketing information as they are needed for decision making.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MKTG 361: Principles of Business Logistics

This course gives students knowledge of logistics principles and functions and enables them to apply this knowledge in enterprises and organizations of all types. It surveys all the fundamental elements of the supply chain and provides a framework for analysis and understanding of logistics systems. It addresses organization and functions of the elements of the supply chain, processes within the supply chain, and strategic issues, including globalization of supply chains.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MKTG 362: Digital Marketing

The course will explore the fundamentals, concepts, and practical applications of business marketing, utilizing digital information to sell across all digital platforms. The student will learn the process of marketing planning in the digital age, including an understanding of (1) the forces that shape digital marketing; (2) the various ways that revenue streams can be developed via digital marketing; and (3) how to develop and implement a digital marketing business plan.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MKTG 363: Marketing Analytics

Marketing Analytics is about applying data science in in making better marketing data-driven decisions. It is the practice of measuring, managing and analyzing customer behavior/data/performance to maximize its effectiveness on the marketing campaigns. Students will learn what analytics is, the benefits of taking analytical based approaches to decision making, and how analytics is practiced in organizations with hand-on experience. More learning data analysis techniques will be introduced, as well as data-driven approaches to marketing topics such as product development, pricing, and customer value. Students will be able to describe the historical/current situations and predict the future trends. Based on the wisdom fostered from the data, students could prescribe the solutions to some unexpected events. This course will advance the student competency in how to discern the patterns and findings of data to optimize the marketing decisions.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MKTG 370: International Marketing

International Marketing is a study of the process of focusing the resources and objectives of an organization on global market opportunities. The course shall take a broad conceptual approach to the marketing management problems, techniques and strategies necessary to incorporate the marketing concept into the framework of the world marketplace. Emphasis is placed on the necessity of program as well as the problems of competing in markets of different cultures. World-wide consumerism as well as the inherent social and ethical issues which arise when a multinational corporation ventures into foreign cultures will be addressed.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MKTG 371: Selected Topics in Marketing

This course will permit the exploration of specialized subjects that are not covered in the regular marketing classes. The course will emphasize a variety of current topics and contemporary issues in marketing which are taking place in a dynamic business environment. Students will review current literature, observe current marketing practices and improve their ability to analyze and express their thoughts in the area.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MKTG 379: Independent Study in Marketing

The Independent Study allows for individualization of the marketing curriculum to meet the specialized needs/interests of students through studies outside of the focus of existing courses. Under the direction of a faculty member from the Marketing Department, the student will investigate an area of academic interest, to be approved by the department. (1-3 s.h.)

MKTG 395: Honors Independent Study/Thesis

Honors Independent Study/Thesis.

Modern Language Studies

MLST 101: Self-Instructional Language Course

Self-instructional Language courses are intended for intensified study, and are not offered as "crash" courses for a quick and superficial capability in the language. Progress and proficiency will be periodically and systematically monitored and tested by a qualified person proficient in the language. A particular course will be open to a student with permission of the chairman and only if a qualified informant is available. The University requires a statement signed by the student which releases the University of responsibility should a monitor/tutor be "lost" during study or, if faculty be unwilling or unable to continue the "Special Arrangement." Self-instructional courses are offered in Arabic, Chinese, Greek, Hebrew, Japanese, Polish, Portuguese.

MLST 102: Self-Instructional Language Course

Self-instructional Language courses are intended for intensified study, and are not offered as "crash" courses for a quick and superficial capability in the language. Progress and proficiency will be periodically and systematically monitored and tested by a qualified person proficient in the language. A particular course will be open to a student with permission of the chairman and only if a qualified informant is available. The University requires a statement signed by the student which releases the University of responsibility should a monitor/tutor be "lost" during study or, if faculty be unwilling or unable to continue the "Special Arrangement." Self-instructional courses are offered in Arabic, Chinese, Greek, Hebrew, Japanese, Polish, Portuguese.

MLST 103: Self-Instructional Language Course

Self-instructional Language courses are intended for intensified study, and are not offered as "crash" courses for a quick and superficial capability in the language. Progress and proficiency will be periodically and systematically monitored and tested by a qualified person proficient in the language. A particular course will be open to a student with permission of the chairman and only if a qualified informant is available. The University requires a statement signed by the student which releases the University of responsibility should a monitor/tutor be "lost" during study or, if faculty be unwilling or unable to continue the "Special Arrangement." Self-instructional courses are offered in Arabic, Chinese, Greek, Hebrew, Japanese, Polish, Portuguese.

MLST 104: Self-Instructional Language Course

Self-instructional Language courses are intended for intensified study, and are not offered as "crash" courses for a quick and superficial capability in the language. Progress and proficiency will be periodically and systematically monitored and tested by a qualified person proficient in the language. A particular course will be open to a student with permission of the chairman and only if a qualified informant is available. The University requires a statement signed by the student which releases the University of responsibility should a monitor/tutor be "lost" during study or, if faculty be unwilling or unable to continue the "Special Arrangement." Self-instructional courses are offered in Arabic, Chinese, Greek, Hebrew, Japanese, Polish, Portuguese.

MLST 357: Walking the Camino de Santiago de Compostela

This course explores the architectural and cultural contributions of groups who have inhabited the Iberian Peninsula. Special attention will be focused on these civilizations' contributions along the various pilgrimages to Santiago de Compostela including the French Way, Northern Way, Primitive Way and/or Portuguese Way.

MLST 363: The Entrepreneurial Language Professional

This course develops the praxis of entrepreneurship for translators, interpreters or other language professionals who wish to start their own freelance business or translation agency/company. Topics include: managing the start-up phase; designing a plan to market the services through traditional methods as well as social media; cost and product analysis to choose the

appropriate equipment for the business; and financial planning such as setting rates, writing contracts, planning for taxes and handling payments. Taught in English.

MLST 380: Senior Seminar in Modern Languages

This course consists of reading and discussions in the area of the individual student's interest in preparation for the comprehensive examination in Modern Languages. Required of all Liberal Arts students concentrating in Modern Languages and B.S. Secondary Education Teachers.

MLST 390: International Internship

This course is designed for the student wishing to spend an extended period of time abroad or at an approved domestic agency/organization in either an internship situation or non-traditional studies. Students must demonstrate that the internship or non-traditional program will be conducted in the modern language of study and will be adequately supervised. Other requirements may need to be met. Open to Majors and Minors with permission of the department chairperson.

MLST 428: Culture and Diversity of English Learners

This course is designed to prepare English as a Second Language (ESL) program specialists to facilitate the integration of English Language Learners (ELLs) and their families into the host school and community. As well, the course facilitates school staff members' understanding of multi-cultural and multi-language learners' needs and support strategies so as to maximize the educational experience. Participants in this course will undertake a comparative approach to similarities and differences between the US culture and other cultures with the goal of developing cultural understanding and sensitivity of ELL/ESL students and families living in the US culture.

MLST 434: Instructional Methodology for English Learners

This course is for English as a Second Language (ESL) practitioners in partial requirement for the Pennsylvania Program Specialist ESL Certificate. This course offers research-based information relative to the design and implementation of an ESL program; methods, strategies, and resources for ESL programs; the use of computer technology (hardware and software) for ELLs; the use of audio/visual media for ELLs; the adaptation of instructional strategies and materials to address the specific needs, talents and interests of ELLs; the integration of multicultural information for ELLs through various curricula; the development, implementation, and evaluation of varied curricular and instructional activities for diverse ELLs; metacognitive awareness and strategic planning of ELLs to assist them in regular classrooms; and the acculturation process regarding reading, writing, speaking, listening, and culture.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MLST 435: Language Acquisition and English Linguistics

This course is for English as a Second Language (ESL) practitioners in partial requirement for the Pennsylvania Program Specialist-ESL Certificate. This course offers an overview of the basic mechanisms of human language, as well as first and second language acquisition and literacy development. Students will examine the linguistic elements of American English and discover effective methods of instruction and assessment of spoken and written language for use with ESL learners. This course is for English as a Second Language (ESL) practitioners in partial requirement for the Pennsylvania Program Specialist-ESL Certificate. This course offers an overview of the basic mechanisms of human language, as well as first and second language acquisition and literacy development. Students will examine the linguistic elements of American English and discover effective method s of instruction and assessment of spoken and written language for use with ESL learners.

Marine Science

MRSC 50: Window to the Oceans

This is a course in marine biology designed for the non-science major. Students will be introduced to the major groups of marine organisms, diverse coastal habitats, adaptations and distribution of organisms within marine habitats, and the potential for human impact on marine organisms and the environment. Current discoveries and "hot topics" within the field of marine biology will also be discussed. Laboratory work will include hands-on experience with sampling methods and equipment from both shore-based and boat-based platforms, general identification of marine plants and animals, and first-hand observation of different coastal habitats, their residents and unique adaptations. This course will be taught at the Marine Science Consortium in Wallops Island, VA. (3 s.h., 4 c.h.; this course is also offered with the BIOL prefix.)

MRSC 110: Introduction to Oceanography

An introductory course designed to introduce students from diverse backgrounds to the physical, chemical, biological and geological aspects of the oceans and to the methods and techniques of this rapidly expanding field. Emphasis is placed on lab and at-sea assignments which focus the students' attention on the interrelationship and unity of oceanography, and its relation to other environmental sciences.

MRSC 210: Sophomore Seminar

This course provides students with fundamental skills necessary to be successful in the marine sciences. The course covers the identification and analysis of scientific literature, data analysis and presentation, research presentations, and scientific writing skills. It also provides early career guidance for students in the marine sciences with respect to pursuit of an advanced degree or the process of finding a job right after graduation. Offered every fall semester.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MRSC 226: Marine Biology

A study of the major groups of marine organisms, their adaptations and distribution within the marine environment. Laboratory work will include methods of sampling, identification, experimental manipulations, and a weekend field trip.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MRSC 237: Field Methods in Oceanography

A course to familiarize students with the dynamic marine environment and field work on board small research vessels; to instruct in the use and application of standard oceanographic instruments and sampling devices; to promote and encourage independent research through the initial stages of a scientific project.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MRSC 250: Wetland Ecology

The ecology and management of wetland wildlife, particularly of freshwater marshes and saltwater marshes. Special emphasis on ecosystem approach.

MRSC 260: Marine Invertebrates

A study of the life history, habits, origin, development, physiology, anatomy and taxonomy of the main phyla of invertebrates. A phylogenetic sequence is followed to show interrelationships among the phyla. Special emphasis is given to the Atlantic marine invertebrates. Laboratory and field work deal with collection, preservation, and identification of local species.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MRSC 280: Field Biology

An introduction to basic principles of ecology and natural history of selected plants and animals in terrestrial, freshwater, and

marine environments. Course is suitable for non-science majors.

MRSC 285-298: Selected Topics in Marine Science

A selection of individual topical courses developed to present information in a specific area of study. Course titles vary depending upon needs and interests to the students and expertise of the faculty. May be repeated for a total of six credit hours.

MRSC 320: Physiological Ecology of Animals

This course will provide an introduction to the physiology of animals utilizing a comparative and ecological approach. The course will cover the topics of respiration, circulation, metabolism, osmoregulation, thermoregulation, locomotion, and sensory systems in the context of comparing the mechanisms and strategies utilized by animals from different habitats and phylogenetic groups. Some emphasis will be placed on organisms occupying various marine habitats, but freshwater and terrestrial animals and habitats will also be included. Laboratory investigations will examine the physiological responses of both invertebrates and vertebrates to common environmental stresses such as salt load, temperature variation, oxygen supply, and pH change. These investigations may be accomplished through measurements and observations in the field, as well as through experimental manipulations in a laboratory setting.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MRSC 326: Marine Ecology

A study of the ecology of marine organisms, the relationships of plants and animals to the physical, chemical and biological factors and their zonation and community structure. Analysis of current issues in marine ecology will also be addressed. Laboratories will include classroom investigations of population and community relationships and a MANDATORY weekend field trip to Wallops Island, VA.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MRSC 331: Chemical Oceanography

This is the study of sea water, oceanic particulate matter and sediments in the context of chemical cycles, especially cycles of carbon dioxide, nutrients, metals and radioisotopes. Correlations are made between chemical cycles having periods from years to thousands of years and biological and physical processes. Correlations are made between chemical cycles having longer periods and geochemical processes. Measurements of the concentrations of major ions, trace elements and nutrients in sea water are made by wet chemical and physical methods.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MRSC 338: Ecology of Marine Plankton

A study of the phytoplankton and zooplankton in marine and brackish environments. Qualitative and quantitative comparisons will be made between the planktonic population of various types of habitats in relation to primary and secondary productivity. This course will be offered summers at the Marine Science Consortium, Wallops Island, Virginia.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MRSC 340: Marine Mammals

The distribution, population size, physiology, evolution, adaptations and ecological relationships of marine mammals will be studied with an emphasis on mammals of the Atlantic Ocean. This course will stress hands-on understanding of marine mammal physiology, behavior, population dynamics and species diversity. Laboratory and field work will include an extended off-campus field trip to facilities holding and/or studying marine mammals of the NE Atlantic Ocean. In addition, the laboratory portion of this course will emphasize data collection in the field, and subsequent analysis and presentation of the data through a required mini-research project.

MRSC 342: Ichthyology

A study of the fishes. Specimens collected along our Eastern Seaboard by the student will be used to illustrate the anatomy, physiology and systematics of this major vertebrate group. Field collections will also give the student the opportunity to observe the relationships of these animals to their biotic and physical environment.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MRSC 344: Marine Botany

A study of marine and marine fringe plants of the Middle Atlantic Coast, their taxonomy, ecology, distribution, life histories, physiology, and economic status. Techniques of collecting, preserving, identifying and herbarium cataloging will be stressed. Exercises in plant ecology, deep core pollen analysis and marine microbiology will be included. (Same as MAR 342: Marine Botany at Consortium, Wallops Island, Virginia.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MRSC 346: Sedimentology and Stratigraphy

The basic composition, transport, diagenesis and distribution of sediments are introduced along with the principles governing the classification, correlation, interpretation, of stratified rocks are presented by means of lectures, laboratory exercises and field trips. Laboratory exercises demonstrate procedures used in analyzing and presenting stratigraphic data. Field trips are employed to introduce the student to stratigraphic principles and local stratigraphic problems.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MRSC 348: Biological Oceanography

The interdisciplinary study of the interactions between biological communities and the ocean environment as observed in the distribution of coastal plankton, fish and benthic invertebrates. Field studies of sample populations will be compared to quantitative environmental variables using state-of-the-art sampling equipment. Topics covered include: the effect of current transport on plankton at barrier island passes, the effect of submarine banks on fish populations, ground truth data for satellite imagery, and epibenthic population studies of nearshore and intertidal environments. This course will be offered summers at the Marine Science Consortium, Wallops Island, Virginia.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MRSC 350: Sedimentation

The basic composition, transport, diagenesis and distribution of sediments are introduced by means of lectures and laboratories.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MRSC 352: Coral Reef Ecology

A study of coral reef types and the relationship of reef organisms to their environment. Emphasis is given to species diversity/identification, symbiosis, and effects of abiotic factors, predation, and competition on the abundance and distribution of coral reef organisms. A segment of this course involves on-site study of the biology of tropical reefs/organisms and the accumulation of species populations data usually at Roatan, Bay Islands, Honduras, but other reef locations may be used.

MRSC 358: General Geophysics

The study of applied near-surface geophysical methods such as gravity, magnetics, seismic refraction, seismic reflection, electrical resistivity, electromagnetic induction, ground penetrating radar, and borehole logging. The laboratory exercises and

field work using portable geophysical equipment will familiarize the students with the various methods used to collect and interpret geophysical data. (This course is also offered under the GEOL 358 designation.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MRSC 360: Anatomy of Marine Chordates

A course designed to familiarize the students with the qualitative aspects of the speciation process; to lay the groundwork for understanding the basic and specialized structure of marine chordates; to trace the most obvious or important trends (and their functional significance) in the evolution of this basic structure in various vertebrate lines. The laboratories will be devoted in large part to a reasonably thorough dissection of representative marine vertebrates.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MRSC 364: Physical Oceanography

This course is a study of the physical properties of the oceans which include: mass and energy budgets; the cause, nature, measurement, analysis and prediction of tides, currents and waves, and basic instrumentation used in field work.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MRSC 366: Marine Geology

A study of the structural and sedimentary environments of the continental shelf, slopes, and ocean basins. The crustal structure of the earth and its relation to the sedimentary record and geologic history of the ocean is examined. Sampling and laboratory procedures used by the marine geologist are introduced.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MRSC 370: Independent Research in Marine Science

This course is designed to allow a student to study individually in a specialized area under the direction of a faculty member. The research topic must be appropriate to the student's background and approved by the faculty member directing the student.

MRSC 380: Senior Seminar in Marine Science

Readings and discussions in the area of the individual student's interest in preparation for the comprehensive examination in Marine Science. Required of all liberal arts students majoring in Marine Science.

MRSC 390: Internship in Marine Science

Supervised, practical work experience in laboratory and/or field situations. Students interested in developing an individualized vocationally oriented program which may assist in future career options may structure a work-study experience with the cooperating agency or organization. A proposal outlining the work-study experience should be submitted to the student's supervising faculty member and the department chairperson. Clock hours will be determined by the cooperating agency or organization. Semester hour credit will be based upon the proposal and scheduled clock hours, but a maximum of 4 credits may be applied toward Arts and Sciences electives. Additional credit cannot be applied to the 128 credit hour graduation requirements.

MRSC 395: Honors Independent Study/Thesis

Honors Independent Study/Thesis.

MRSC 398: Honors Supplemental Research

Mathematics Education

MTED 415: Learning and Teaching Mathematics

The nature of mathematics and mathematical thought processes; current views on the learning and teaching of mathematics; problem-solving; discovery learning; meaningful instructional objectives; individualizing instruction in mathematics; aids to instruction; instructional strategies in mathematics education. Open to Senior Secondary Education Mathematics majors, Senior Elementary Education majors with a Mathematics Concentration and to graduate students in mathematics education.

MTED 425: Middle School Mathematics

This course is designed to prepare both elementary and secondary teachers to teach mathematics in the middle school. Various instructional strategies will be examined and discussed. A significant portion of the course will be devoted to the content and methods of middle school mathematics. The course will include the presentation of some activities that middle school students can use to discover mathematical concepts. Open to Senior Secondary Education Mathematics majors; Senior Elementary Education majors with a Mathematics Concentration and to graduate students in mathematics education.

Music Education

MUED 100: Overture To Music Education

This course serves as an introduction to the foundations of music education. Topics include history of music education in the United States, philosophical underpinnings of what we do as musician educators and why we do it, on becoming a musician teacher, fundamental psychology of learning and teaching, developing tools for teaching, early childhood music, elementary and secondary classroom music, instrumental music, choral music, multicultural music education, diverse learners, and developing instruction. Special emphasis is placed on helping the music education student in developing one's own philosophy of music and music education, and how being a music teacher requires one to be both a fine musician and a fine teacher.

MUED 220: Elementary Music Methods

This course will prepare the prospective music educator to be able to create, develop, and teach successful elementary classroom music programs. Students will study major trends and learning theories, apply knowledge of child development including exceptional populations, examine the literature and materials for teaching music, create lesson and unit plans, and engage in practice teaching experiences.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MUED 222: Secondary Music Methods

This course will prepare the prospective music educator to be able to create, develop, and teach successful classroom music programs for individuals from grade 6-12. Appropriate music course offerings will be outlined for both middle and high school settings based on the social, psychological, intellectual, and physical changes experienced by students of this age group. Practical, hands-on teaching experience will be achieved by having students prepare and present lessons. Performance opportunities and concerns will be discussed. Students will also examine a variety of resources, including the music of various cultures, as well as the resources available in their own community.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MUED 231: String Techniques

This course will prepare the prospective music educators to be able to teach string instruments to beginning school students, and to successfully apply knowledge of string instruments in the school instrumental music program in classroom and ensemble settings.

MUED 232: Woodwind Techniques

This course will prepare the prospective music educators to be able to teach woodwind instruments to beginning school students, and to successfully apply knowledge of woodwind instruments in the school instrumental music program in classroom and ensemble settings.

MUED 233: Brass Techniques

This course will prepare prospective music educators to be able to teach brass instruments to beginning school students, and to successfully apply knowledge of brass instruments in the school instrumental music program in classroom and ensemble settings.

MUED 234: Percussion Techniques

This course will prepare prospective music educators to be able to teach percussion instruments to beginning school students, and to successfully apply knowledge of percussion instruments in the school instrumental music program in classroom and ensemble settings.

MUED 236: The Arts and Pre-K 4 Education

This course provides Pre-K through Gr4 Teacher Candidates with concepts and skills central to the visual and performing arts (Visual Art, Music, Theater, and Dance). Candidate will learn how to construct developmentally appropriate learning experiences in the arts for Pre-K through 4 students and how to integrate these experiences with other subjects. (3 s.h., 4 c.h.)

MUED 299: Music Education Lab

This is a workshop course for music teacher candidates which provides learning experiences in individual topics including guitar, musical theatre, and jazz improvisation which meet standards required for certification.

MUED 320: Instrumental Music Methods

This course is designed to prepare students to teach instrumental music in the schools. Each student will be able to discuss and/or demonstrate appropriate teaching techniques, strategies and materials (including representative orchestral and wind repertoire), and develop an understanding of the administrative responsibilities needed to initiate and maintain a successful instrumental music program.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MUED 322: Choral Music Methods

This course is designed to prepare students to teach choral music in the schools. Each student will be able to discuss and/or demonstrate appropriate teaching techniques, strategies, and materials (including representative choral repertoire), and develop an understanding of the administrative responsibilities needed to initiate and maintain a successful choral music program.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MUED 335: Music for the Exceptional Learner

In this course students will become familiar with general educational issues and music education trends affecting exceptional learners in the United States. Developmental music experiences for the exceptional learner in mainstreamed music classes will be addressed with an emphasis on the identification, methods of instruction, and arranging of music for exceptional learners. Questions about music education teaching and learning will be covered, and students will be introduced to variations in language ability, assessment, inclusion, and music education in a diverse world. The class will develop a sense of community online through reading and posting to discussion forums and communicating regarding case study and video presentations. Students will become knowledgeable in the areas of language, motor, visual, and social development, connecting current research and theory about exceptional learners in music education to classroom practice. To synthesize thinking and learning experiences, students will also critically assess inclusive school settings.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MUED 390: Clinical Experience and Practicum: Music I

Student teaching is the culminating experience of the undergraduate Music Education program. It provides the student with the opportunity to observe professional music teachers and to participate in the music education program of the school. The student teaching semester is divided into two segments, one at the elementary level (K-6) and the other at the secondary level. These are interchangeable. At some point during these placements the student teacher will have experience with general, vocal/choral, and instrumental music instruction. The student teacher is expected to participate in planning and teaching lessons in all of these areas. The Practicum is a seminar scheduled concurrently with Student Teaching. Led by university faculty, students will discuss a variety of subjects, including but not limited to: teaching strategies, learning theory, classroom and rehearsal management techniques, community resources, and other pre-professional concerns.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MUED 391: Clinical Experience and Practicum: Music II

Student teaching is the culminating experience of the undergraduate Music Education program. It provides the student with the opportunity to observe professional music teachers and to participate in the music education program of the school. The student teaching semester is divided into two segments, one at the elementary level (K-6) and the other at the secondary level. These are interchangeable. At some point during these placements the student teacher will have experience with general, vocal/choral, and instrumental music instruction. The student teacher is expected to participate in planning and teaching lessons in all of these areas. The Practicum is a seminar scheduled concurrently with Student Teaching. Led by university faculty, students will discuss a variety of subjects, including but not limited to: teaching strategies, learning theory, classroom and rehearsal management techniques, community resources, and other pre-professional concerns.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MUED 399: Independent Study: Music Education

This course is an individualized approach to address the needs and interests of select students through guided research, readings, discussions, and papers in music education. Students may schedule this course for one to three credits in a single semester.

Music Performance

MUPF 122: Class Guitar I

This course is designed to develop basic skills playing the acoustic guitar, such as simple chords, strumming patterns, fingerstyle and plectrum skills. Song styles and structures will be studied that the guitar is typically called on to play as an accompaniment instrument. This class is appropriate for students with little or no guitar experience.

MUPF 222: Class Guitar II

This is a continuation of MUPF 122 Class Guitar I where students gain a broader understanding of the guitar and its role in American popular music, with concentration on the electric guitar in various styles including rock, blues, rockabilly, and rhythm and blues. Students develop basic skills playing the electric guitar such as transposable bar chords, major and minor pentatonic scales, upper string triads and sight reading in the closed positions.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MUPF 228: Recording Ensemble

The Recording Ensemble is designed to trace the steps of the music production process from the creation of a demo through distribution. Students will be trained in the art of recording live band tracks and live instrumental and/or vocal overdubs in a variety of musical styles explored over multiple semesters. Students will use software instruments and audio recordings to create original electronic sounds and musical productions in a variety of styles. Students learn the proper terminology to address recording engineers before, during, and after each session. Students will work together to help create, rehearse, record, manage, and market a professionally recorded demo. Throughout the development of each project, students will gain an understanding of releasing a musical product to online and physical retailers.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MUPF 229: Applied Jazz Instruction

Instruction one half hour per week in voice, keyboard, guitar, drum set, saxophone, electric and/or acoustic bass, trumpet, trombone, vibes. This instruction will be offered consistent with student demand, availability of faculty and facilities. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 230: Chamber Ensemble

This course will provide students with opportunities to engage in live music-making experiences in a variety of small ensemble settings. Faculty members will instruct and coach students in appropriate aspects of musicianship and the development of performance skills as is appropriate for the type of ensemble.

MUPF 231: String Ensemble

Ensemble instruction may be elected only with the permission of the instructor. Ensemble instruction: One hour per week in string, woodwind, brass, percussion, jazz, and vocal ensemble. May be repeated for credit.

MUPF 232: Woodwind Ensemble

Ensemble instruction may be elected only with the permission of the instructor. Ensemble instruction: One hour per week in string, woodwind, brass, percussion, jazz, and vocal ensemble. May be repeated for credit.

MUPF 233: Brass Ensemble

Ensemble instruction may be elected only with the permission of the instructor. Ensemble instruction: One hour per week in string, woodwind, brass, percussion, jazz, and vocal ensemble. May be repeated for credit.

MUPF 234: Percussion Ensemble

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. There is a special fee for private instruction and a special fee for organ rental. Private instruction requires permission of the instructor and the Chairperson of the Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 235: Vocal Ensemble

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. There is a special fee for private instruction and a special fee for organ rental. Private instruction requires permission of the instructor and the Chairperson of the Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 236: Applied Music: French Horn (Pr)

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. There is a special fee for private instruction and a special fee for organ rental. Private instruction requires permission of the instructor and the Chairperson of the Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 237: Applied Music: Piano (Pr)

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. There is a special fee for private instruction and a special fee for organ rental. Private instruction requires permission of the instructor and the Chairperson of the

Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 238: Applied Music: Organ (Pr)

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. There is a special fee for private instruction and a special fee for organ rental. Private instruction requires permission of the instructor and the Chairperson of the Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 239: Applied Music: Voice (Pr)

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. There is a special fee for private instruction and a special fee for organ rental. Private instruction requires permission of the instructor and the Chairperson of the Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 240: Applied Music: Viola (Pr)

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. There is a special fee for private instruction and a special fee for organ rental. Private instruction requires permission of the instructor and the Chairperson of the Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 241: Applied Music: Cello (Pr)

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. There is a special fee for private instruction and a special fee for organ rental. Private instruction requires permission of the instructor and the Chairperson of the Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 242: Applied Music: String Bass (Pr)

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. There is a special fee for private instruction and a special fee for organ rental. Private instruction requires permission of the instructor and the Chairperson of the Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 243: Applied Music: Flute (Pr)

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. There is a special fee for private instruction and a special fee for organ rental. Private instruction requires permission of the instructor and the Chairperson of the Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 244: Applied Music: Oboe (Pr)

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. There is a special fee for private instruction and a special fee for organ rental. Private instruction requires permission of the instructor and the Chairperson of the Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 245: Applied Music: Clarinet (Pr)

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. There is a special fee for private instruction and a special fee for organ rental. Private instruction requires permission of the instructor and the Chairperson of the Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 246: Applied Music: Bassoon (Pr)

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. There is a special fee for private instruction and a special fee for organ rental. Private instruction requires permission of the instructor and the Chairperson of the Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 247: Applied Music: Saxophone (Pr)

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. There is a special fee for private instruction and a special fee for organ rental. Private instruction requires permission of the instructor and the Chairperson of the

Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 248: Applied Music: Trumpet (Pr)

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. There is a special fee for private instruction and a special fee for organ rental. Private instruction requires permission of the instructor and the Chairperson of the Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 249: Applied Music: Violin (Pr)

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. There is a special fee for private instruction and a special fee for organ rental. Private instruction requires permission of the instructor and the Chairperson of the Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 250: Applied Music: Baritone Horn/Trombone (Pr)

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. There is a special fee for private instruction and a special fee for organ rental. Private instruction requires permission of the instructor and the Chairperson of the Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 252: Applied Music: Tuba (Pr)

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. There is a special fee for private instruction and a special fee for organ rental. Private instruction requires permission of the instructor and the Chairperson of the Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 253: Applied Music: Percussion (Pr)

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. There is a special fee for private instruction and a special fee for organ rental. Private instruction requires permission of the instructor and the Chairperson of the Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 254: Applied Music: Guitar (Pr)

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. There is a special fee for private instruction and a special fee for organ rental. Private instruction requires permission of the instructor and the Chairperson of the Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 275: Jazz Combo

This course will provide students with opportunities to engage in live music-making experiences in a small ensemble setting. Faculty members will instruct and coach students in appropriate aspects of musicianship and the development of performance skills as is appropriate. This course is repeatable for credit, including in the same semester, up to 99 times. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 276: Popular Music Ensemble

This course will provide students with opportunities to engage in live music-making experiences in a small ensemble setting. Faculty members will instruct and coach students in appropriate aspects of musicianship and the development of performance skills as is appropriate for popular styles of music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 277: Studio Performance Seminar

This course is designed to provide the students with the opportunity of intensive study and understanding of their instrument through analytical and musical demonstration of works of broad stylistic range. The class will offer performance and teaching methods through discussion and listening to compositions that exemplify different idioms and forms, studying the rhythmic, melodic and harmonic characteristics of each work and considering the specific historical context. An analysis of the principles, methods and practices currently used in the teaching of each specific instrument will also be offered as part of the development of a professional performer and successful teacher. This course is repeatable for credit, including in the same semester, up to 99

times.

MUPF 281: University Band

This course is a concert band performing ensemble. The University Band program is a Symphonic Band and Wind Ensemble. The Symphonic Band performs of a wide variety of wind band literature: standard repertoire published compositions, and selections from festival lists. The Wind Ensemble is comprised of the top wind, brass, and percussion students from the symphonic band program. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 282: University Marching Band

This course is a Marching Band program. The University Marching Band (known as the Kutztown University Marching Unit) is offered during the fall semester. The Marching Unit performs of a wide variety of music for performance in the stands as well as a diversified musical repertoire with coordinated drill design at all home and selected away football games. The schedule also includes performances at parades, exhibition performances, and other special events. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 283: University Choir

Choir is a study of the development of vocal technique and vocal performance skills in an ensemble setting, resulting in artistic and aesthetic experiences through the medium of choral music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 285: University Orchestra

University Orchestra will rehearse and perform the instrumental music literature of the 18th, 19th and 20th centuries, including genres such as the overture, suite symphony, concerto, as well as music from ballet. In addition, there will be opportunities to experience various forms of vocal literature, such as oratorio, cantata, opera, mass, as well as music from musical theatre. Formal concerts will take place each semester, with additional performances such as children's concerts and musical theatre productions. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 287: New Music Ensemble

The New Music Ensemble provides students with the opportunity to perform experimental and important twentieth and twenty-first century repertoire. It allows the student to study, from a performance perspective, historically important works of the twentieth century, and deepens the students understanding of current trends in contemporary music. The course develops skills in improvisation, extended techniques, analysis and interpretation, and knowledge of the relationship between world music and contemporary music. No experience with new music is mandatory for participation, but all participants will be held to the highest possible performance standards. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 289: Large Jazz Ensemble

Jazz Orchestra is a music ensemble which studies and presents a variety of jazz styles including representative music from 1940 to the present. Students participating in the band gain both ensemble and solo experience, the latter frequently through improvisation. Regular rehearsals are scheduled and culminate in various performances on and off campus. Audition is required. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 296: Musical Theatre Workshop

This is a workshop course in the preparation and presentation of live musical theatre performances. The course is designed to offer opportunities for dingers and instrumentalists to engage in the experiences, and to develop the skills, associated with performing in musical theatre productions. The course is open to all students by audition with the Instructor. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 399: Senior Recital

This course will prepare the student to present a live music performance in the student's principal applied music medium. The performance may be public or private, as determined by a hearing by the faculty of the Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 430: Chamber Ensemble

This course will provide students with opportunities to engage in live music-making experiences in a variety of small ensemble settings. Faculty members will instruct and coach students in appropriate aspects of musicianship and the development of performance skills as is appropriate for the type of ensemble. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 431: String Ensemble

Ensemble instruction may be elected only with the permission of the instructor. Ensemble instruction: One hour per week in string, woodwind, brass, percussion, jazz, and vocal ensemble. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 432: Woodwind Ensemble

Ensemble instruction may be elected only with the permission of the instructor. Ensemble instruction: One hour per week in string, woodwind, brass, percussion, jazz, and vocal ensemble. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 433: Brass Ensemble

Ensemble instruction may be elected only with the permission of the instructor. Ensemble instruction: One hour per week in string, woodwind, brass, percussion, jazz, and vocal ensemble. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 434: Percussion Ensemble

Ensemble instruction may be elected only with the permission of the instructor. Ensemble instruction: One hour per week in string, woodwind, brass, percussion, jazz, and vocal ensemble. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 435: Vocal Ensemble

Ensemble instruction may be elected only with the permission of the instructor. Ensemble instruction: One hour per week in string, woodwind, brass, percussion, jazz, and vocal ensemble. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 436: Applied Music: French Horn (Pr)

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. There is a special fee for private instruction and a special fee for organ rental. Private instruction requires permission of the instructor and the Chairperson of the Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 437: Applied Music: Piano (Pr)

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. There is a special fee for private instruction and a special fee for organ rental. Private instruction requires permission of the instructor and the Chairperson of the Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 438: Applied Music: Organ (Pr)

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. There is a special fee for private instruction and a special fee for organ rental. Private instruction requires permission of the instructor and the Chairperson of the Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 439: Applied Music: Voice (Pr)

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. There is a special fee for private instruction and a special fee for organ rental. Private instruction requires permission of the instructor and the Chairperson of the Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 440: Applied Music: Viola (Pr)

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. There is a special fee for private instruction and a special fee for organ rental. Private instruction requires permission of the instructor and the Chairperson of the Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 441: Applied Music: Cello (Pr)

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. There is a special fee for private instruction and a special fee for organ rental. Private instruction requires permission of the instructor and the Chairperson of the Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 442: Applied Music: String Bass (Pr)

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. There is a special fee for private instruction and a special fee for organ rental. Private instruction requires permission of the instructor and the Chairperson of the Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 443: Applied Music: Flute (Pr)

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. There is a special fee for private instruction and a special fee for organ rental. Private instruction requires permission of the instructor and the Chairperson of the Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 444: Applied Music: Oboe (Pr)

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. There is a special fee for private instruction and a special fee for organ rental. Private instruction requires permission of the instructor and the Chairperson of the Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 445: Applied Music: Clarinet (Pr)

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. There is a special fee for private instruction and a special fee for organ rental. Private instruction requires permission of the instructor and the Chairperson of the Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 446: Applied Music: Bassoon (Pr)

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. There is a special fee for private instruction and a special fee for organ rental. Private instruction requires permission of the instructor and the Chairperson of the Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 447: Applied Music: Saxophone (Pr)

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. There is a special fee for private instruction and a special fee for organ rental. Private instruction requires permission of the instructor and the Chairperson of the Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 448: Applied Music: Trumpet (Pr)

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. There is a special fee for private instruction and a special fee for organ rental. Private instruction requires permission of the instructor and the Chairperson of the Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 449: Applied Music: Violin (Pr)

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. There is a special fee for private instruction and a special fee for organ rental. Private instruction requires permission of the instructor and the Chairperson of the Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 450: Applied Music: Trombone (Pr)

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. There is a special fee for private instruction and a special fee for organ rental. Private instruction requires permission of the instructor and the Chairperson of the Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 452: APL MUS:TUBA(PR)

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. Private instruction requires permission of the instructor or the Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 453: APL MUS:PERCUSSION(PR)

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. Private instruction requires permission of the instructor or the Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 454: APL MUS:GUITAR(PR)

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. Private instruction requires permission of the instructor or the Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 455: String Ensemble

Ensemble instruction may be elected only with the permission of the instructor. Ensemble instruction: One hour per week in string, woodwind, brass, percussion, jazz, and vocal ensemble. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 456: Woodwind Ensemble

Ensemble instruction may be elected only with the permission of the instructor. Ensemble instruction: One hour per week in string, woodwind, brass, percussion, jazz, and vocal ensemble. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 457: Brass Ensemble

Ensemble instruction may be elected only with the permission of the instructor. Ensemble instruction: One hour per week in string, woodwind, brass, percussion, jazz, and vocal ensemble. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 458: Percussion Ensemble

Ensemble instruction may be elected only with the permission of the instructor. Ensemble instruction: One hour per week in string, woodwind, brass, percussion, jazz, and vocal ensemble. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 459: Vocal Ensemble

Ensemble instruction may be elected only with the permission of the instructor. Ensemble instruction: One hour per week in string, woodwind, brass, percussion, jazz, and vocal ensemble. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 460: Applied Music: French Horn (Pr)

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. There is a special fee for private instruction and a special fee for organ rental. Private instruction requires permission of the instructor and the Chairperson of the Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 461: Applied Music: Piano (Pr)

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. There is a special fee for private instruction and a special fee for organ rental. Private instruction requires permission of the instructor and the Chairperson of the Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 462: Applied Music: Organ (Pr)

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. There is a special fee for private instruction and a special fee for organ rental. Private instruction requires permission of the instructor and the Chairperson of the Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 463: Applied Music: Voice (Pr)

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. There is a special fee for private instruction and a special fee for organ rental. Private instruction requires permission of the instructor and the Chairperson of the Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 464: Applied Music: Viola (Pr)

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. There is a special fee for private instruction and a special fee for organ rental. Private instruction requires permission of the instructor and the Chairperson of the Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 465: Applied Music: Cello (Pr)

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. There is a special fee for private instruction and a special fee for organ rental. Private instruction requires permission of the instructor and the Chairperson of the Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 466: Applied Music: String Bass (Pr)

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. There is a special fee for private instruction and a special fee for organ rental. Private instruction requires permission of the instructor and the Chairperson of the Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 467: Applied Music: Flute (Pr)

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. There is a special fee for private instruction and a special fee for organ rental. Private instruction requires permission of the instructor and the Chairperson of the Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 468: Applied Music: Oboe (Pr)

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. There is a special fee for private instruction and a special fee for organ rental. Private instruction requires permission of the instructor and the Chairperson of the Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 469: Applied Music: Clarinet (Pr)

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. There is a special fee for private instruction and a special fee for organ rental. Private instruction requires permission of the instructor and the Chairperson of the Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 470: Applied Music: Bassoon (Pr)

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. There is a special fee for private instruction and a special fee for organ rental. Private instruction requires permission of the instructor and the Chairperson of the Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 471: Applied Music: Saxophone (Pr

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. There is a special fee for private instruction and a special fee for organ rental. Private instruction requires permission of the instructor and the Chairperson of the Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 472: Applied Music: Trumpet (Pr)

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. There is a special fee for private instruction and a special fee for organ rental. Private instruction requires permission of the instructor and the Chairperson of the Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 473: Applied Music: Violin (Pr)

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. There is a special fee for private instruction and a special fee for organ rental. Private instruction requires permission of the instructor and the Chairperson of the Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 474: Applied Music: Trombone (Pr)

Private instruction: One half hour per week in voice, piano, organ and orchestral instruments. There is a special fee for private instruction and a special fee for organ rental. Private instruction requires permission of the instructor and the Chairperson of the Department of Music. This course is repeatable for credit, including in the same semester, up to 99 times.

MUPF 480: Chamber Ensemble

This course will provide students with opportunities to engage in live music-making experiences in a variety of small ensemble settings. Faculty members will instruct and coach students in appropriate aspects of musicianship and the development of performance skills as is appropriate for the type of ensemble. This course is repeatable for credit, including in the same

semester, up to 99 times.

Music

MUSC 10: Introduction to Music

A survey of western music designed to increase the student's understanding and enjoyment of music. Through lecture, discussion and directed listening the student will be introduced to representative works of the major stylistic periods in music history with reference to the political, social and artistic milieu in which they were created. Opportunity will be provided for listening to recordings, films, and live performances.

MUSC 20: Basic Concepts and Skills of Music

Designed for students with little or no prior musical experience, this course provides basic knowledge concerning the structure of music, i.e., melody, rhythm, form, harmony, and texture. Along with an orientation to the keyboard, students are introduced to reading, writing, and creating music; sight singing, rhythms, ear training, and dictation.

MUSC 24: Class Piano I

A course in practical keyboard facility, sight reading, and harmonization of folk melodies and songs. For all students interested in obtaining a better understanding of music by means of keyboard work. Useful for elementary majors who do not present a minimum degree of proficiency in piano.

MUSC 79: Voice Class I

This course provides students with the opportunity to develop basic singing techniques and apply them to the singing of songs. Class performance stresses the development of confidence and expressiveness.

MUSC 80: Introduction to Music Production and Songwriting

This course is for students seeking to learn about popular music. No previous musical knowledge is required. The course will examine three aspects of music: the societal and cultural context that produces musical style, the technical construction of the music itself, and the resultant ideas that music expresses. To gain a deep understanding of these, the student will listen to and analyze historical musical examples and engage in "hands-on" work, using software applications to compose and produce songs.

MUSC 101: Aural Skills I

This course provides the student with the opportunity to learn and develop the aural, visual and theoretical aspects of music reading. Students will study the movable "DO" system of solfeggio and sing using these syllables, scale degree numbers, and note letter names, using both treble and bass clefs. Students will learn to take melodic, harmonic, and rhythmic dictation in diatonic relationships with few incidental chromatics. The level of harmony parallels the material in MUS 102, Harmony and Theory I. It is recommended that these courses be taken concurrently.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MUSC 102: Harmony and Theory I

This course is designed as a foundation course in diatonic harmony and music theory. The study of primary and secondary triads and seventh chords, their inversions, and non-harmonic tones are emphasized along with related skills in melodic analysis. This course should be taken concurrently with, or after, MUSC 101, Aural Skills I.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MUSC 106: History of Rock and Roll

This course is a study of the origins and development of Rock and Roll music. It examines the role of popular music especially in the 1950s and beyond in a broad overview of historical, artistic, and cultural traditions. Through lecture, discussion, and directed listening, students will become familiar with the social circumstances, technologies, musical groups, songwriters, and producers that have affected and shaped Rock and Roll music.

MUSC 108: Introduction to World Music

This course is a survey of music focusing on non-Western cultures. Selected musical traditions from throughout the world will be explored, with emphasis on how music functions as part of the daily life in particular societies. Through lecture, discussion, and direct listening, students will become more familiar with other cultures, values, and traditions and gain a better aesthetic appreciation of music from diverse societies.

MUSC 113: Introduction to Film Music

This class examines the history and development of film music through readings, lecture and film viewing. The class studies the process of film scoring and how music and its relationship to film have changed over the last century. Class will include discussion and evaluation of different compositional styles and learning to listen critically to film scores while viewing movies.

MUSC 114: Musical Theatre Performance

This course provides basic techniques and approaches to the art of acting through singing for the theatre. Emphasis on using acting tools to create expression through song. Students develop skills through stage performance with a classroom audience. Class periods will be physically oriented with the emphasis on active participation. The students will prepare songs, both solos and duets, from musical theatre which will be analyzed, directed and performed on the stage for a classroom audience.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MUSC 116: Finding Your Voice

This course will explore the beauty and power of the natural voice for singing and speaking and help the student expand their resonance, projection, breathing, expressiveness and vocal range. Proper phonation and articulation will be covered as well as the improvement in pitch, timbre, vocal quality, vocal health, and performance anxiety. Study of the International Phonetic Alphabet to correct and eliminate individual articulation problems will be introduced. Finding Your Voice is for everyone. No previous singing experience is required, but students will be expected to participate in all vocal exercises. These exercises will be utilized as a bridge between the speaking and singing voice.

MUSC 118: Rhythm and Movement, Applications of Dalcroze Eurhythmics

This course enables students to establish an internal pulse through movement and listening exercises based on the concept of Eurythmics which, along with Solfege and Improvisation, makes up the approach to music education developed by Emile Jaques-Dalcroze. The Dalcroze approach to music education is based on the idea that rhythm is the primary element in music, and that the source for all music rhythm may be found in the natural rhythms of the human body.

MUSC 121: Fundamentals of Music Business

This class is a general overview of the major areas of music business and the music industry. Attention is given to the theoretical foundations and practical application of current business practices in the music industry including supporting organizations and the revenue flow from music consumer to creator.

MUSC 123: Exploring Music through Modern-Day Thinkers

This exploratory course takes the student into the world of music by examining music-based lectures, papers, and videos presented by innovative thinkers from 1984 to present day. Through discussion and analysis of groundbreaking presentations, students will delve into the culture of the musician and artist.

MUSC 124: Class Piano II

A study of the piano, its technique and literature; a continuation of Class Piano I. This course is intended for those who are capable of playing medium grade piano music. Admission by permission of instructor.

MUSC 126: Aural Skills Through Performance

This course begins with an introduction of aural and notational elements of rhythm and pitch and progresses to the aural and notational introduction of scales, intervals, tonality; notation of rhythm and meter, rudiments of harmony, and the concept of musical structure and form. Musical concepts will be derived from major, minor and modal folk songs, and art and popular music examples. In this class the sound to symbol approach will be used. Students will experience the musical concepts through listening, singing, movement and the playing of musical instruments. Theoretical explanations will follow.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MUSC 127: Commercial Music Theory

This is a music theory course covering modern American music. While there are some similarities to traditional European theory, there are many differences. Special emphasis will be given to how music theory is applied to modern American music (commercial music) from the early 20th century to the present day, writing for modern commercial instrumentation, understanding form such as the blues, song form, rondo, and aesthetics of commercial music including studies in timbre, extended ranges, and other performance practices unique to this style.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MUSC 129: Recording Technology Survey

This course is provided as an introductory study of developments in music recording technology. The course will focus on historical innovations in the recording process, a chronology of historical recordings, and the resulting effect of technology on the sonic quality of recorded music.

MUSC 179: Voice Class II

This course is a continuation of vocal technique developed in Voice Class I. It includes interpretation, stage deportment, programming and song literature.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MUSC 194: French, German and Italian Lyric Diction for Musicians

This course is a study in the correct manner of singing French, German and Italian lyric diction. Students are introduced to the International Phonetic Alphabet as a means for studying all three languages. The course is designed to be taken by both voice students, who are concurrently enrolled in applied voice and non-voice students, who wish to improve their pronunciation of French, German and Italian. In addition to the study of the lyric diction of all three language, students will also learn the basic conversational skills that a one-month interaction with each language can afford.

MUSC 195: Music in Human Experience

This course considers how music has functioned in human societies around the world and also historically across time. Students will examine music in the context of religion, court traditions, dancing, entertainment, and theatrical presentations in Western European history and also in traditional and popular cultures around the world. Through lecture, discussion, and directed listening, students will gain a better aesthetic appreciation of music in a range of human experience.

MUSC 199: Songwriting

This course will incorporate elements of practical application and technique of the working songwriter. The song as a creative vehicle will be explored, from the creation of ideas through melody, lyrics, and "hooks." Students will learn how to brainstorm ideas, overcome writer's block, and express themselves more effectively in words and music.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MUSC 201: Aural Skills II

This course is a continuation of MUSC 101 Aural Skills I, in which the aural, visual and theoretical aspects of music reading are developed and expanded. Students will continue working with the movable "DO" system of solfeggio, and will sing using these syllables, scale degree numbers, and note letter names. Both treble and bass clefs will be used for the exercises, and both diatonic and chromatic relationships will be studied. Part singing, including canons, duets, trios, and standard SATB four-part writing will be studied. The level of harmony parallels the material in MUSC 202 Harmony and Theory II; it is recommended that these courses be taken concurrently.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MUSC 202: Harmony and Theory II

This course is designed to follow a foundation course in diatonic harmony and music theory, extending to chromatic harmony, modulation, and standard part-writing practices. The study of secondary dominants will begin the study of modulation, which will include common chords, common tones, sequential modulation, direct modulation, and monophonic modulation. This course should be taken concurrently with MUSC 201, Aural Skills II, or MUSC 213, Aural Skills III.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MUSC 205: The Physical Properties of Sound: Music and Music Reproduction

This course is a non-mathematical music-based study of sound; its properties, production, storage and reproduction. This course will study the acoustical properties of the voice and music instruments and the electronic devices used to record and reproduce their sounds. The course is designed to provide experiences in the practical uses of musical acoustics.

MUSC 209: Women in Music

This course will examine the contributions of women as composers, performers and conductors of music from the Middle Ages through the twentieth century. Focus will remain mainly on the roles of women in the sphere of classical music, although some jazz and popular music will be included. Class is limited to 25 students. (This course is also offered under the WGST 209 designation.)

MUSC 213: Aural Skills III

This course is a continuation of MUSC 201 Aural Skills II, in which the aural, visual and theoretical aspects of music reading are further developed and expanded. Students will continue working with the movable "DO" system of solfeggio, and will sing using these syllables, scale degree numbers, and note letter names. Both diatonic and chromatic relationships will be studied, with emphasis on material involving modulation and an expanded harmonic vocabulary. Part singing, including canons, duets, trios, and standard SATB four-part writing, will be studied. The level of harmony parallels the material in MUSC 214 Harmony and Theory III; it is recommended that these courses be taken concurrently.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MUSC 214: Harmony and Theory III

This course is designed as a continuation of MUSC 202, Harmony and Theory II. It emphasizes the study of advanced chromatic harmony, including borrowed chords, the Neapolitan chord, augmented sixth chords, extended tertian chords, and other late nineteenth-century devices. The study of binary and ternary forms, sonata form, rondo form, and other musical structures is included in this semester. Study of twentieth-century innovations in harmony, melody, rhythm and form serves as a springboard to discussing emerging trends in current music. This course should be taken concurrently with MUSC 213 Aural Skills III if not already completed.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MUSC 215: American Popular Music

This course is a study of the origins of popular music in the United States. It examines the role of popular music beginning in the nineteenth century into the twenty-first century in a broad overview of the music industry, published sheet music and recorded sound. Through lecture, discussion, and directed listening, students will become familiar with popular song, musical theater, blues, jazz, folk, country, rock, film music, rap, and current pop artists.

MUSC 217: Music and the Spoken Word

This course is designed to develop and intensify the student's intellectual, emotional and aesthetic responses to the aural qualities of spoken word poetry and music through an examination of the similarities and differences between them. It combines rhythm, rhyme, music, drumming, and the power of words. Emphasis will be placed upon those works that particularly convey their meaning through aural and temporal devices.

MUSC 224: Class Piano III

This course will serve as a continuation of Class Piano I and II and also as a placement for students with more fluent reading and playing skills than required for Class Piano II. A placement examination is required of students without prior study in Class Piano II.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MUSC 225: Jazz: Its History and Influence

A study that explores the logical musical derivatives and developments in jazz and how these developments affected and continue to affect individual jazz styles.

MUSC 226: Jazz Improvisation

This course is an introduction to jazz improvisation and is designed to increase the student's understanding of the principles of improvisation in the jazz idiom. Through lecture and demonstration the student will receive instruction in the basics of jazz improvisation as founded in the bebop era of jazz history.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MUSC 228: The History of American Musical Theatre

This course is an advanced history and survey of the musical, the American contribution to the world of theatre. In addition to examining contemporary musicals, American precursors and European influences, innovators and innovations in music, libretto, staging and choreography will be studied as a means of illustrating changes and trends in music theatre.

MUSC 230: Introduction To Music Technology

This course will present the student with an investigation into the equipment and materials available in current trends in music technology. Information presented in the course will relate to the practicing musician as well as music teachers. The course will cover the technique and creative process of incorporating music technology into the school curriculum to meet current standards, and the methods of adapting music technology to various classroom and ensemble settings.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MUSC 279: Private Instruction in Music Composition

This course is one-half hour per week private instruction in the techniques of music composition. The course will be offered consistent with student demand, availability of faculty and facilities.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MUSC 291: Selected Topics in Music

Topics in the field of Music will be selected for study. For example, topics may include music literature courses such as genres, stylistic periods, ethnic music, performers and composers, or music theory courses such as analysis of selected works, counterpoint, and twentieth century compositional techniques. The course may be repeated for credit provided that the same topic is not repeated. Prerequisites will be determined by the topic selected.

MUSC 292: Audio Engineering I

This course is an introduction to the field of audio engineering. The primary focus of the course is an investigation of recording session procedures including the technical specifications and operational features of each component in the recording studio. Emphasis is placed on developing logistical and auditory perception skills for recording engineers.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MUSC 293: Hip-Hop Music and Culture

This course examines the historical, social, political, and aesthetic roots of hip-hop music and culture. Students in this class will examine the music and lyrics of a selection of representative songs by hip-hop groups and individual artists. Through critical listening and reading students will explore and examine the sociopolitical influence and the controversy and criticisms of hip-hop music and cultural phenomena such as constructions of race, neighborhood, masculinity, misogyny and homophobia, and the uses of technology. The course will also explore how musical processes like rapping, DJing, scratching, and sampling have evolved, as well as how styles and subgenres have proliferated.

MUSC 294: Sound Design for Visual Media

This course focuses on elements of designing, editing, and mixing sound for film, video, and video games. Students take the skills of audio recording and mixing acquired in Audio Engineering I or Audio Production to produce realistic sound design for visual productions. Skills learned in this course include microphone technique and placement, field and studio recording, and Foley/atmospheric creation. Additionally, manipulating these sounds within editing software expands the creative process.

MUSC 295: Artist Management and Touring

This course explores the role and importance of an artist manager, what they do, and how they impact the career of the artist and their brand. The course begins with the basics: why an artist needs a manager, the keys to finding the right partner, and a typical management contract. From there the details of planning an artist's career, and money management. Beginning with the first local gigs through the first national tour, students will learn how to create a memorable live performance; book, negotiate, and market the right shows; capture a loyal fan base; and build the kind of success story that helps expand careers.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MUSC 296: Live Audio Production

Live Audio Production is for anyone who wants to work as a live sound engineer. The basics needed to run a live sound event in 100-1,000 capacity venues will be covered. Topics will include the basics of acoustics and sound, how power works in a system, aspects of a sound system, including speakers, mixers, monitors, how to troubleshoot and take care of equipment properly, analog vs. digital systems, and mixing a live show.

MUSC 302: The Modern Private Music Teacher

This course will explore the various pedagogical approaches for teaching private lessons on specific instruments, the core of teaching repertoire for the solo instrument, injury prevention, and the logistics of running a private music studio.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MUSC 303: Electronic Music Composition

This course is intended to provide the student who is interested in electronic music (music produced by means of synthesizers and computers) with the theoretical and practical knowledge of the basics of electronic music production, the application of

MIDI technology and the basic techniques of electronic music composition using traditional recording and sequencer technology.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MUSC 304: The Professional Classical Musician

This course explores the musical and business skills necessary for a career in performance and music related occupations. Through lecture, discussion, and projects, the students will focus on their development as musicians and as entrepreneurs in preparation for seeking existing jobs and creating new opportunities.

MUSC 305: The Professional Jazz Musician

This course explores the musical and business skills necessary for a career in performance and music related occupations. Through lecture, discussion, and projects, the students will focus on their development as musicians and as entrepreneurs in preparation for seeking existing jobs and creating new opportunities.

MUSC 307: Techniques and Materials of Musical Composition

This course investigates the rhythmic and harmonic materials used in the creation of a musical composition. Attention will be given to the development of the melodic and rhythmic structure of a musical composition as well as the formal organization of traditional works by selected composers. Additionally, students will gain a basic understanding of the instrumental and vocal resources used in the creation of an original musical composition.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MUSC 308: Jazz and Commercial Arranging

This course investigates the instruments and materials used by jazz and commercial arrangers and the craft of adapting compositions to various vocal and instrumental media within the jazz and commercial genre.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MUSC 309: Advanced Jazz Improvisation

This course is designed to increase the student's improvisation skills, building upon Jazz Improvisation I. The students will move to the phase of improvisational expertise that will allow them to create new material rather than mimicking that which past masters have already established. The course will begin the study of improvisation in the post-bop period, focusing on the innovations and creative thought process of Miles Davis, John Coltrane, Wayne Shorter, and others.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MUSC 310: Composition and Arranging

An investigation into the creative process of music composition and the craft of adapting compositions to various vocal and instrumental media.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MUSC 311: Music from Ancient Times to 1750

This course is a study of the music literature from ancient times to 1750. It integrates the role of music in a broad overview of historical, artistic, and cultural traditions. Emphasis is placed on the analysis of forms, styles, genres, and compositional approaches as found in musical scores, to better understand the music in its historical context.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MUSC 312: Music from 1750 to the Present

This course is a study of the music literature from 1750 to the present. It integrates the role of music in a broad overview of historical, artistic, and cultural traditions. Emphasis is placed on the analysis of forms, styles, genres, and compositional approaches as found in musical scores, to better understand the music in its historical context.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MUSC 315: Audio Engineering II

As a continuation of MUSC 292 (Audio Engineering I), this course is an advanced study of components in the recording studio. Students will explore advanced studio electronics and signal flow, computer-based digital recording and editing, console operations, microphones, spatial signal processing, and the role of the audio engineer.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MUSC 318: Symphonic Literature

This course is an in-depth examination of representative orchestral works from the eighteenth to the twenty-first century that are often too long to be studied in other survey courses. While historical and contextual background is addressed, the focus of the course is study and analysis of the form, movement structure, compositional process, performance practice, and orchestration of the works selected through score study and directed listening.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MUSC 325: Conducting (Vocal and Instrumental)

The course is a study of conducting techniques for choral, orchestral and band music through lecture, demonstration, reading, discussion, and recitation. The primary focus of this course is on developing effective and efficient rehearsal methods and conducting techniques.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MUSC 326: Advanced Conducting

The course is a study of advanced techniques of conducting through lecture and demonstration with recordings and live ensembles. The primary focus of this course is to develop more advanced skills in conducting technique, rehearsal planning, and advanced concepts in sound and styles.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MUSC 328: Hearing Musical Form I

This course develops the ability to identify and hear structural form in Western music. In addition to motives, cadences, and musical phrases, the formal structures of 1-Part form, Binary, Ternary, Ostinato, Variations, and Contrapuntal forms from the 17th through 19th centuries will be studied. Emphasis is placed on techniques for hearing form, analysis of musical scores, and the application of both to performance.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MUSC 329: Hearing Musical Form II

This course develops the ability to identify and hear structural form in Western music. In addition to motives, cadences, and musical phrases, the formal structures of Sonata form, Rondo, and Sonata-Rondo from the 17th through 19th centuries will be

studied as well as 20th and 21st Century innovations in form. Emphasis is placed on techniques for hearing form, analysis of musical scores, and the application of both to performance.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MUSC 379: Directed Studies in Music

This course is an individualized approach to address the needs and interests of select students through guided research, readings, discussions, and papers.

MUSC 380: Senior Seminar in Music

This course includes readings and discussions of music as a component of contemporary society, with particular reference to the complementary roles of the composer, performer, consumer and critic.

MUSC 391: Field Experience in Music

Intended as a capstone experience this course is designed to provide the student with educational opportunities outside the normal academic program which cannot be gained through the more traditional course structure. Music internships may take place in a variety of music fields including but not limited to music products retail and wholesale, arts management, marketing, promotions, live performing, recording, live sound, venue operations, sound design, and/or audio production. Music internships usually occur following completion of the student's core coursework. Students are encouraged to make contact with potential internship programs well before their internship semester.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

MUSC 392: Field Experience in Music

Upon approval of a cooperating agency, the student will be placed in a situation in which practical professional experience can be acquired through an organization related to his/her career plans. Interested students should apply through their advisor or the chairperson of the department.

MUSC 393: Field Experience in Music

Upon approval of a cooperating agency, the student will be placed in a situation in which practical professional experience can be acquired through an organization related to his/her career plans. Interested students should apply through their advisor or the chairperson of the department.

MUSC 394: Field Experience in Music

Upon approval of a cooperating agency, the student will be placed in a situation in which practical professional experience can be acquired through an organization related to his/her career plans. Interested students should apply through their advisor or the chairperson of the department.

MUSC 395: Hon: Independent Study/Thesis

Honors Independent Study/Thesis.

MUSC 399: Independent Study: Music

This course is an individualized approach to address the needs and interests of select students through guided research, readings, discussions, and papers in music. Students may schedule this course for one to three credits in a single semester.

MUSC 420: Selected Topics In Music Literature

Music literature of various stylistic periods, cultures, media, and genre, and/or works of selected composers or performers which cannot, because of their scope, receive emphasis in existing music literature courses are studied.

MUSC 450: Performing Arts Administration

Performing Arts Administration will engage students in the business aspects of the performing arts industry, including organizational behavior and arts management, performing arts center and ensemble management, community arts organizations, financial management for the arts, audience development and marketing the arts, legal issues in the arts, repertoire appraisal in the arts, working in the non-profit sector, grant-writing, and fundraising. Students will also complete field work with local arts agencies as part of the course.

MUSC 460: Foundations of Christian Musical Worship

This course is a study of the history, theology, and practice of music and the arts in worship. Designed for church musicians and students who are interested in music in the church, this course will provide biblical and historical perspective and necessary materials and resources to understand and develop creative worship experiences.

MUSC 470: Selected Topics in Music Literature

Music literature of various stylistic periods, cultures, media, and genre, and/or works of selected composers or performers which cannot, because of their scope, receive emphasis in existing music literature courses are studied.

MUSC 485: Intermediate Piano Tuning

This is an intermediate level course for learning piano tuning. The primary focus of this course is to learn techniques and procedures for proper tuning of pianos using musical industry approved methods. Emphasis is placed upon ear-training for aural tuning and the correct use of electronic tuning aides. Recognition of the various factors that affect pitch stability and tuning durability are presented.

MUSC 490: Advanced Piano Tuning

This is an advanced level course for learning fine piano service techniques of voicing, tuning, and regulation of piano hammers, strings and key actions. Emphasis in this course is placed upon recognition of correct piano tone and touch along with understanding methods that can facilitate accurate sonic and tactile micro-changes.

Pennsylvania German Studies

PGST 10: Introduction to Pennsylvania German Studies

This course is an introduction to Pennsylvania German culture, its development, and the various ways it is interpreted and represented. Students will learn about the European origins of the Pennsylvania Germans, their reasons for migrating, and how Pennsylvania German culture was developed and transformed in the United States over the last 300 years. Students will also learn how that culture has been defined and redefined, represented and displayed, both by Pennsylvania Germans and others.

PGST 101: Introduction to Pennsylvania German Language I

This is the first of two, sequential three-credit language courses for beginning students of the Pennsylvania German language. These courses are designed to develop basic skills in comprehension, pronunciation, speaking, reading and writing. Course content stresses the practical use of the language and learning about Pennsylvania German cultural practices through learning the language. Students are encouraged to practice and use their skills with members of the surrounding community.

PGST 102: Introduction to Pennsylvania German Language II

This is the second of two, sequential three-credit language courses for beginning students of the Pennsylvania German language. These courses are designed to develop basic skills in comprehension, pronunciation, speaking, reading and writing. Course content stresses the practical use of the language and learning about Pennsylvania German cultural practices through learning the language. Students are encouraged to practice and use their skills with members of the surrounding community.

PGST 251: Pennsylvania German Literature in English and Translation

This is a survey course of Pennsylvania German literature broadly defined. Knowledge of Pennsylvania German is not required. This survey will examine the beginning of the Pennsylvania German literary tradition in the middle of the 19th century and its development throughout the 20th century and into the 21st century. The literature includes material in Pennsylvania German that is translated into English and English literature with Pennsylvania German themes and subjects.

PGST 276: The Pennsylvania German Landscape

This course examines the development and evolution of the rural Pennsylvania German landscape from 1682 through the present. Students completing this course shall engage in readings discussions, visit museums, conduct fieldwork, and engage in a hands on restoration project. Students will gain a broad understanding of the social history and visual culture of the Pennsylvania Germans as they study their architecture, rural way of life, decorative arts, and material culture.

PGST 301: Pennsylvania German Literature

This is a survey course of Pennsylvania German literature broadly defined. This survey will examine the development of a literary tradition in the beginning of the 19th century and its development throughout the 20th and into the 21st century. The literature includes material in Pennsylvania German and English literature with Pennsylvania German themes.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PGST 360: Pennsylvania German Studies Abroad

Students are encouraged to pursue their studies in Pennsylvania German language and culture at universities and institutions in Germany, and elsewhere. The student must submit a plan of study before being approved and must present a paper or project at the completion of the project.

PGST 370: Readings in Pennsylvania German Life

Students preparing for advanced study in German Studies may undertake guided reading and/or research. Arrangements as to the program and supervising faculty must be completed prior to registration.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PGST 379: Independent Study

Before registering the student is required to consult with the faculty member in the discipline to be studied who will supervise the independent study. May be repeated for credit for up to 6 credits.

PGST 390: Internship in Pennsylvania German Studies

This is a capstone course for students interested in Pennsylvania German Studies. Students review issues in Pennsylvania German Studies and then apply them to a practical and/or professional project. The course is developed for advanced students in Pennsylvania German Studies, but it may be taken by any student who has permission of instructor.

Physical Education Class

PHED 67: Self Defense for Women

This course is clearly a Women's Studies course since the central focus is the development of skills and knowledge relative to women's ability to function effectively in an increasingly violent environment.

PHED 70: Personal Fitness

This course provides students an opportunity to learn about and participate in activities designed to provide basic skill development in cardiovascular conditioning along with strength training and flexibility. Students will be involved in a comprehensive program involving cardiovascular conditioning, muscular strength training, range of motion exercises and

muscular endurance activities.

PHED 73: Fitness For Life

This course is intended to enable students to develop and participate in an individualized, self-directed, contractually assessed physical activity program. Course will be offered in an "on-line/distance learning" format that requires access to a computer and the internet.

PHED 77: Social Dance

This course will introduce the student to the basics and history of social dance. The focus of the course will be on the basic skill movements associated with six common social dances, their origin, etiquette, and history. Students will be expected to practice the skills associated with each of these dances and select two dances for in class presentation.

PHED 83: Tai Chi

This course is designed to include the knowledge and skills essential to develop and maintain a personal health activity program that emphasizes the importance of personal wellness, physical movement, rehabilitation, and personal safety.

PHED 94: Hatha Yoga II

Hatha Yoga II is designed for the student with prior experience in Yoga. This course introduces students to more challenging variations of basic postures, and to asanas at the intermediate level. Pranayama, Yogic philosophy, meditation and stress-reduction exercises are integrated into each class.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PHED 95: Hatha Yoga

Instruction in Hatha Yoga is designed to provide cognitive knowledge and basic skill development in a conditioning regimen that is both ancient and modern. This course is structured to include the knowledge and skills essential to develop and maintain a personal health activity program. Emphasis is placed on the importance of personal wellness, stress reduction, and the gradual development of individual physical strength and flexibility.

Philosophy

PHIL 15: Critical Thinking

Critical thinking is the ability to determine systematically the degree to which a claim or assertion is warranted by purported evidence. This course presents explicitly the principles and standards involved in reasoning and logical persuasion as they apply to our lives, both privately and publicly.

PHIL 20: Introduction to Logic

An introduction to both traditional and modern symbolic logic with emphasis on problem solving through the applications of rules of validity and truth table tests for validity.

PHIL 30: Introduction to Philosophy

A course designed to introduce the student to philosophic thought and terminology. Topical survey of the main branches of philosophy; epistemology; metaphysics, value theory.

PHIL 40: Introduction to Ethics

A study of the development of major ethical concepts and problems from the theories of the early Greeks to those of 20th Century philosophers.

PHIL 60: Introduction to Religious Studies

This course introduces students to various theories of and approaches to religion in terms of the nature, origin, description, function, and language of religion. We will examine how religion is studied in the history of religion, phenomenology, sociology, psychology, and anthropology.

PHIL 80: Business Ethics

An investigation of the logic and historical development of principal philosophical theories concerning business, and its moral consequences. Possible topics include the philosophical foundations of free-market, state and collectivist economies, and their applications to contemporary ethical problems such as truth in advertising, workers' rights and economic justice.

PHIL 105: Medieval Philosophy

This course surveys Western medieval philosophy. It covers such figures as Augustine, Aquinas, and Ockham. Emphasis will be placed upon problems having historical as well as modern importance.

PHIL 113: Environmental Philosophy

This course is an introduction to philosophical theories and ethical issues concerning humanity's relationship to the natural world. What responsibility do we have to care for the environment? What moral obligations, if any, do we have to other animals, plants, and ecosystems, and what is the basis for such obligations?

PHIL 116: Ancient Philosophy

This course exams the major figures and problems of ancient Greek philosophers.

PHIL 121: Modern Philosophy

This course exams the major problems and figures of philosophy in the modern period in which began the scientific revolution and the rise of the West. The course focuses on the rationalists and the empiricists.

PHIL 125: Philosophical Aspects of Death and Dying

The course is concerned with such issues as the mind-body-soul distinction and how this affects our attitudes toward death. It also considers questions of life after death and the ethical issues which must be considered when dealing with death and the human event of dying

PHIL 130: Asian Philosophy

Investigation of the philosophic tendencies of various branches of Eastern thought with major emphasis on theories of metaphysics, knowledge and ethics. Comparisons between Eastern and Western philosophic methods and conclusions will be made.

PHIL 136: Kant to Hegel

This course will examine some of the major figures of late modern philosophy. Immanuel Kant, some of Kant's immediate critics (e.g. Fichte, Schelling, Maimon, and Jacobi); and the greatest of the German idealists, G.W.F. Hegel. There will also be a brief consideration of the "Hegelian aftermath" on both the Continent and in the English-speaking world.

PHIL 140: Symbolic Logic

This course investigates the various types of modern symbolic logic, with special reference to deductive method and the concepts involved in formal axiomatic systems. Some time is given to the application of symbolic logic to critical thinking and formal models and to the philosophy of logic.

PHIL 150: History of Scientific Ideas

Scientific ideas from their origins in Greek philosophical speculation to the complex character of modern scientific enterprise and the relations between philosophy and science through modern history.

PHIL 170: Philosophy of Religion

A philosophical examination of the major problems of religion such as the concept of human nature, the nature of religious knowledge and faith, the traditional arguments for God's existence, the problem of evil, and the nature and function of religious language.

PHIL 202: Two Philosophers Worth Knowing Well

This course provides an introduction to philosophy via concentrated study of the works of two major philosophers, whose work has had a great cultural influence and has strong, systematic interrelations. The particular philosophers studied will vary from semester to semester, with professors' and students' interests. Emphasis is upon philosophy as involving a continuous and perennial dialogue between great minds.

PHIL 210: Medical Ethics

This course is an introduction to the study of moral, legal, and conceptual problems in biomedical research, health care, and health policy. Topics include experimentation on human subjects, the physician-patient relationship, defining death, foregoing life- sustaining treatment, euthanasia, abortion, new reproductive technologies, human genetics, and the allocation of health care resources.

PHIL 215: Persons Life and Death

The course examines alternative concepts of persons and personal identity and their application to the definition of life and death and debates over abortion, the use of embryonic stem cells for research, genetic enhancement, and euthanasia.

PHIL 225: Metalogic

This course investigates philosophical issues in symbolic logic and other formal systems. Topics include: the metatheory of predicate logic and the structure of formal axiomatic systems; extended systems of logic including the modal and the temporal; set theories; abstraction; issues in the philosophy of mathematics.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PHIL 235: Topics in Moral Theory

A detailed examination of selected moral theories: These may include the Aristotelian, Kantian, utilitarian, intuitionist, feminist and naturalist.

PHIL 240: Philosophy of the Social Sciences

An introduction to and the use of the scientific methods and techniques as they are applied to the social sciences. Relations between the social sciences, the natural sciences and philosophy. Philosophic analysis of the various social sciences in terms of strengths, weaknesses, methods, models and goals.

PHIL 241: Philosophy of Mind

Philosophy of Mind is a major area of both historical and contemporary philosophy. This course surveys that area. It examines critically fundamental questions of mind and consciousness, such as the mind-body problem, free will, immortality, and artificial intelligence.

PHIL 245: Human Love and Sexual Morality

This course addresses the perennial philosophical questions of what love is and means, and how we should behave sexually. It surveys classical, modern and contemporary philosophical writings on these metaphysical and ethical issues. It has two complementary themes: the historical development of major philosophical traditions concerning love and sexuality, and the pressing contemporary ethical issues concerning sexual behavior.

PHIL 249: Interpretations of the Quran

This course aims at studying major themes in interpretations of the Quran from classical to contemporary period. Variations and evolution in methods of interpretation will also be studied, particularly with a reference to recent developments in Western philosophical hermeneutics.

PHIL 260: Philosophy of Art

An investigation into major problems of art from a definition of art to the relation between aesthetic judgment and knowledge in general.

PHIL 265: Social and Political Philosophy

A study of one or more important concepts in social and political philosophy such as rights, revolution, law, freedom, justice, property, sovereignty, political obligation, and the nature, range, and validation of judgments in the social and political domain. Emphasis may be on either a systematic treatment of problems or on an historical development of theories.

PHIL 280: American Philosophy

An examination of the development of philosophy in America from the Colonial period to the present, with special emphasis on pragmatism.

PHIL 310: Theory of Knowledge

An inquiry into the nature of sources of knowledge, including an investigation of theories of truth and meaning. Considers the construction of theories of knowledge based on sense perception, rationalism and modem theories based on the analysis of language. Also, a discussion of such topics as faith, belief, certainty, probability and skepticism.

PHIL 330: Philosophy of Science

The nature of scientific theory, explanation, method and assumptions. The implications of modern science for society and philosophy, and some of the major philosophical issues in the sciences.

PHIL 345: Metaphysics

An analysis of basic metaphysical concepts and problems such as substance, causation, nature of the individual, the categories of being. The importance of method to the philosophic inquiry will be examined.

PHIL 350: Selected Topics in Philosophy

Extensive readings, critical discussions, and papers on any one of the major philosophers, philosophical schools, or philosophical problems. Selections will vary, depending on the needs and interests of eligible students. Independent research will be emphasized. The course may be taken for credit more than once by permission of the Department Chairperson.

PHIL 351: Selected Topics in Philosophy

Extensive readings, critical discussions, and papers on any one of the major philosophers, philosophical schools, or philosophical problems. Selections will vary, depending on the needs and interests of eligible students. Independent research will be emphasized. The course may be taken for credit more than once by permission of the Department Chairperson.

PHIL 352: Selected Topics in Philosophy

Extensive readings, critical discussions, and papers on any one of the major philosophers, philosophical schools, or philosophical problems. Selections will vary, depending on the needs and interests of eligible students. Independent research will be emphasized. The course may be taken for credit more than once by permission of the Department Chairperson.

PHIL 353: Selected Topics in Philosophy

Extensive readings, critical discussions, and papers on any one of the major philosophers, philosophical schools, or philosophical problems. Selections will vary, depending on the needs and interests of eligible students. Independent research will be emphasized. The course may be taken for credit more than once by permission of the Department Chairperson.

PHIL 354: Selected Topics in Philosophy

Extensive readings, critical discussions, and papers on any one of the major philosophers, philosophical schools, or philosophical problems. Selections will vary, depending on the needs and interests of eligible students. Independent research will be emphasized. The course may be taken for credit more than once by permission of the Department Chairperson.

PHIL 355: Existentialism and Phenomenology

A study of such existential concepts as dread, despair, anxiety, absurdity, nothingness, and authenticity, and study of phenomenological concepts such as perception, the nature of human emotions, space and time, intersubjectivity, and value. Emphasis may be placed on either a systematic treatment of problems or on a historical development of theories.

PHIL 375: Philosophy of Language

This course deals with contemporary philosophy of language. It begins with the logical atomists of the early twentieth-century and proceeds to follow developments up to the present. The course is intended to provide historical perspectives as well as to keep the student abreast of current discussion.

PHIL 379: Independent Study

Before registering the student is required to consult with the faculty member in the area to be studied who will supervise the independent study. May be repeated for credit.

PHIL 380: Senior Seminar in Philosophy

This course consists of readings and discussions in the area of the individual student's interest in philosophy. Required of all Liberal Arts students majoring in philosophy.

PHIL 381: Senior Seminar in Philosophy and Religion

This course consists of readings and discussions in the area of the individual student's interest in philosophy and religion. Required of all Liberal Arts students majoring in philosophy/religious studies track.

PHIL 395: Honors Independent Study/Thesis

Honors Independent Study/Thesis.

Physics

PHYS 14: Physics of Superheroes

The course is a one-semester general education physics course that uses the concepts of physics to look at super heroes in comic books and in movies. Physics is the study of how our universe works; these same concepts can also be applied to the fantastical universe of comic book superheroes. Students will learn about various concepts in physics (matter, energy, and force). We will examine gravity, electricity, magnetism, optics, relativity, and quantum physics and see how they apply to the universe of superheroes. Comic books apply actual physics that range from the Kryptonian world of Superman to the superhuman speed of Flash here on Earth. We will explore these fundamental principles of physics and use them to separate fact from fiction in the world of your favorite comic book characters. This course does not count toward the Physics major or minor.

PHYS 20: Introduction to Physics

This course is an introduction to the principles of physics including mechanics, thermal physics, wave motion, electricity and magnetism, optics, atomic and nuclear physics. The traditional topics will be related to contemporary problems. This is a laboratory course intended for the general education of non-science majors. This course does not satisfy major, concomitant or specialization requirements for Secondary Education and/or Liberal Arts Science majors.

PHYS 30: Environmental Physics and Chemistry

A study of some fundamental physical and chemical principles and their application to a few of the environmental problems facing our society today, with emphasis on the production and use of energy. A laboratory course intended for the general education of non-science majors. This course does not satisfy major, concomitant or specialization requirements for Secondary Education Science and/or Liberal Arts Science Majors.

PHYS 35: Physics Guide to Life

This general education course examines the central concepts of physics by correlating them with patterns of life, human behavior and society. The course is ideas-driven, with no math beyond elementary arithmetic and geometry. A comprehensive picture of physics is conveyed, covering classical physics, quantum mechanics, relativity, elementary particles and statistical mechanics. The course will use analogies from common life experiences to build intuition about physical laws. This course does not satisfy major, concomitant, or specialization requirements for Secondary Education and/or Liberal Arts and Science majors or count toward major GPA for Physics majors.

PHYS 38: Introduction To Electronics

This course provides a basic introduction to the subject of electronics. Topics include DC and AC circuits, band theory of solids, semiconductors diodes and transistors, filter circuits, rectifier circuits, voltage doubler circuits, and amplifier circuits. Laboratory exercises to familiarize the student with the operation and use of meters, oscilloscopes, and the above mentioned circuits are performed. This course is not open to Physics majors.

PHYS 40: General Physics I

This is the first part of the algebra-based (non-calculus) introductory course sequence in physics. It will cover mechanics, vibrations and waves, and thermal physics. This course does not meet the program requirements of physics and chemistry majors.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PHYS 42: General Physics II

This is the second part of the algebra-based (non-calculus) introductory course sequence in physics. It will cover electricity and magnetism, and optics. This course does not meet the program requirements of physics and chemistry majors.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PHYS 80: Problem-Solving Techniques in Applied Science

This is a support course for Physical Science majors that will provide an overview of mathematical problem solving skills needed to succeed in physics and other physical science courses by discussing the physical applications of algebra, trigonometry, and differential and integral calculus. This course does not satisfy major, minor, or specialization requirements for Secondary Education and/or Liberal Arts Science Majors. It also does not replace the MATH 181 requirement in Physics and Chemistry major programs.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PHYS 100: Physics I

This is the first part of the calculus-based introductory course sequence in physics with lab. This course covers mechanics, vibrations and waves, and thermal physics, and is designed for students in physics, chemistry and related fields.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PHYS 102: Physics II

This is the second part of the calculus-based introductory course sequence in physics with lab. This course covers electronics and magnetism, and optics, and is designed for students in physics, chemistry and related fields.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PHYS 212: Modern Physics

This course offers an introduction to the theory of relativity and the ideas of early quantum physics. Topics include special relativity, blackbody radiation, photoelectric effect, Compton effect, x-rays, structure of the atom, emission/absorption spectra and the Bohr Model, wave-particle duality, and wave packets.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PHYS 214: Introduction to Subatomic Physics

This course provides a continuation of the discussion of early quantum physics into quantum mechanics and an introduction to atomic physics, nuclear physics and modern elementary particle physics.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PHYS 220: Electronics

This course analog electronics – design and implementation. It includes the characteristics of passive components, solid-state diodes, transistors, and basic integrated circuits. DC and AC analysis of transistor and op-amp circuits leads to a survey of basic amplifier designs. Extensive lab work provides experience building and testing circuits.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PHYS 230: Optics

This course provides a survey of optical science and its applications. Emphasis is given to geometrical and physical optics. Geometrical optics considers the propagation of light as rays through simple optical systems (mirrors, lenses, and prisms) leading to discussions if imaging, aberrations, and optical instruments. Physical optics studies include the propagation of light as waves by exploring the theory and applications of interference, diffraction, and polarization effects. Special topics such as quantum optics, integrated optics, Fourier optics, and/or applications in medicine, display technologies, and optical communications are also included.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PHYS 245: Mathematical Physics I

This is a sophomore level course on mathematical methods in physics. Many branches of mathematics that have direct applications in physics are discussed with an emphasis on developing problem solving skills. Topics include complex numbers, linear algebra and vector spaces, vector calculus, Fourier series, and ordinary differential equations.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PHYS 250: Programming for Experimental Research and Industry

This course covers essential programming methods and techniques used in experimental physics and engineering applications. Students will acquire skills and the tools necessary to interface computer systems with sensor, meters, control devices, measurement systems, etc. Methods of debugging, processing, presenting, and storing data will be covered. Course work will involve extensive programming using Lab VIEW, Matlab, and/or C/C++ and/or other programming as appropriate.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PHYS 290: Introduction To Nanotechnology

Nanotechnology is the study of fabricating and manipulating matter at the scale of individual to a few atoms and molecules with typical structures ranging from 1 to 100 nanometers. With relentless miniaturization, nanotechnology is the inevitable technology of the future. This course will present the fundamental paradigm shifts implicit in taking conventional technology to the nanoscale, with focus on the dominant role of quantum mechanics and discrete structure of matter and radiation. With that background as a basis, the course will continue on to a comprehensive survey of the specific applications-based segments of nanotechnology, including novel nano-materials, nanoscale circuits and devices, lower dimensional structures, and molecular devices.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PHYS 310: Physics of Sound

The mathematical theory and basic physical principles of vibrations and sound. Production, propagation, and detection of sound waves, vibrations or sounding bodies, and acoustic measurement.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PHYS 312: Classical Mechanics I

This course offers a comprehensive study of kinematics and dynamics of particles in a Newtonian mechanical framework. Central forces and orbits, scattering, and Lagrangian and Hamiltonian mechanics are also discussed in great detail.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PHYS 314: Classical Mechanics II

This course is a continuation of the study of Newtonian mechanics. Topics covered include non-inertial frames, systems of particles, rigid bodies, oscillating systems and normal modes.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PHYS 315: Advanced Physics Laboratory

This is an advanced level undergraduate laboratory physics course that features experiments in Mechanics, Thermodynamics, Electricity and Magnetism, and Modern Physics. The experiments are closely related to material covered in other upper-level physics courses. Many experiments require computer simulations or computer-based data acquisition processes.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PHYS 316: Electromagnetism I

This course covers the fundamental principles of classical theory of electricity and magnetism, and the extension of these principles to Maxwell's Equations. Topics include electrostatics, boundary value problems, magnetostatics, electric and magnetic fields in matter, and time-varying fields.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PHYS 318: Electromagnetism II

This course is a continuation of the study of classical electricity and magnetism. Topics include electromagnetic waves, absorption and dispersion, wave, wave guides, gauge transformations, and radiation.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PHYS 319: Advanced Physics Laboratory II

This is an advanced level laboratory physics course in Electricity, Magnetism and Modern Physics. Advanced experiments from the areas of Electricity, Magnetism, Optics and Atomic, Nuclear and Solid State Physics are performed. Topics in error and data analysis are included.

PHYS 327: Thermodynamics and Statistical Mechanics

This first part of this course will systematically cover classical thermodynamics with focus on four laws of thermodynamics and their applications and specific attention to heat engines. The second part of the course will provide an introduction to statistical mechanics, leading up to a derivation of the macroscopic results of thermodynamics from the underlying microscopic theory.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PHYS 340: Computational Physics

This course covers the essential numerical methods used in physics and engineering, based on writing and debugging computer programs to implement those methods. Students will acquire the skills and the tools to analyze complex physics and engineering problems numerically, encode them in appropriate software, to be complied and evaluated on computers to arrive at precise solutions and to present those solutions in graphical format if applicable. Course work will involve programming in Mathematica, Matlab, Fortran and /or C/C++ as appropriate.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PHYS 342: Astrophysics

This course explores the physics of astronomical phenomena, from processes within our Solar System to the creation and evolution of stars, galaxies, and the Universe. The course is designed for physics majors and other science majors with strong interest in astronomy, physics, and mathematics. This course takes a mathematically rigorous approach of applying basic principles of physics to astronomy, and therefore also provides a foundation for more advanced (undergraduate and graduate level) coursework in astrophysics.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PHYS 345: Mathematical Physics II

This is an upper-level course on mathematical methods in physics. Topics include calculus variation, special functions, complex functions and residue theorem, partial differential equations, and probability statistics.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PHYS 350: Instrumentation in Physics

This course covers the instrumentation commonly used to perform measurements of physical quantities. The underlying physics of different sensors is described, and then these sensors are used in experiments. Interface circuits and detection techniques are also explored Extensive laboratory work is involved.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PHYS 360: Quantum Mechanics I

This course explores the fundamental principles of quantum mechanics. Topics include the application of Schrodinger equation in one-dimensional systems, Hilbert space formalism, the hydrogen atom, angular momentum algebra, and philosophical implications of quantum mechanics.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PHYS 361: Quantum Mechanics II

This course is the second part of the study of quantum mechanics. Topics include time-independent perturbation theory, adiabatic approximation, and scattering.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PHYS 362: Solid State Physics

This course is an introduction to the subject of solid state physics. Topics include crystal structure, crystal binding, lattice vibrations, thermal and electrical properties of solids, the Fermi gas, band theory of solids, conductors and semiconductors, superconductivity, magnetic properties, and crystal defects.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PHYS 364: Nuclear Physics

This course is an introduction to the subject of nuclear physics. Topics include nuclear structure and models, nuclear transitions and decay, nuclear reactions, radiation detection, natural radioactivity and elementary particles.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PHYS 370: Research in Physics

This course involves individual research on a specific problem in physics or a related field under the advice of a faculty member. Students must discuss research opportunities with any faculty member whose areas of expertise interest them. This course can be repeated for credit.

PHYS 372: Selected Topics in Physics

Topics in the field of physics that are of current interest will be selected for in-depth study. The course content will normally change each time the course is offered. The course may be repeated for credit provided that the same topic is not repeated. The instructor must approve a 1-3 semester hours as required.

PHYS 373: Selected Topics in Physics

Topics in the field of physics that are of current interest will be selected for in-depth study. The course content will normally change each time the course is offered. The course may be repeated for credit provided that the same topic is not repeated. The instructor must approve a 1-3 semester hours as required.

PHYS 374: Selected Topics in Physics

Topics in the field of physics that are of current interest will be selected for in-depth study. The course content will normally change each time the course is offered. The course may be repeated for credit provided that the same topic is not repeated. The instructor must approve a 1-3 semester hours as required.

PHYS 375: Selected Topics in Physics

Topics in the field of physics that are of current interest will be selected for in-depth study. The course content will normally change each time the course is offered. The course may be repeated for credit provided that the same topic is not repeated. The instructor must approve a 1-3 semester hours as required.

PHYS 380: Senior Seminar in Physics

This course consists of readings and discussions in the area of the individual student's interest in physics in preparation for the Comprehensive Examination in Physics. Required of all Liberal Arts students majoring in Physics.

PHYS 390: Internship in Physics

Supervised, practical work experience in laboratory and/or field situations. Students interested in developing an individualized vocationally oriented program which may assist in future career options may structure a work-study experience with the cooperating agency or organization. A proposal outlining the work-study experience should be submitted to the student's supervising faculty member and the department chairperson. Clock hours will be determined by the cooperating agency or organization. Semester hour credit will be based upon the proposal and scheduled clock hours, but a maximum of 4 credits may be applied toward Arts and Sciences electives. Additional credit cannot be applied to the 128 credit hour graduation requirements.

PHYS 395: Honors Independent Study/Thesis

This course involves research on a specific problem in physics or a related field under the advice of a faculty member. Students must discuss research opportunities with any faculty members whose area of expertise interests them.

PHYS 398: Honors Supplementary Research

PHYS 465: Advanced Physics Laboratory II

This is an advanced level laboratory physics course in electricity, magnetism and modern physics. Advanced experiments from the areas of electricity, magnetism, optics and atomic, nuclear and solid state physics are performed. Topics in error and data analysis are included. This course will cover topics at a more in-depth level than PHYS 319. A student may not enroll in this course if he/she has successfully completed PHYS 319.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PHYS 470: Quantum Mechanics

This course is an introduction to the subject of quantum physics. Topics include wave-particle duality, state functions and their usefulness, the Schrodinger equation, uncertainty principle, expectation values of observables and applications of quantum physics to one dimensional systems. The hydrogen atom is also considered. This course will cover topics at a more in-depth level than PHYS 360. A student may not enroll in this course if he/she has successfully completed PHYS 360.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PHYS 472: Solid State Physics

This course is an introduction to the subject of solid state physics. Topics include crystal structure, crystal binding, lattice vibrations, thermal and electrical properties of solids, the Fermi gas, band theory of solids, conductors and semiconductors, superconductivity, magnetic properties, and crystal defects. This course will cover topics at a more in-depth level than PHYS 362. A student may not enroll in this course if he/she has successfully completed PHYS 362.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PHYS 474: Nuclear Physics

This course is an introduction to the subject of nuclear physics. Topics include nuclear structure and models, nuclear transitions and decay, nuclear reactions, radiation detection, natural radioactivity and elementary particles. This course will cover topics at a more in-depth level than PHYS 364. A student may not enroll in this course if he/she has successfully completed PHYS 364.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

Paralegal Studies

PLGL 105: Law Office Technology

This course introduces the fundamentals of how to use computer technology to accomplish tasks performed by paralegals in a law office or in legal setting.

PLGL 120: Introduction to Paralegal Studies

The paralegal profession is investigated in this course. Topics studied include careers as a paralegal, job searching techniques, ethics, and limitations of paralegals. The course will also explore the court systems of the federal government and Pennsylvania, as well as introduce legal research, including but not limited to mandatory and binding precedent, persuasive precedent, and legal citations. Legal writing and terminology are also course components as well as legal analysis and various systems utilized in a law office.

PLGL 125: Workers' Compensation Practice for Paralegals

Provides paralegal students with a knowledge of the workers' compensation laws and the legal concepts embodied in the Pennsylvania Workers' Compensation Act. Other topics include practice and procedure before administrative judges, trial issues, and the relationship of workers' compensation law to other administrative entitlements, such as Social Security Disabilities.

PLGL 130: Social Security Disability Practice

Provides paralegal students with a knowledge of the laws involved in Social Security Disability practice, as well as the practice and procedure before administrative judges, trial issues, and relationship to other administrative entitlements, such as worker's compensation.

PLGL 135: Interviewing for Paralegals

Provides paralegal students with a knowledge of the interviewing skills that are to be mastered in a legal setting. Interviewing skills are essential skills for the well-educated paralegal. The students will be exposed to the different types of interview situations that may be encountered in a legal setting. The students will demonstrate their knowledge of interviewing by conducting various types of interviews. The students will also be required to understand the ethical responsibilities in interviewing. The course will also provide the students with the communication skills necessary for effective interviewing techniques.

PLGL 150: Torts and Personal Injury Law

Tort law is an area of law that covers every aspect of society. Tort law governs the conduct of individuals, corporations, and businesses by providing an outlet for addressing civil wrongs. This course will provide the student with an understanding of the variety of torts and the elements necessary for tort cause of action. The student will gain an understanding of tort law through practical application of tort law concepts.

PLGL 200: Civil Litigation and Procedures

Intended to be a follow-up to the Torts and Personal Injury Law course. Enables the student to assist in all aspects of civil litigation including the drafting of pleadings. Entails an extensive study of pre-trial, trial, and post-trial procedures.

PLGL 215: Law Office Management

Covers the fundamentals of law office management. Designed to familiarize the paralegal with the practical inner-workings of a law office including understanding law office procedures. Law office management goes beyond mere efficiency and productivity and includes being sensitive to ethical concerns and providing quality legal services to clients in an affordable manner. Covers an array of topics that will be encountered in a law office setting.

PLGL 220: Contract Law and Business Organizations

Provides paralegal students with an understanding of basic business law concepts. The students will demonstrate their knowledge of contracts by drafting various contract clauses and an entire contract. The students will also be required to understand judicial interpretation of the contract principles by completing assignments. Educates paralegal students with regard to business organization and prepares the student to work in the area of corporate law as a paralegal. Gives the students an overview of the laws and the theory as well as practical information concerning sole proprietorship, partnerships, and corporations. Students will be required to analyze cases to illustrate the application of laws being discussed. The students will also be required to draft various documents regarding business operations. Warranties, sales, and agency agreements are also reviewed.

PLGL 228: Immigration Law for Paralegals

This course will provide an introductory overview of US immigration law with a focus in the paralegal's role in case assembly, compilation, intake, and processing. Students will learn to identify common issues and available benefits associated with processing nonimmigrant and immigrant visa cases to discuss with the Attorney. Students will also gain an overall understanding of both the nonimmigrant and immigrant visa process and US citizenship including the forms, documents, and filing procedures associated with each.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PLGL 230: Estates and Trusts

Enables the student to understand the legal principles involved in estate work and to demonstrate the skills necessary to assist in the preparation and completion of all documents incident to estate practice. Includes a coverage of living wills and various types of trusts as well as probate administration.

PLGL 235: Family Law

Provides the student with a thorough, working knowledge of the basics of family law. Covers the essentials of family law and the tasks that a paralegal might perform in an active practice, such as client interviewing and coordinating discovery. Entails a study of the various aspects involved in family law including marriage, antenuptial agreements, divorce, spousal and child support, property distribution, divorce proceedings, and adoption. The course materials are supplemented by Pennsylvania specific materials.

PLGL 240: Bankruptcy Law

Presents a practical approach to the understanding of bankruptcy law. Familiarizes the student with the bankruptcy code as well as the bankruptcy process. Approaches the bankruptcy process with a practical perspective and "hands-on" approach featuring research and drafting projects.

PLGL 245: Legal Research and Writing

Involves the understanding of the various sources involved in law. Includes primary and secondary resources. The student will be able to distinguish binding or persuasive law. The student will combine legal research with legal writing by completing problems and preparing of a memorandum of law. Legal writing entails case briefing, drafting a memorandum of law, and review of components of legal correspondence. Utilizes the library at Lehigh County Court of Common Pleas.

PLGL 250: Legal Internship

Provides the student with "hands-on" experience while working at a law firm, courthouse, bank, or other acceptable locale. The student will work a total of 225 hours at the business during the semester, as well as attendance in meetings to discuss job-searching skills. Intended to be taken after a majority of the course work is completed. Must be pre-approved by the program coordinator according to deadlines established in internship manual.

PLGL 255: Legal Writing

Legal writing skills are reinforced through various assignments. The student will draft case briefs, complaints, answers, discovery demands, motions, and various types of legal correspondence. Legal research will be utilized to respond to a fact simulation that results in a memorandum of law. Grammar competency is expected.

Political Science

POLI 10: Introduction to American Politics

The historical background and general principles of American federal government. The congress, the presidency, administrative organization, civil service, the courts, and political processes are described and analyzed.

POLI 20: Introduction to International Relations

A study of the diplomatic, organizational, military, and legal relationships among states. Designed to provide a conceptual framework leading to a better understanding of international developments, the course considers the nation-state system, sovereignty, nationalism, the sources of national power, the foreign policy making process, and conflict and conflict resolution.

POLI 30: Introduction to World Politics

A comparative examination of the cultural environments, decision-making processes, leadership patterns, public policies and political development tendencies of western and non-western societies. Problems of methodology are reviewed.

POLI 40: Introduction to Political Theory

This course is a survey of classical Western political thought. Works covered in this course are crucial for an understanding of the development of political thought in Western civilization, political culture, and government. This course critically examines the major political philosophers from ancient Greece through the Middle Ages. It focuses on issues such as nature, justice, the good society, and the role of the state.

POLI 50: State and Local Government

A general consideration of federal, state, and interstate relations followed by a more detailed treatment of the state-local government relation in the United States. Particular emphasis is placed on the citizen's role and representation in grassroots government. Possibilities for improvement of state and local government are explored.

POLI 101: Social Research Design and Writing

Social Research Design and Writing introduces students to the formal process of social scientific inquiry. As in any scientific discipline, knowledge in political science is advanced through the careful application of the scientific method, emphasizing the development of theoretical explanations, derivation of testable hypotheses, and creation and application of a research design used to empirically evaluate the theoretical claims. This course focuses on the core elements of the scientific research process, including the inception of the research question, preparing an academic literature review, generating theoretical claims, deriving testable hypothesis, and designing an empirical research design.

POLI 115: Public Administration

The basic principles of administration in the public sector are presented and analyzed. Surveys the historical development of contemporary public administration and examines the process, both formal and informal, by which public policy is implemented.

POLI 132: Politics Europe

A study of the governmental systems and politics of Western European nations. Special attention is given to Great Britain,

France and Germany. Contrasts and comparisons are drawn among these governments and with other governments, including the United States.

POLI 133: The Politics of Cuba and the Caribbean

The Politics of Cuba and the Caribbean aims to use the analytical tools of comparative politics to impart a comprehensive understanding of Cuban politics, society, and culture, within the broader context of the unique challenges facing the countries of the Caribbean and their diasporas in the United States. Cuba is a country that for many remains shrouded in mystery and intrigue. This course will challenge the dominant perceptions about Cuba that have been shaped by the American news media and popular films. Using articles and texts from a variety of political perspectives (including sources from within Cuba) will bolster student debate on the relative significance of different historical trends and developments as well as controversial current events. While highlighting the intricacies of Cuba's historical and political development, this course will also place Cuba in a comparative context with the experiences of other countries in the Caribbean to examine a variety of themes central to study of the comparative politics.

POLI 134: Politics of the Middle East

A comparative analysis of the political systems of an area that encompasses seventeen countries, including 13 Arab states, two Persian-dominated states (Iran and Afghanistan), plus Turkey and Israel. Special attention is paid to the fragmented Islamic cultural traditions of the region, the impact of Western Colonialism, the monarchical-socialist dichotomy, the special problems of Israel and the Palestinian Arabs, as well as the politics of oil.

POLI 135: Urban Politics

An examination of the place of municipalities in the American political system. The relationship of municipalities to the state and federal government. Forms of municipal government will be examined as well as proposed forms of metropolitan government. Participation in municipalities will be considered along with a discussion of individual participants, particularly majors, managers, and councilmen. Current municipal problems and future prospects for municipalities will be discussed.

POLI 140: Law and Society

An introductory course that surveys selective legal and socio-political views on the place of the legal system in society. Attention will be given to contemporary issues which raise significant or troubling questions for the main theoretical themes, such as the historical basis for the principles of the "rule of law" or an "autonomous legal system" and the social conditions for their existence or nullification.

POLI 141: Machiavelli to Marx

A critical examination of political theory as it developed in the West since Machiavelli. Emphasis will be on the development of liberalism, democracy, socialism, communism and fascism. Contemporary trends will be considered.

POLI 181: Criminal Law

This course is an in-depth analysis of criminal law in the United States. It focuses on the nature and purposes of criminal law, the sources of classifications and limitations on criminal law, the elements of criminal liability, defenses to criminal liability, parties to crime and the specific crimes against persons, property and public order and morals. Attention will be given to the model penal code and the criminal law of Pennsylvania.

POLI 182: Criminal Procedure

An extensive analysis of criminal procedure in the United States. The course will focus on decisions of the U.S. Supreme Court dealing with criminal procedure principles and doctrines. This course is designed as a follow-up course to Criminal Law.

POLI 200: Statistics for the Social and Behavioral Sciences

The purpose of this course is to introduce the student to the concepts of descriptive and inferential statistics. The results of any research should be summarized by appropriate descriptive statistics such as central tendency, variability, and the shape of the distribution. Relationships will be studied using correlation, regression, and chi-square. Research which involves sampling

will be analyzed by appropriate inferential statistics such as t-tests and ANOVA. Sampling error, hypothesis testing, significance levels, Type I Error, Type II Error, and power will be discussed. In addition, the student will be introduced to SPSS for Windows, Microsoft Excel, and/or other appropriate software for performing descriptive and inferential statistical procedures presented throughout the course. No students (Sociology or non-Sociology majors) may receive credit for both PSYC/SOCI 200 and SOCI 201 due to substantial overlap.

POLI 201: Empirical Political Analysis

An introduction to political analysis based on systematic social science methods. Discussion of differing approaches to Political Science but concentration on empirical analysis. Topics include the nature of social science, measurement, statistical analysis and hypothesis testing. The course is intended primarily for political science major students and is not a proper choice for a student seeking to survey the subject matter of political science.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

POLI 211: Public Opinion and Propaganda

An examination of various aspects of public opinion and political influence, including: definitions of public opinion; an overview of political socialization; analysis of the structure of public opinion and propaganda in modern societies; evaluation of the ideals and realities of popular government; and an introduction to methods of public opinion measurement.

POLI 213: Court and Politics

An analytic study of the most significant facets of the entire American legal system. Basic legal theories, basic structure of federal and state court systems. Judicial reasoning process, the system of precedents and the most basic and important substantive areas of law will be considered.

POLI 214: American Political Parties

The first part of the course will examine the development of party systems from a comparative perspective. The remainder of the course will examine the development and functioning of the American party system. Such topics as interest representation, recruitment, campaigning, party organization, and electoral behavior will be examined. The role of political parties in a democracy and the concept of party responsibility will also be considered.

POLI 222: International Political Economy

This course introduces students to the key concepts, theories, and substantive issues of international political economy. Special attention is paid to the historical development of the modern international economic system, trade, monetary and finance policies, development, and globalization. The overall emphasis of the course is on the politics of international economic relations. In other words, who wins, who loses, and why? Furthermore, what principles are at stake when policy-makers consider and make various choices? This course may be used as a General Education elective.

POLI 224: Politics of Development

Politics of Development examines political, economic, and social development and underdevelopment in the plethora of countries that comprise the Developing World. Utilizing a comparative approach, the course identifies the common challenges faced by developing countries and the strategies adopted to address them. Major topics considered in the course include the evolution of markets and determinants of economic growth; nation-building and political developments (e.g., democratization); the role of developed countries and international organizations in the developing world; and human rights and globalization.

POLI 225: Planning and Decision-Making Theory

An examination of modern techniques of rational decision-making such as cost-benefit analysis, with special attention given to how these techniques are applied to environmental problems. Problems in planning and the quantification of values are considered.

POLI 227: The Causes of War

The Causes of War examines nation-states' efforts to maintain their borders and protect their government and citizenry from inter and intra-state conflict. In doing so, the course will place a special interest on the theoretical and methodological concepts that are fundamental to studying such issues as deterrence, compellence, and international engagement. Additionally, attention is paid to the concept of security in a post Cold War World and how nation-states are attempting to meet the evolving economic, ecological, and terrorist challenges. The course may be used as a General Education elective.

POLI 228: American Foreign Policy

A study of the American foreign-policy-making process with a focus upon the institutions and functions of America's foreign relations. Special emphasis is given to the period since 1945. Case studies are utilized.

POLI 231: Social Movement and Revolutions

Social Movement and Revolutions analyzes the causes, objectives, strategies, and consequences of major social movements and revolutions throughout world history. Revolutions are among the most hotly-debated and far-reaching political events in terms of their consequences for human development, ideological viability, and the nature of world political systems. This course will offer students a broad theoretical framework for understanding the place of social movements, cycles of contention, and revolutions within the more general category of contentious politics. The course will analyze both successful and failed cases of social contentious politics. The course will analyze both successful and failed cases of social movements. Additionally, the challenges for both social movement formation and success in the 21st century will be addressed in detail.

POLI 242: Democratic Theory

This course acquaints students with both classical and recent democratic theory and the issues that surround democratic governance. Many argue that democracy in the only legitimate form of government. This is evidenced by the proliferation of representative governments throughout the world during the 20th century. As it stands today, some form of democratic government makes up the majority of regime types in the world. This course begins with the meaning of democracy and then examines the obstacles to democratic governance, such as: challenges of capitalism, protection of minority rights, issues on representation, lack of legitimacy, and political culture. By the end of this course, students will be able to describe and summarize the concepts, theoretical debates, and limitations to democracy, clearly articulate and defend a conceptual and institutional understanding of democracy, and coherently present the limitations and issues of each theoretical model.

POLI 311: Constitutional Law: Institutions and Functions

A study of the development of the Constitution through the interpretations of the Supreme Court. The course emphasizes the institutional aspects of the federal system and also economic regulation within the federal system.

POLI 312: Constitutional Law: Civil Liberties and Civil Rights

An analytical study of the U.S. Supreme Court cases interpreting clauses of the Constitution guaranteeing the rights of individuals: the meaning of the Bill of Rights and the Fourteenth Amendment. Attention is focused on recent decisions and their impact on the governmental system and society.

POLI 313: The American Presidency

A study of the development, dynamics, politics, and impact of the American Presidency.

POLI 314: Environmental Policy and Law

Designed to introduce students to the legal, administrative and political dimensions that pervade national environmental disputes, laws, and regulations. The course will employ both a legal and administrative process orientation. Through the use of legal case material and legal, political, statutory and regulatory analysis, students are taught about the different ways statutes and regulations attempt to address environmental problems, including the strengths and weaknesses of each generic statutory and regulatory type. No , although it is preferred Introduction to EVSC 100 Environmental Science or POLI 010 American

Government be taken first.

POLI 316: Politics, Sex, and Gender

An extensive examination of the constitutional and legal bases of sex-based discrimination in the United States. The course will focus specifically on statutory law and judicial decisions relating to discrimination of both men and women.

POLI 321: International Law and Organization

An analytical study of the legal framework, principles, and practices of the nation-state includes the forms and functions of international organizations with special reference to the role of the United Nations in contemporary international politics with a focus on selected legal problems.

POLI 322: International Relations Theory

International Relations Theory examines the competing theoretical models that explain the fundamental issues in world politics. Utilizing an applied theoretical approach, the course examines and deconstructs the dominant international relations theories and tests their explanatory power with both historical and modern issues. Major theories considered in this course are realism, liberalism, constructivism, critical theories (e.g. feminist and Marxist approaches), and decision-making theories. Inter alia, topics considered are alliance formation, strategic choice and conflict, international institutions and their role in facilitating cooperation and trade, arms control, globalization, and morality.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

POLI 325: The American Legislative Process: National and State

A study of legislative institutions, process and behavior at the national and state legislative levels. Particular emphasis is given to a description and analysis of the vast quantity of legal, historical, normative and behavioral literature available in this field. Legislative processes are analyzed with emphasis on their relation to the larger environment and inclusive political systems.

POLI 332: The Politics of Latin America

An examination of the major forces which determine the politics of the Latin American states. A problem-centered approach is emphasized, designed to highlight the most important contemporary issues confronting these countries in both their domestic and external relations.

POLI 341: American Political Thought

A critical examination of the essence and development of the American political culture. Contemporary trends in American political thought will be considered.

POLI 346: Public Budgeting and Fiscal Management

This course will address all major facets of public budgeting theory including budgetary formats, governmental budgetary decision processes at the federal, state, and local levels, bargaining and politics in budget decision making, governmental tax policies, and strategies for fiscal management. In addition, the course will focus upon practical application of theory through the use of real-life case studies. A special section on grant writing and non-profit fiscal management will highlight the needs of non-profit organizational management.

POLI 347: Human Resource Management in the Public Sector

This course will cover both the general theory of human resource management and the practical applications of this theory in the public sector. Students will be exposed to various aspects of human resource management including job analysis, worker motivation and management, labor/management relations and collective bargaining. Public sector issues such as equal worth, sexual harassment, ADA and equal employment opportunity will also be addressed. In particular, the course will highlight the constitutional, legal and political constraints and requirements which are unique to public sector management.

POLI 370: Independent Study in Political Science

Independent reading or research under the supervision of a member of the department in an area of political science of special interest to the student. A total of 6 semester hours may be earned in independent study, with no more than 3 semester hours taken in any one semester.

POLI 371-379: Selected Topics in Political Science

An analytic study of a selected topic in Political Science. Topics will vary depending upon interests of student and faculty, or timeliness of the subject matter. The course may be repeated for credit twice, provided that the same topic is not repeated.

POLI 380: Senior Seminar in Political Science

Readings and discussions in the area of the individual student's interest. The course serves as preparation for the comprehensive examination in Political Science. Required of all Liberal Arts students concentrating in Political Science.

POLI 381: Senior Seminar in Public Administration

Readings and discussions on the subject of the field of public administration and in the area of the individual student's interest. The seminar concentrates on the history and nature of public administration. The course serves as preparation for the comprehensive examination in public administration. Required of all Liberal Arts students majoring in Public Administration.

POLI 390: Federal, State, and/or Local Government Internship

A limited number of selected students participate in a study and training program on location in federal, state, or local government offices under faculty supervision for a full semester, full time. Consultation with the Political Science Department is required prior to registration for this program. Open only to Political Science or Public Administration majors.

POLI 391: The Harrisburg Internship Semester (THIS): Internship

THIS Internship is a program sponsored by PASSHE and is designed to give the student firsthand, practical experience and the opportunity to work alongside officials at all levels of state government. THIS is open to qualified students from any major, who have a 3.0 GPA and have earned 45 credits. A faculty Campus Coordinator selects students from the university to serve as THIS interns.

POLI 392: The Harrisburg Internship Semester (THIS): Research

The Harrisburg Internship Semester provides a comprehensive academic approach to the internship experience. THIS Internship is a program sponsored by PASSHE and is designed to give the student firsthand, practical experience and the opportunity to work alongside officials at all levels of state government. In addition, students are required to complete a thesis-length research project. THIS is open to qualified students from any major, who have a 3.0 GPA and have earned 45 credits. A faculty Campus Coordinator selects students from the university to serve as THIS interns.

POLI 393: The Harrisburg Internship Semester (THIS): Seminar

The Harrisburg Internship Semester provides a comprehensive academic approach to the internship experience. THIS Internship is a program sponsored by PASSHE and is designed to give the student firsthand, practical experience and the opportunity to work alongside officials at all levels of state government. In addition, students are required to participate in rigorous weekly public policy seminar. THIS is open to qualified students from any major, who have a 3.0 GPA and have earned 45 credits. A faculty Campus Coordinator selects students from the university to serve as THIS interns.

POLI 395: Honors Independent Study/Thesis

Honors Independent Study/Thesis.

POLI 425: Public Policy Making

The study of public policy within an analytical framework. Emphasis will be given to: conceptual frameworks and approaches to the study of public policy; the role of the environment in the policy process; the effect of political structures and institutions on public policy; and the citizen in the policy process.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

POLI 441: Managerial Leadership and Ethics

This course gives graduate public administration students a fundamental and practical understanding of effective administrative leadership. Various leadership approaches are examined, paying particular attention to the public sector. With leadership comes ethical responsibility. How does one attain organizational objectives while accommodating for politics, ethics, and multiple agendas? How does a public administrator balance conflicting interest and the public good? In what way is integrity the means to effective leadership?

POLI 465: Administrative Law

An analytic study of the law dealing with the power, procedures, and judicial review of the administrative agencies of government; emphasis will be placed on federal agencies and procedures. Graduate course open to juniors and seniors with 2.90 Q.P.A. and Departmental permission.

Public Relations

PREL 250: Public Relations Ethics and Law

A survey of legal and ethical issues relevant to public relations. Specific topics will include free speech, corporate speech, intellectual and creative property, and defamation. This is a required course for all undergraduate Public Relations majors.

PREL 310: Public Relations Research

This course will provide students with opportunities to understand the critical role of research in the public relations process from the development and management stages to the evaluation phase. Students will learn how to use the most appropriate research techniques including qualitative, quantitative, and mixed-methods for specific public relations objectives. This is a required course for all undergraduate Public Relations majors.

PREL 338: Personal PR: Entering the Profession

This course will teach self-marketing strategies for professionals hoping to enter the workplace as full-time or freelance writers. Students will create professional identities for themselves in an online environment. A keystone project of the course will be to design a professional, online portfolio of work. This course will also require students to create a blog about a professional topic with the larger goal of positioning themselves as contributing members of online professional communities. This is an elective course for all undergraduate Professional Writing majors.

PREL 380: The Agency Experience, Part One

This course is part one of a two-semester capstone experience for public relations majors. In it, students will begin to develop public relations programming for a real client (they will execute the program in part two of this capstone experience, which they will take the following semester). Course activities will include meeting with clients, researching issues, strategizing programming, and pitching ideas to the client. This is a required course for all undergraduate Public Relations majors.

PREL 381: The Agency Experience, Part Two

This course is part two of a two of a two-semester capstone experience for public relations majors. In it, students will develop

materials and implement public relations programming that has been strategized and proposed during the first part of this course, which they will have taken the previous semester. They will also evaluate the success of the program and report their evaluation to their client. This is a required course for all undergraduate Public Relations majors.

PREL 390: Public Relations Internship

This course provides students with a supervised professional experience focused within the specialties of the public relations field. This is a required course for all undergraduate Public Relations majors.

Professional Studies

PRST 100: Introduction to Business for the Non-business Major

This course is an introductory course designed to familiarize students with the nature and purpose of business enterprises. Topics explored include: the environment of business organizations and their role in society and the economy, forms of ownership, the management process, managing human resources, developing marketing plans, and managing financial resources. This course cannot be used by business majors to fulfill business course requirements.

PRST 110: Marketing for the Non-business Professional

Fundamentals of Exchange is an introductory course which exposes students to creating customer value and facilitating the exchange between seller and buyer. The importance of value in the customer-supplier exchange will be emphasized. The focus of the course is creating satisfaction of customers' needs through product/service planning and development, distribution selection, promotional decisions and price determination. Students will have the opportunity to explore these topics in a variety of different unique industries. This course cannot be used by business majors to fulfill business course requirements.

PRST 120: Accounting Survey for Professional Studies

This course is designed to provide a basic understanding of Accounting and other related financial issues that may be encountered by students entering the business world. Students will be exposed to a variety of Accounting topics, some financial, some managerial. Students will be expected to demonstrate how financial information is gathered, reported and used in the decision making process. This course cannot be used by business majors to fulfill business course requirements.

PRST 185: Fundamentals of Personal Finance

Fundamentals of Personal Finance is an introductory course that explores financial planning techniques to manage personal financial plans. Developing personal financial statements and plans will be explored. Other topics will include: considerations of managing basic assets such as cash and savings, automobile and housing decisions, managing credit and investments, and retirement planning. This course cannot be used by business majors to fulfill major course requirements.

PRST 210: Introduction to Entrepreneurship

This course is designed for non-business majors who want to start their own business. The course will focus on how to start and operate a small business. A primary focus of the course will be the development of a business plan. The business plan will focus on the key parts of planning and operating a business such as management, marketing, creating financial statements and determining financial requirements.

PRST 220: Wealth Creation for the New Entrepreneur

This course is designed for students in any major who wish to begin and develop a new business enterprise in their disciplinary field or in a different field of endeavor. The course will focus on topics of taxation for the new business, as well as taxation for the growing business. Also, topics will be covered in the areas of profit sharing, retirement funds, and methods of transferring funds between businesses. All topics target the new entrepreneur.

PRST 232: Practical Leadership

Practical Leadership is a study of leadership focused on personal development and the practical application of leadership skills in organizations of all kinds. This course examines the experience of successful leaders in diverse walks of life and encourages students to reflect on how to develop their own leadership abilities over a lifetime.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PRST 290: Selected Topics in Professional Studies

This course will permit the exploration of specialized topics that are not covered in existing courses or are not available to non-business majors. The course will emphasize a variety of current topics and contemporary issues in business, the economy and that affect the students as employees and consumers. Students will review current literature and improve their ability to analyze and express their thoughts relative to the selected topic. This course cannot be used by business majors to fulfill business course requirements.

PRST 410: Accounting, Budgeting, and Financial Reporting for Public Libraries

This course is designed for students majoring in Library Science and professional librarians wishing to strengthen their knowledge of Pennsylvania Law relating to accounting, financial reporting, and budgeting for public and special libraries in the Commonwealth of Pennsylvania.

Professional Writing

PRWR 100: Reading and Writing in the Professions

This course will orient students to the significance of critical reading and different genres of writing in public, professional, creative, and academic careers. Students will analyze a range of print and non-print texts and media from different genres. They will also get experience writing in a variety of different genres. Students will exercise and refine interpretive methods, critical strategies, and writing practices as they also explore and prepare for the varied career opportunities for English and Professional Writing majors.

PRWR 107: Conventions of English Grammar

This course surveys the fundamentals and conventions of English grammar and syntax. Topics include lexical categories, phrase structure, clause structure, modification, subordination, punctuation, and language acquisition. Additional attention is given to matters of style in order to sharpen students' prose. This course is recommended for those pursuing degrees in English, Professional Writing, Elementary Education, and English Secondary Education although open to any student wishing a deeper understanding of English grammar.

PRWR 108: Introduction to Creative Writing

This course provides an introduction to creative writing in the genres of fiction, poetry, and drama, creative nonfiction, and nonfiction. Students will craft original creative works and revise based on critique and theoretical study of the writing process. Students will also read and analyze published works of poetry, fiction, drama, and nonfiction to serve as models for their own writing.

PRWR 111: Journalism I

Journalism focuses of the fundamentals of reporting and newswriting for web, print, radio, TV, and social media audiences. The course stresses the reporting, writing and producing involved in producing text news stories, photos, and other multimedia components for all news platforms. It also stresses on the fundamentals of publication style and legal and ethical concerns in the practice of journalism.

PRWR 120: Technical Writing and Communication

This course focuses on helping students shape specialized information for a variety of different audiences. Students will learn effective strategies for creating user-centered information design based on written, oral, and visual communication techniques employed in technical, scientific, and professional settings. Special attention will be paid to taking complex processes and making them accessible for wider audiences. Students will learn how to communicate with clarity, accuracy, and concision in professional settings.

PRWR 205: Scientific Writing

This course offers a workshop-based introduction to writing in and about the physical, life, and social sciences. Students will analyze and produce science writing in a variety of genres for specialist and non-specialist audiences, including formats such as science journalism for a public readership, journal articles and oral conference presentations, research proposals and grant applications. In doing so, students will become familiar with the rhetorical, organizational, and stylistic conventions of professional science writing in a variety of contexts, with a special emphasis on the place of narrative in effective scientific communication.

PRWR 207: Writing for the Workplace

This course focuses primarily on written forms, such as letters, memoranda, email, and both formal and informal reports. Through modeling and practice of forms, researching external sources, and examining case studies, students will gain experience writing in a business environment. This environment features deadlines, professional ethics, advanced communication technology, and audience expectations that influence the writing process. This course will also require students to practice oral presentations and analyze team dynamics during group projects.

PRWR 212: Introduction to Mass Communications

A study of the method and philosophy of mass communications. Historical growth of the mass media is described. Interrelationships of present forms of mass communication are linked to the underlying necessity to write, speak, and think clearly and honestly.

PRWR 213: Copy Editing: Revision and Style

Students in this course will produce written documents, revise and rewrite manuscript copy, and give and receive editorial critique. Emphasis is placed on creating clear and polished copy and identifying and correcting errors-in grammar, punctuation, and sentence structure.

PRWR 214: Magazine Writing

This basic course introduces students to magazine writing. Students learn what constitutes magazine style writing by studying magazine articles from a wide range of publications intended for diverse markets. Students examine the growth and development of the medium, the current state of the industry and trends for the future. Students write magazine articles and study the processes by which articles may be sold to appropriate publications.

PRWR 215: Pop Music Journalism

Students are given exposure to and practice in writing about popular music in a variety of genres and for a variety of audiences. Students learn the practices of evaluation, interpretation, and analysis of popular music artists, performances, representations, genres, songs, albums, music videos, subcultures, etc.

PRWR 216: Writing for Public Relations

Students in this course analyze and compose various documents related to the field of public relations. Emphasis is placed on shaping perception through crafting clear, direct, and accurate prose.

PRWR 217: Storytelling in Public Relations

This course will teach the craft of storytelling as it applies to public relations. Students will learn basic narrative theory, how to identify story ideas, how to pitch stories to the media, and practice a variety of research techniques, including interviewing.

Students will also write stories designed to advance or enhance the reputation of an organization. Class projects will focus on both written and visual storytelling. This is a required course for all undergraduate Public Relations majors and an elective course for students in the Professional Writing major and Public Relations minor.

PRWR 223: Games and Literature

In this course students will play, analyze, and write their own interactive narrative games. The literary nature of video console, computer, boardgame, and roleplaying games will be the focus of this course with particular emphasis on short form avant-garde games that challenge the genre. We'll discuss the ways that narrative games transform the reader into a player with an active role in story creation, how games might be understood as literature, and the tropes that these games often rely upon. Playing and discussing games is one major part of the course activities, but writing will be equally important as the main method of responding to and creating interactive games.

PRWR 226: Newsletter Writing and Design

Students in this course write and design print and digital newsletters for a variety of professional organizations. Emphasis is placed on positioning the organization via Interesting, newsworthy articles as well as the Interaction of text and graphics and maintaining the brand identity of the organization.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PRWR 235: Lyric Writing

This course teaches the craft of writing song lyrics. Students will learn the process of lyric writing through the study and practice of creative writing techniques. Students will read, analyze, discuss, and write about notable song lyrics, poetry, and prose by a diverse group of writers to better understand the form. With a combination of peer and instructor feedback, classroom discussions, and careful analysis of written content, students will sharpen their skills as lyric writers.

PRWR 244: Story Analysis and Screenplay Development

This course will offer students a comprehensive understanding of story analysis and screenplay development and will give them pragmatic tools used by the professional reader and development executive in the motion picture and television industry today. Students will learn and practice coverage skills while gaining an understanding of the elements of story. Class topics will include various types of coverage; how to compose story notes; and character breakdowns, treatments and outlines. Upon completion of the course, students will have written at least three pieces of full coverage that can be used as a part of a professional portfolio or to interview for a job as a reader or development assistant.

PRWR 250: Writing for Social Media

Students will learn theories and practices associated with using a variety of social media platforms for public relations purposes. A "working" class, this experience will require students to maintain a social media presence for a specific, real client. This is an elective course for all undergraduate students enrolled in the Professional Writing major and Public Relations minor.

PRWR 251: Flash Fiction, Prose Poetry, and other Short-Short Stories

Flash Fiction (also called micro, nano, sudden, or lightning fiction) incorporates literary principles of both fiction and poetry, and we will be exploring this form by reading and writing short-short stories of 1,000 words or less. Individual classes will focus on analyzing the various poetic and narrative elements such as rhythm, figurative language, characterization, voice, etc. Students will also participate in regular workshops during which their writing will be critiqued by their peers. Additional attention will be given to researching literary markets (both in print and online) and the submission process for publication. This is an elective course intended for new writers to experiment and to develop control of their language, as well as more experienced writers seeking to refine their skills.

PRWR 255: Creating User Documentation

This course focuses on helping students create effective end user documentation in a variety of forms. Students will learn user-centered approaches for crafting technical communication documents such as user manuals and training materials through both written and visual means, and special attention will be paid to hands-on application and usability workshops. Students will learn how to create user documentation that is clear, accurate, and compelling.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PRWR 303: Investigative Journalism

PRWR 303 Investigative Journalism concerns the strategies and techniques of in-depth reporting. Students critically analyze professional investigative and public affairs reportage. In pursuit of their own stories, students learn how to acquire original and electronic documentation at the local, county, state and federal levels.

PRWR 304: American Literary Journalism

PRWR 304 Literary Journalism concerns the relationship between mass media journalism and literature, focusing on strategies and techniques of significant works and movements in American journalistic literature that students may apply to their own writing.

PRWR 305: Freelance Journalism

PRWR 305 Freelance Journalism provides guidance in the preparation and writing of news and feature material for the student newspaper and a variety of external publications. It also examines issues facing freelance writers, as well as the student press.

PRWR 306: Advanced Magazine Writing: Covering a Specialty

This advanced course teaches students of magazine journalism how to develop a specialty. Students continue to study what constitutes magazine style writing by reading magazine articles from a wide range of publications and studying how their own specialty manifests in different publications. Students research and write magazine articles and study the process by which articles may be sold to appropriate publications.

PRWR 308: Rhetoric and Writing

This course focuses on established and developing rhetorical and stylistic theories which form the conceptual base of the practice and study of writing and stresses the students' application of these theories.

PRWR 309: Poetic Forms

This poetry writing course is designed for the study and practice of poetic forms-- the larger structural patterns that organize the language of poems into unified wholes. Students will write poems in a variety of well-established poetic forms, including but not limited to: haiku, free verse, sonnet, blank verse, villanelle, and pantoum, while studying influential examples of poems in those forms by poets from diverse historical eras and cultural backgrounds. Students will also research the professional poetry journals that accept poems in the forms they have written in, and learn the process of submitting their work to those journals.

PRWR 311: Creative Writing: Short Fiction

Students in "Creative Writing: Short Fiction" develop writing skills as will enable them to produce original works of fiction. Students read, analyze, and critique each other's stories as well as those by accomplished fiction writers, and ideas, techniques, and aesthetic concepts are discussed in a workshop setting.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PRWR 312: Creative Writing: Poetry

PRWR 312 Creative Writing: Poetry is an advanced course in the writing of poetry, focusing on poetic craft and style through critical analysis of student poems, and analysis, interpretation, and evaluation of published contemporary poetry. The course will be conducted as a workshop with extensive peer review.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PRWR 313: Creative Writing: Drama

An advanced course in the writing of drama.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PRWR 315: Arts and Entertainment Writing

This class explores the nuances of contemporary arts and entertainment journalism and writing, with special emphasis on creating interactive, digital articles and media that will engage audiences. Students will also read, consume and respond to a wide range of recently published articles, blogs, podcasts and web videos. Students will learn to critically respond to a wide range of film and television media. They will learn to respond critically to media, write appropriate to audience and market and interact with their audience via social media. Students will write articles, reviews, blogs and have the opportunity to create a podcast or web video.

PRWR 316: Public Relations and the Corporate Environment

PR and the Corporate Environment introduces students to the various roles public relations professionals play in both internal and external corporate communication strategies and efforts.

PRWR 318: Sports Writing and Reporting

Sports Writing provides students with the tools to write legitimate sports stories worthy of publication. Journalistic fundamentals such as research, interviewing, storytelling, accuracy, editing, and ethics will be stressed. The course will also involve photojournalism and the development of an online sport-related presence. This course requires familiarity with the Internet, access to a digital camera, and experience with word processing and slide show software.

PRWR 320: Advanced Technical Writing

This goal of this course is to help students master the art of creating technical reports for specific audiences. Students will learn effective strategies for crafting user-centered technical reports, and special attention will be paid to addressing complex problems with analytical reports. Students will learn how to write with (and edit for) clarity, accuracy, and concision in order to craft technical reports that resonate within professional settings.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PRWR 321: Information Design: Data Visualization in Technical Writing

This course focuses on helping students learn the principles and value of information design, with an emphasis on creating effective data visualizations for technical writing contexts. Students will learn strategies for acquiring, processing, and interpreting data, as well as how to create a variety of visualizations that connect with specific audiences. Special attention will be paid to making visualizations by writing code and using open source software to aid in data collection and design.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PRWR 325: Travel Writing

This course will enable students to write newspaper, magazine and online articles about specific destinations that inform the reader about the culture, history and landscape of a place. The class will not only focus on broader issues like research methods, tone but also micro-techniques regarding word choice and sentence structure. Students will produce a number of articles of varying styles, including travelogues, travel features, adventure stories and guidebook entries as well as read fine examples of each type of writing featuring destinations from around the world. Like most professional travel writers, the students will begin by seeking out inexpensive, close-to-home destinations that might appeal to a broader audience, market appropriateness.

PRWR 326: Advanced Desktop Publishing: Writing and Designing Documents

In this advanced course, students will consider aspects of document composition both content and design. Assignments will emphasize promotional copy writing as well as report writing.

PRWR 330: Writing the Novel

This course teaches the craft of writing the novel. Students will create original fiction with the intent of completing a book-length story. A capstone project of the course will be to submit a final portfolio of work containing complete, polished drafts of the chapters written and workshopped throughout the semester. The course will also require students to read, analyze, discuss, and write about novels by celebrated writers.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PRWR 333: Digital Rhetoric and Writing

This course focuses on honing the analysis and production of contemporary digital texts by extending longstanding academic conceptions rooted in the printed word alone. Specifically, the course examines how emerging areas within Rhetoric and Composition such as visual rhetoric, digital writing, and multimodal style are vital in cultivating sophisticated, responsive methods of analysis and production in a variety of online texts. Students will familiarize themselves with issues surrounding the creation, revision, and deployment of digital texts to better understand the complex rhetorics involved when arranging words, images, sounds, coding languages, available designs, fonts, colors, and spaces to make new kinds of 21st century texts and arguments.

PRWR 339: New Media, Story, Change

This course investigates the crucial role that story plays in creating impactful campaigns within new and emerging media environments. Particular attention will be paid to the ways in which story continues to be one of the most important rhetorical tools in community and social movements seeking change. Readings will draw from a wide range of disciplines including rhetoric, literacy studies, marketing, public relations, communication studies, social media theory, cognitive psychology, and social movement studies.

PRWR 340: Screenwriting I

This course will offer an introduction to the art and craft of screenwriting and will prepare students to write screenplays for motion pictures or television that meet industry standards. The class will include intensive writing, readings, script analyses, and critiques. Students will complete assignments in story, structure, character, and script development. In addition, students will be introduced to the business of being a screenwriter and a motion picture industry professional today. For the term project, students will complete a short narrative screenplay.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PRWR 342: Screenwriting: Creating a Narrative Web Series

This course will offer an introduction to creating and writing the short-form episodic Internet TV series and will give students pragmatic tools used by screenwriters working in this burgeoning field of the digital media industry today. Class topics will include the series concept, character and story development, collaborative writing skills, and production design. Lectures and screenings will provide a background in the history and aesthetics of serial media projects, short-form video, and episodic drama. Upon completion of the course, students will have created a web series, written a pilot script and two subsequent scripts, and employed a screenwriter's considerations in devising a pre-production strategy. In addition, they will be introduced to the business of promoting a narrative web series designed for distribution over the Internet.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PRWR 345: Rhetoric, Democracy, Advocacy

The connection between rhetoric and democracy is an old one dating back to the origins of both concepts in Western traditions. Simply put rhetoric the skilled use of argument and persuasive discourse and democracy were seen as ways to replace violence as the primary means of governing and maintaining social order. However, the connections between democracy and rhetoric may not be immediately apparent indeed the two may appear to be in opposition in contemporary society. This course argues that the intimate connections between rhetoric and democracy are critical to retain and reclaim for the health of democratic society and culture. In the era of globalization and digital media these connections are even more important. A healthy democracy requires citizen advocates who are skilled in the analysis of public discourse as well as in the production of persuasive texts.

PRWR 347: Activists Writing Media: Composing Democratic Futures

The early twenty-first century has seen an explosion in the development, repurposing, and critical use of new media by political activists. Unlike theoretical debates regarding the relative merits of new media compared to more traditional media or the vigorous business interest in "web 2.0" for its marketing possibilities, activists have approached new media in a rhetorical fashion. For activists, new media are part of the "available means" with which political organizing and campaigning take place. This course explores the multiple and complex ways in which activists have made use of and rewritten what counts as media, who counts as an authorized writer, and even what counts as writing. The course will investigate examples of activist campaigns, emergent theories of literacy, and the role of literacy training for the development of activists and how this is often at odds with the literacy instruction students receive in secondary and post-secondary schooling.

PRWR 350: Breaking News: Consuming, Reporting and Writing

This course provides undergraduate students with a more detailed study in the reporting and writing about breaking news, planned and unplanned events that happen and develop quickly in our communities every day. Students will engage with, analyze and respond to breaking stories that develop around them - locally, nationally and internationally - monitoring social media, websites, radio, TV outlets and print news sources. Students will also work in their communities, reporting on and writing about breaking news (small and large, planned and unplanned) as it happens around them. They will report and write short news stories using social media, online and print platforms. There will also be the opportunity to post photographs, sound clips and short video of the news they cover.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PRWR 370: Seminar: Selected Topics in Professional Writing

A course offering students the opportunity to study in depth a topic in the practice, theory, or history of the print media not covered in the regular curriculum. Students may register for this course more than once - up to a maximum of six semester hours of credit - so long as they do not repeat the same topic. However, they may take no more than three hours of credit under this rubric in any one semester.

PRWR 371: Independent Study in Professional Writing

A course offering the individual student an opportunity to study in depth a topic in the practice, theory, or history of written communications not covered in the regular curriculum. A student may register for this course more than once - up to a maximum of six semester hours of credit - so long as he or she does not repeat the same topic. However, a student may take no more than three hours of credit under this rubric in any one semester.

PRWR 380: Professionalization Seminar

This course will provide students with the tools they need to make the transition from undergraduate academic study to professional application of skills, apply for and obtain internships, and identify and work towards specific post-graduation goals. Students will learn about internship and professional opportunities for English and Professional Writing majors, create professional resumes and cover letters, complete effective social media profiles, create a professional website, network with professionals, and apply for and obtain internships. Students will be required to update the professional website during the internship to include work done during this experience. This is a required course for all undergraduate English and Professional

Writing majors and should be taken prior to the for-credit internship experience.

PRWR 390: Professional Writing/English Internship

The Professional Writing/English internship creates the opportunity for supervised, practical work experience in professional contexts wherein the skills attendant to English Studies are valued and can be developed. Internships are to be secured by the student under the advisement and coordination of English Department faculty, following ENGL/PRWR 380 Professionalization Seminar. The internship will extend the student's academic studies into the workplace and may fall into such professional categories as Editing, Journalism, Publishing, Public Relations, Social Media, Research, Campaign Organization, Communications, or Marketing. This internship may be taken for three, six, or nine credits.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PRWR 400: Creative Writing: Theory and Practice

This graduate-level workshop focuses on the production of original works of fiction, poetry, or drama. Using contemporary writers as models, students will explore various writing styles consistent with the practice of contemporary writing. Students will examine craft and technique used by celebrated authors. As this is a workshop, students are expected to critique the works of their peers and actively participate in classroom discussions. The course is meant to prepare students technically and creatively for further study in creative writing with the goal of producing publishable works. Emphasis is placed on the writing process itself.

PRWR 430: Rhetorical Traditions and Contemporary Renditions

This course studies the histories of rhetoric as well as contemporary intersections and applications across disciplines. Depending on the particular interests of the professor, one or more specific area(s) such as media, popular culture, sciences, feminisms and gender studies, composition studies, literary theories, literacies, global issues, pedagogy, arts, and political discourse will be chosen for a more detailed study. Critical to the course are the writing assignments that allow students to examine issues in more depth and explore alternative rhetorical stances and situations.

Psychology

PSYC 11: General Psychology

An introduction to the psychological bases of behavior in motivation, learning, memory, development, personality, perception, abnormal behavior, psychotherapy, attitude change, and group behavior.

PSYC 105: Contemporary Developments and Careers in Psychological Science

This seminar-style course serves as an in-depth examination of the current nature of psychology as a discipline, a scholarly pursuit, and as a potential area for the focus of a career. An emphasis will be placed on conveying an understanding of the processes that psychologists have used to expand and develop understanding within the domain of psychology, and how these are changing. This will include an examination of (1) critical thinking, (2) research methodology, and (3) current attempts to strengthen the credibility of psychological science by, for example, requiring research projects to be pre-registered, and requiring date to be made publicly available. Within this context, this course will also equip students with conceptual tools that will help them meaningfully address the personal questions of (1) whether psychology is the right field of concentration (major) for them as an undergraduate and (2) whether a career in the field of psychology could eventually be a fulfilling career choice after graduation. In this connection, the possibilities and practical aspects of launching oneself on a course of graduate training within psychology and/or on career path within psychology will be reviewed. If a student elects to take this course, then it would be best to take it immediately after having had general psychology or upon transferring into the major.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PSYC 110: Child Psychology

This course deals with the organization of psychological processes within the individual as he/she develops from conception to adolescence. It will focus on the physical, social, cognitive, and emotional aspects of child development as well as techniques of child study, theories of learning, genetics, and individual differences.

PSYC 115: Self and Social Identities

Who am I? How does my family and culture influence me? How does my identity change over time? The course seeks to answer these questions by better understanding our personal selves and social identities. Examining the inherently multifaceted nature of selves and identities (e.g., social, cultural, political) allows the student to better understand the emergence of identity, changes in self-concept and identities, and how these identities influence our attitudes and behaviors.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PSYC 120: Adolescent Psychology

A study of the interacting physical, social, and psychological characteristics of the adolescent stages of human development. Special attention will be given to means that parents and professionals might employ to facilitate positive growth and development of the adolescent.

PSYC 125: Life Span Development

This course examines human development across the life span from infancy to old age. The emphasis will be on physical, cognitive, social and personality development. Normal development will be stressed but aspects of abnormal functioning will also be considered.

PSYC 140: Educational Psychology

The focus of this course is the study of the human learning process, with an emphasis on the application of the principles of psychology to the problems of learning and teaching. The social, cultural, and political contexts within which the educational system is embedded is examined. Special emphasis is given to teacher effectiveness and to the procedures involved in facilitating learning, both at the elementary and secondary levels.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PSYC 160: Human Exceptionalities

The course is designed to give a functional understanding of the various types of exceptional or atypical individuals. Attention is given to the psychological problems arising out of the interaction of exceptional children and the environment. Individuals with physical, mental, neurological, sensory, and behavioral exceptionalities are studied.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PSYC 200: Statistics for the Social and Behavioral Sciences

The purpose of this course is to introduce the student to the concepts of descriptive and inferential statistics. The results of any research should be summarized by appropriate descriptive statistics such as central tendency, variability, and the shape of the distribution. Relationships will be studied using correlation, regression, and chi-square. Research which involves sampling will be analyzed by appropriate inferential statistics such as t-tests and ANOVA. Sampling error, hypothesis testing, significance levels, Type I Error, Type II Error, and power will be discussed. In addition, the student will be introduced to SPSS for Windows, Microsoft Excel, and/or other appropriate software for performing descriptive and inferential statistical procedures presented throughout the course. No students (Sociology or non-Sociology majors) may receive credit for both POLI/SOCI 200 and SOCI 201 due to substantial overlap.

PSYC 201: Computer Techniques For Behavior Sciences

This course provides experience in the use of computers in the research process with a focus on data organization, analysis, interpretation, and presentation. The Statistical Package for Social Sciences will be covered in depth. Topics to be explored at an introductory level include interfacing to operating systems (DOS, Windows, UNIX); spreadsheet, graphing, and database applications; and the Internet.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PSYC 202: Psychology of Personality

A study of the methods and concepts used in studying personality. Consideration is given to various theories as well as the experimental and clinical findings on personality.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PSYC 205: Psychology of the Black Experience

This course is designed to provide students with an in-depth examination of the factors that have historically, culturally, politically, educationally, and scientifically shaped the consciousness of black Americans. Specific attention will be paid to how these factors have explicitly and implicitly influenced the self-concept development of black Americans and how such self-awareness influences their interactions among themselves as well as other individuals from different racial and cultural groups.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PSYC 208: Psychology of Gender

This course is designed to introduce the psychological study of gender through an overview of theory and research on both the similarities and differences between men and women. Topics to be covered include (but are not limited to) the role of gender in development, health and wellness, education and the workplace, culture and media.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PSYC 215: Psychology of Prejudice

Prejudice will be defined and its origins, benefits to the prejudger and its implications for our society will be discussed. Antecedents of prejudice and means of reducing prejudice will be identified. Prejudice against specific groups of individuals will be explored.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PSYC 217: Forensic Psychology

An overview of the area of psychology and law. Topics covered will include psychological aspects of criminal behavior, the insanity defense, competency, commitment of the mentally ill, scientific jury selection and professional issues such as the duty to warn.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PSYC 220: Industrial/Organizational Psychology

The interactive relationships between organizations and the individual will be analyzed. Psychological principles involved in personnel selection, training, performance appraisal, motivation, group processes, leadership, organizational dynamics, and the work environment are considered. A minor focus on career planning.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PSYC 232: Psychology of Death and Dying

This course is designed to provide an overview of the psychological aspects of death and dying, including an understanding of the theories and research about different developmental aspects of death and dying, issues of coping with and preparation for death and dying and the concepts of normal versus abnormal grieving.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PSYC 240: Social Psychology

The behavior of the individual in society, the actions of humans in relation to other persons, the development of social goals, and social behavior. Prejudice and its effects on the individual as well as attitude formation and change will be discussed.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PSYC 242: Performance Psychology

This course investigates the psychological factors associated with skilled performance and how these factors can be applied to understand elite performance in various areas such as sport, music, and surgery.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PSYC 250: Abnormal Psychology

This course reviews the history, causes, symptoms, and treatment of the various types of abnormal behaviors. Special emphasis is placed on neurosis, psychosis, and psychosomatic disorders as well as organic bases of psychological functioning. Each diagnostic category is considered in light of traditional as well as current theory with special attention given to current research in the field.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PSYC 255: Environmental Psychology

The study of individual and group behavior as it relates to natural and human-made environments. Emphasis is placed on aspects of the environment such as space, physical arrangements, crowding, pollution, etc. as they relate to perception, development, and adjustment. Research methods for studying aspects of the environment are an integral part of the course.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PSYC 260: Psychology of Human Communication

Cognitive, emotive, and perceptual development and processes of communicative behavior. Included will be an overview of applicable theories and research, the influence of psychological, situational, and personality factors, and the interactive active processes of verbal and non-verbal communication.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PSYC 265: Human Sexual Behavior

An overview of the current scientific knowledge and research methods concerning human sexuality. The influence of learning, feelings, motivations, interactions, subtleties, problems and therapies of sexual behavior will be discussed.

PSYC 270: Experimental Psychology

Experimental Psychology deals with various aspects of research in the field of psychology. Experience will be provided with the

design of research, the collection of data, the analysis of data, and the presentation of results. An individual research project utilizing the theories and methods is required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PSYC 280: Selected Topics in Psychology

Topics in the fields of psychology that are of current interest will be selected for in-depth study. The course content will normally change each time the course is offered. The course may be repeated for credit provided that the same topic is not repeated.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PSYC 281: Selected Topics in Psychology

Topics in the fields of psychology that are of current interest will be selected for in-depth study. The course content will normally change each time the course is offered. The course may be repeated for credit provided that the same topic is not repeated.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PSYC 282: Selected Topics in Psychology

Topics in the fields of psychology that are of current interest will be selected for in-depth study. The course content will normally change each time the course is offered. The course may be repeated for credit provided that the same topic is not repeated.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PSYC 283: Selected Topics in Psychology

Topics in the fields of psychology that are of current interest will be selected for in-depth study. The course content will normally change each time the course is offered. The course may be repeated for credit provided that the same topic is not repeated.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PSYC 284: Selected Topics in Psychology

Topics in the fields of psychology that are of current interest will be selected for in-depth study. The course content will normally change each time the course is offered. The course may be repeated for credit provided that the same topic is not repeated.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PSYC 285: Selected Topics in Psychology

Topics in the fields of psychology that are of current interest will be selected for in-depth study. The course content will normally change each time the course is offered. The course may be repeated for credit provided that the same topic is not repeated.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PSYC 286: Selected Topics in Psychology

Topics in the fields of psychology that are of current interest will be selected for in-depth study. The course content will normally change each time the course is offered. The course may be repeated for credit provided that the same topic is not repeated.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PSYC 287: Selected Topics in Psychology

Topics in the fields of psychology that are of current interest will be selected for in-depth study. The course content will normally change each time the course is offered. The course may be repeated for credit provided that the same topic is not repeated.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PSYC 288: Selected Topics in Psychology

Topics in the fields of psychology that are of current interest will be selected for in-depth study. The course content will normally change each time the course is offered. The course may be repeated for credit provided that the same topic is not repeated.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PSYC 289: Selected Topics in Psychology

Topics in the fields of psychology that are of current interest will be selected for in-depth study. The course content will normally change each time the course is offered. The course may be repeated for credit provided that the same topic is not repeated.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PSYC 290: Culture and Personality

The course is designed as an interdisciplinary survey of the field of culture and personality. The key problem involves investigating the concepts of culture and personality and the nature of the relationship between them. May be taken as ANTH 290 or PSYC 290.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PSYC 293: Evolutionary Psychology

Evolutionary psychology is the application of evolutionary theory to the study of behavior. The consideration of selection pressures faced by humans enables the identification of behavioral mechanisms that promote adaptability, survival and reproduction. Key topics may include: mating strategies, kinship, aggression, cognitive mechanisms, and how evolutionary theory can provide a unified approach to understanding the different branches of psychology.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PSYC 305: Psychology Field or Research Practicum

This is a supervised learning experience in an approved applied setting that may be on- or off-campus. Psychology field settings are expected to include placements in human or animal service organizations. Psychology research settings are expected to include placements in academic or government institutions. Field and/or research experiences might include, but are not limited to, volunteering for a non-profit organization or government agency, observing at a church, school, or hospital, or working as a research assistant in a laboratory or other facility. This learning experience is not designed for activities related to Industrial/Organization or Clinical/Counseling services, which have existing internship courses for credit (See PSYC 362 and

PSYC 363). Early in the semester prior to the psychology field or research experience, the student must work with a faculty supervisor to determine the expected work hours and to develop a proposal outlining the anticipated learning activities. Students will need to plan in advance to submit both a Department course proposal form and a University internship request form for approval prior to course registration.

PSYC 310: Principles of Psychological Measurement

An introduction to the theory of measurement of human behavior, its application to test and survey design and the application and evaluation of tests and survey tools in practice clinical, industrial, educational, and research situations.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PSYC 311: Psychology of Learning, Motivation and Emotion

A study of the basic processes in the areas of learning, motivation, and emotion as viewed through the major theoretical systems and empirical research.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PSYC 312: Sensation and Perception

An overview of visual and auditory perception combining the empirical and phenomenal approaches. Sensory and perceptual bases of color, form, space, sound, and music are covered.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PSYC 325: Physiological Psychology

This course is designed to explore the relationship between physiological functions and their behavioral manifestations. The sensory systems, the central and peripheral nervous systems, and the glands will be covered as they affect motivation, emotion, learning and memory, and psychopathology. Normal as well as abnormal functions are examined.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PSYC 329: Autism Seminar

This psychology seminar provides in-depth exposure to historical and current research concerned with autism spectrum disorders (ASD). Through critical reading, synthesizing, and discussion of theoretical and empirical research studies, students will gain a greater understanding of the major psychological theories of autism, individual differences in ASD symptomology, and various techniques used for diagnosis and intervention spanning from infancy through adulthood.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PSYC 331: Health Psychology: Biopsychosocial Factors in Health and Illness

Health psychology is the scientific study of behaviors that relate to health enhancement, disease prevention and management, and rehabilitation. This course will examine the biological, psychological, and social factors in health and illness. The course is organized into three parts: foundations of health psychology, biopsychosocial factors in health, and biopsychosocial factors in illness. Health psychology is both an applied field and a basic research field. Accordingly, scientific accomplishments are examined as they impact on clinical application.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PSYC 333: The Psychology of Leadership in Organizations

The primary focus of this course is on managerial leadership. The course will present a broad survey of theory and research on leadership in formal organizations, with special emphasis on leader effectiveness. Conceptual and methodological issues pertaining to leader effectiveness will be explored from four major research approaches: (1) the power-influence approach; (2) the trait approach; (3) the behavior approach; and (4) the situation approach. An integrating model of leadership will also be examined.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PSYC 336: Diversity in Organizations

Organizations have been continuing to diversify their workforces by employing people of various genders, ethnicities, national cultures, ages, and abilities. This course will examine a wide range of workplace issues as they related to diversity, starting with understanding the advantages of a diverse workforce, individual and organizational challenges experienced with regard to diversity, and best practices in how to maintain a diverse workforce.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PSYC 340: Cognitive Psychology

Cognitive psychology is the scientific study of mental representations and processes. Cognitive psychology, for example, focuses on how people take in, mentally represent, and store information; how they perceive and process that information; and how these processes affect everyday behavior. Its diverse topics include attention, pattern recognition, learning, memory, language processing, problem solving, and reasoning. The discoveries of cognitive psychologists are used in a variety of disciplines, including applied psychology, psychiatry, engineering, computer science, and linguistics. The goal of this course is to provide a foundation in many of the major areas within cognitive psychology.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PSYC 350: Personnel Psychology

The focus of this course is an examination of individual work behavior in the context of organizations. Personnel psychology (also referred to as industrial psychology) is a sub-field within the broader applied discipline of industrial and organizational psychology (Cascio, 1998). Personnel psychology overlaps with human resources management (HRM). Like industrial and organizational psychology, personnel psychology is based on the "Scientist-Practitioner" model with emphasis on principles of individual, group and organizational behavior through basic research and the application of scientific knowledge to the solution of human problems at work. Personnel psychology has its origins in the first half of the twentieth century where basic psychological theory and principles were applied to assist in the selection and staffing of personnel during World War I (Cooper and Locke, 2000). Following the War, psychologists continued to apply psychological theory and principles to solve real world problems in industry, commerce, and the public sector. Since its early roots in personnel selection, personnel psychology has extended beyond recruiting and hiring processes. As such, in addition to the traditional area of personnel selection, this course will examine such topics as applied psychometrics, job analysis and criteria development, testing, performance management systems, training and development and HRM.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PSYC 351: Organizational Psychology

This course examines the science and practice of organizational psychology. Organizational psychology is a sub-area of the broader filed of industrial/organizational (I/O) psychology. While industrial or personal psychology (PSYC 350) concentrates on topics associated with the management of human resources in organizations (i.e. employment law, criterion development, recruitment, test validation, selection, performance management, training, human resource planning), organizational psychology examines individual and group behavior in formal organizations (i.e., socialization, motivation, job attitudes, occupational stress, leadership, group performance, organizational culture).

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PSYC 355: Organization Development and Change

This course will introduce the student to the basic theory and practice of Organization Development (OD). OD, a subfield of Industrial/Organizational Psychology, can be defined as a system-wide application of behavioral knowledge and practice to the planned development and reinforcement of organizational strategies, structures, and processes for improving an organization's effectiveness (Cummings and Worley, 2001). The course will focus on six major OD processes and interventions: (1) the process of how OD is applied to organizations; (2) human process interventions aimed at the social processes occurring within organizations; (3) technostructural interventions aimed at organization structure and at better integrating people and technology; (4) human resource management interventions that are directed at integrating people into the organization; (5) strategic interventions that focus on organizing the firm's resources to gain a competitive advantage in the environment; and (6) evaluating OD interventions and stabilizing them as a permanent part of the organizational functioning.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PSYC 360: Introduction to Clinical Psychology

This course is a survey of the field of Clinical Psychology, its problems, methods, and areas of application. The student will be presented with rudimentary background knowledge in testing techniques, interviewing, and psychotherapy.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PSYC 362: Internship in Industrial/Organizational Psychology

This is an academically based, supervised work experience designed to apply theory to practice. Students will have the opportunity to interact with professionals in their area of interest, develop the communication skills needed in their field, and begin to build a strong resume and references for employment and/or graduate study. This experience will provide not only career focus but also increased self-confidence and maturity.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PSYC 363: Clinical Internship

One semester supervised internship at agencies and organizations offering clinical/counseling services. Students spend either one or two days a week at the internship site and have the opportunity to observe and/or provide psychometric services, interviews, counseling, and other clinical services under supervision. In addition, students participate in a weekly meeting at the university during which they present their fieldwork experiences and discuss the relationship between clinical practice and theory.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PSYC 370: Selected Research Topics in Psychology

This course is designed to allow students to do independent research under the direction of a faculty member. The topic must be accepted by the department member with whom the student will work.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PSYC 375: Psychotherapy: Theory, Research and Practice

This course will examine the major approaches to psychotherapy through a critical review of (a) the epistemological and theoretical bases of psychotherapeutic practice, (b) evidence from outcome and process studies conducted in analogue as well as field settings, and (c) specific techniques employed in the treatment of various psychological problems.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PSYC 379: History and Systems of Psychology

This course is designed to give the student an historical introduction to the various points of view in contemporary theories of behavior.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PSYC 380: Senior Seminar in Psychology

This course, required of all liberal arts students majoring in psychology, provides an opportunity for senior psychology majors to critically examine selected significant issues and problems within the discipline of psychology. Through critical reading, discussion and expository writing students are encouraged to integrate and synthesize prior training in psychology as they critically and creatively examine important issues and problems in the field. This course should be taken during the school year of expected graduation. Required of all Psychology majors. ENROLLMENT: Limited to twenty students.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PSYC 395: Honors Independent Study/Thesis

Honors Independent Study/Thesis.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

PSYC 429: Behavior Modification

A survey of procedures used for behavior modification and behavior therapy. Practical application of these procedures to various populations will be stressed.

PSYC 432: Human Neuropsychology

This course will consider aspects of the relationship between brain and behavior in the adult and the developing human through the critical examination of evidence derived from (1) the study of the effects of focal lesions of the cerebral cortex, (2) the effect of forebrain commissurotomy and (3) the neuropsychological investigation of subjects without neurological impairment. Relevant experimental literature concerned with animals other than humans will also be considered.

Science Education

SCED 100: Introduction to Scientific Problem Solving

SCED 100 combines fundamental scientific content knowledge with mathematical and logical reasoning to help students solve scientific problems. Students will develop and utilize problem solving strategies for a variety of scientific topics. This course will improve students' number sense, algebra skills, and graphical interpretation. In parallel, students will reflect on what practices and skills best lead to meaningful individualized learning within scientific disciplines. This course is intended primarily for first semester science majors or students considering transferring into a science major, This course does not satisfy major, minor, or specialization requirements for Secondary Education and/or Liberal Arts Science Majors. This course cannot be taken by students with more than 30 credits or successful completion of either CHEM 102 or PHYS 102 or GEOL 102 or BIOL 106 without the written permission of the instructor.

SCED 220: Practical Scanning Electron Microscopy

A practical introduction to the basic concepts underlying electron beam analysis of materials, emphasizing signals generated by scanning electron microscopes, including secondary electron, backscatter electron, scanning transmitted electron, and cathodoluminescence imaging, as well as energy dispersive x-ray spectroscopy. Topics include sample preparation, basic SEM

operation, strategies for ameliorating complications in data collection, and brief introduction to emerging analytical methods such as electron backscatter diffractometry, electron energy-loss spectroscopy, and focused ion beam microscopy.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SCED 240: The Writing Scientist

If you want to be an effective scientist, you must be an effective writer; communication of science is a vital part of the scientific process. This course develops the writing skills required of scientists writing within the context of the scientific process. Topics focus on building skills in the use of scientific data and literature, the reading and citing of peer-reviewed materials, explanation of scientific concepts, equations, and data to diverse audiences, and preparation and discussion of effective visualizations and graphs. Course assignments range from technical summaries and abstracts to figure captions and general audience pieces, capturing the breadth of writing practiced across the scientific professions. Students read a variety of scientific literature as models, engage with data to produce written and visual artifacts, edit their own and their colleagues work, and present their writing in the classroom setting.

SCED 250: Scientific Storytelling

Science is more than just facts, definitions and details. It is a complex and integrated process. Communicating accurate details and the process of science is challenging, but using a narrative framework can help. Therefore, this course uses the techniques of audio storytelling to develop narratives that contextualize scientific information, theories, and process.

Supply Chain Management

SCMG 260: Principles of Supply Chain Management

Supply Chain Management (SCM) is a cross-functional discipline concerned with the management of flow of goods, services and information. This introductory course to SCM provides an understanding of fundamental supply chain concepts. Many functional areas of supply chain management are explored in an integrated view of procurement, manufacturing and operations management, transportation and logistics, inventory and warehousing, demand planning, scheduling, network design, collaboration and performance measurement. The course covers both the tactical and strategic perspectives of SCM, and is based on supply chain operations in the real world.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SCMG 320: Applied Project Management

This course focuses on the process of project management. Students will be expected to learn the terminology of project management and the conditions for success. Additionally, students will learn about the characteristics of different types of projects in a variety of fields, including business, technology, arts, and personal development.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SCMG 361: Principles of Business Logistics

This course gives students knowledge of logistics principles and functions and enables them to apply this knowledge in enterprises and organizations of all types. It surveys all the fundamental elements of the supply chain and provides a framework for analysis and understanding of logistics systems. It addresses organization and functions of the elements of the supply chain, processes within the supply chain, and strategic issues, including globalization of supply chains.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SCMG 362: Supply Chain Analytics

This course presents various analytical approaches that are often utilized by businesses to design, manage, and improve their supply chains. The optimization techniques such as linear programming (LP), integer programming (IP), mixed integer programming (MIP), and nonlinear programming are discussed in the course. The course focuses on the process of creation of analytical models and solution techniques (algorithms) in the context of supply chain management. The use of Queuing theory and simulation approaches are also explored in the course. Students use a variety of software (Spreadsheet, etc.) and algorithms for modeling and problem solving.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SCMG 363: Global Transportation Management

Global Transportation Management is a course of current concepts, theory and issues in the global supply chain context. This course is a study of the systems used to move goods and people and their role in business and the global economy. It addresses the economic and operational characteristics of the domestic and international transportation modes, intermodal operations, transportation prices and rate theory, the management of for hire and private transportation resources, the procurement of transportation -services, and regulatory and public policy issues.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SCMG 364: Lean Warehouse Management

The warehouse serves a trans-shipment point matching product availability to customer demand. The primary purpose of warehouse is to facilitate the movement of goods from supplier to customers, meeting demand in a timely and cost effective manner. The traditional warehouse operations focused on the economy scale and the accumulations and consolidation of inventory in order to reduce the expenses. However, as the magnified number and variety of orders and shortened lead-time of the order process, companies must be able to customize the order fulfillment promptly and accurately. The course will focus on the area that challenge today's warehouse and logistic managers. These include improving efficiency and productivity; improving quality and accuracy; the challenge of reduced lead time from customers; technological advancement; workforce availability and management; health and safety; and efforts on the environment.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SCMG 365: Sustainability in Supply Chain

This course provides an understanding of sustainability issues and opportunities that companies face today. It also delivers a set of tools and skills to identify. evaluate, and improve the sustainability of supply chain operations. It enables students to understand core sustainability concepts of industrial and commercial activities, in this way they will be able to design sustainable supply chain management practices. The course addresses the value of sustainability in supply chain management as a new source of competitive advantage for the firm.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SCMG 366: Enterprise Systems and Integrated Business Processes

This course provides an introduction to enterprise systems and discusses how typical business processes are executed in such a system. Students execute necessary transactions to complete business processes by using an enterprise system. The focus of the course is on procurement, production, inventory and warehouse management, fulfillment, and material planning processes. Students execute these processes of a case company in an enterprise system. Teams of students then participate in several rounds of a market simulation game. In this game, teams of students manage the decisions of their business in a simulated market in an enterprise system. The objective of the teams is to develop strategies to improve the profit of their business under the constraints of the simulated market. The teams have to generate appropriate reports-, analyze data, and implement decisions to complete entire cash-to-cash cycle of their business.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SCMG 367: Supply Chain System Design and Planning

This course is an examination of the strategic importance and practical application of supply chain design, planning, and operations. It addresses the value of supply chain management as a source of competitive advantage for the firm. The course considers supply chain strategies, risk pooling, strategic partnering, and the value of information and supply chain coordination. The course emphasizes current practice and trends in developing and managing information and material flows throughout the supply chain.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SCMG 368: Strategic Procurement and Sourcing

Purchasing and supply management are essential to a company to operate effectively and efficiently in today's global business environment. A company will not only select the suppliers and purchase materials from them; but also acquire the needed materials in the right amount, at the right time with the right quality levels. Meanwhile, the strategic close relationship will be required to ensure the uninterrupted flow of goods and services and to diminish the wastes throughout the supply chain in term of time and money. The objective of this course is to make students aware of the demands placed upon purchasing professionals-, and to understand the impact of purchasing on the competitive success and profitability of the firm. They must also have an understanding of legal and ethical considerations which affect purchasing decision-making.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

Secondary Education

SEED 15: Secondary Education First Year Seminar

College of Education: Secondary Education First Year Seminar introduces Secondary Education freshmen, organized by cohorts according to declared major, to the critical strategies, resources, and responsibilities of a university student and future teacher. The seminar will build the students' foundation knowledge and understanding of what it means to be professional educators. Toward this end, the students enrolled in this course will participate in a number of relevant experiences that facilitate and strengthen their personal appreciation and intellectual understanding of their role as a teacher candidate and Kutztown University and the support available to ensure their success. The course will be required of all entering freshmen. The course will be offered as Pass/Fail.

SEED 210: Secondary School Curriculum

The content and organization of high school curriculum, and of the nature and content of major fields of instruction. Requirements and standards that affect the high school program.

SEED 310: Problems of Secondary Education

Theoretical and practical approaches relevant to current problems in secondary education with attention on the broad spectrum as well as immediate day-to-day situations will be explored. A focused effort has been made to develop a responsive course to prepare the teacher candidates to be effective classroom managers for learners in today's inclusive and diverse classrooms.

SEED 312: Principles of Learning

This is a clinically based course that examines how aspects of learner language, culture, prior knowledge and experience influence the learning process in the school setting. This course will provide a bridge between theories of learning and current practice by placing teaching candidates in a weekly, supervised experience. This course will be taken after the student has achieved teacher candidacy. Teaching candidates will meet for 6 hours each week, in two three-hour blocks. During the first block, candidates will meet at the university with the professor. This will be the theory-based component of the course and coordinates with Categories I and IV of the Principles of Teaching and Learning criteria established by the Pennsylvania Department of Education. The second block will take place in the school setting (SEED 313 Principles of Learning Clinical Lab). This course must be taken with SEED 313 Principles of Learning Clinical Lab. This course is a prerequisite for SEED 342

Principles of Teaching.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SEED 313: Principles of Learning Clinical Lab

This is the clinical part (second block) of the SEED 312 Principles of Learning course. The entire class will be assigned to a school where pairs of teaching candidates will be assigned to a classroom. Schools will be recruited based on their opportunities for diverse experiences and size. The Kutztown faculty member will accompany teaching candidates to the placement and will supervise while the candidates are in the building. This course must be taken with SEED 312 Principles of Learning. It is a prerequisite for SEED 342 Principles of Teaching.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SEED 320: Appraisal and Evaluation in Secondary Education

This course emphasizes the value, use and interpretation of standardized group tests for various purposes in the public schools. Training is given in the administration and evaluation of group intelligence, achievement, and aptitude tests and personality and interest inventories. The organization and operation of school testing programs will be analyzed. Teacher constructed evaluative criteria will be required.

SEED 324: Methods of Teaching Secondary School Subject: Science

Methods, techniques and evaluative instruments applicable to the teaching of secondary school subjects. The course is basically the responsibility of a coordinator and a "team" of teachers, each of whom is a specialist in the subject matter fields of Communication, Social Studies, Foreign Languages, Science, and Mathematics. Laboratory experiences include classroom observation, micro-teaching, films, lectures by resource persons, construction of a teaching unit, etc. Summer course not available to undergraduates.

SEED 331: Practicum: Communication

SEED 331 provides a practicum, concurrent with the methods class. This practicum provides an opportunity for the application of theory presented in the methods class to be applied to middle and high school classroom. (1 s.h., 2 c.h.)

SEED 332: Practicum: Modern Languages

SEED 332 provides a practicum, concurrent with the methods class. This practicum provides an opportunity for the application of theory presented in the methods class to be applied to middle and high school classroom. (1 s.h., 2 c.h.)

SEED 333: Practicum: Mathematics

SEED 333 provides a practicum, concurrent with the methods class. This practicum provides an opportunity for the application of theory presented in the methods class to be applied to middle and high school classroom. (1 s.h., 2 c.h.)

SEED 334: Practicum: Science

SEED 334 provides a practicum, concurrent with the methods class. This practicum provides an opportunity for the application of theory presented in the methods class to be applied to middle and high school classroom. (1 s.h., 2 c.h.)

SEED 335: Practicum: Social Studies

SEED 335 provides a practicum, concurrent with the methods class. This practicum provides an opportunity for the application of theory presented in the methods class to be applied to middle and high school classroom. (1 s.h., 2 c.h.)

SEED 340: Teaching Reading in Secondary School Academic Subjects

This course is designed to provide teachers of the content areas with basic strategies for coping with the unique reading demands of their subjects. Emphasis is upon diagnosis, comprehension, vocabulary skills, and study skills. Required of all

students majoring in secondary education.

SEED 342: Principles of Teaching

This course is a clinically based course that provides teaching candidates with a common language to talk about teaching and clear, concrete levels of performance for teaching candidates to use in reflecting upon the work of the classroom teacher. These components of professional practice are based on Praxis III and are aligned with INTASC and the National Board for Professional Teaching Standards. This course will provide a bridge between theories of teaching and current practice by place teaching candidates in a weekly, supervised experience. This course must be taken with SEED 343 Principles of Teaching Clinical Lab.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SEED 343: Principles of Teaching Clinical Lab

This clinical experience meets the Pennsylvania Department of Education requirements to extend field experiences prior to the student teaching assignment. Teacher candidates will be assigned to a high school in their certification area. This course must be taken with SEED 342 Principles of Teaching.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SEED 380: Independent Study in Secondary Education

Independent Study is based on a student's pursuit of a subject in Secondary Education not covered within regularly offered undergraduate courses. Undergraduate students may schedule this course for one to three credits in a single semester, with no more than six credits for Independent Study overall. Permission of the faculty of the Secondary Education Department is required.

SEED 390: Clinical Experience and Practicum: Secondary I

Both SEED 390 and SEED 391 are segments of a single course which provides two full-time classroom experiences comprising an entire semester. Opportunities are provided for observation and participation in all activities related to teaching on the secondary level. The practicum, concurrent with student teaching, is a clearing house for the selection, organization, and presentation of proposed units, lessons, or activities. In addition, it provides an opportunity for the discussion of problems that arise in the classroom. Students organize units of instruction and present them for evaluation by the group. Juniors are encouraged wherever feasible to participate in the practicum.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SEED 391: Clinical Experience and Practicum: Secondary II

Both SEED 390 and SEED 391 are segments of a single course which provides two full-time classroom experiences comprising an entire semester. Opportunities are provided for observation and participation in all activities related to teaching on the secondary level. The practicum, concurrent with student teaching, is a clearing house for the selection, organization, and presentation of proposed units, lessons, or activities. In addition, it provides an opportunity for the discussion of problems that arise in the classroom. Students organize units of instruction and present them for evaluation by the group. Juniors are encouraged wherever feasible to participate in the practicum.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SEED 410: Science Instructional Methods for Middle and High School

This course is a graduate level instructional methodology course designed to meet the needs of the graduate and post-baccalaureate student seeking certification in middle level and high school level science. It is a comprehensive science methodology course for students in the College of Education. The basic philosophy of this course is to adapt constructivist methodology to science education. The infusion of Internet technology coupled with the National and Pennsylvania Standards in Science Education will call upon students to formulate instructional strategies that are both relevant and grade level

appropriate. This graduate course will meet PA State CETP guidelines.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SEED 414: Computer Science Instructional Methods for Middle and High School

This course is designed to meet the needs of Secondary Education teacher candidates (undergraduate and graduate) seeking certification in Grades 7-12 Computer Science. This course provides teacher candidates in the Secondary Education Computer Science program with the knowledge, skills, and dispositions necessary to effectively teach computer science at the secondary level. This course focuses on the theories, methods, materials, and assessment procedures that align with the standards put forth by the Pennsylvania Department of Education (PDE) and the Computer Science Teachers Association (CSTA). In this course, there will be a strong emphasis on practical aspects of classroom instruction, such as synthesizing content into individual lesson plans, developing instructional units, designing effective assessment, working with state and national standards, and using a wide variety of strategies to relay content. In addition, teacher candidates will teach sample lessons and complete a number of field experiences. As a whole, this course is designed to prepare teacher candidates with opportunities to connect theory, resources, and instructional methods to effectively teach in middle school and high school Computer Science classrooms during their student teaching (clinical) experience and beyond.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SEED 420: Education Theory and Practice

This course is designed for post-baccalaureate teaching candidates who have already passed the Praxis II in their content area. This course will provide the preservice middle and high school teachers with strategies necessary to promote effective, creative, and scholarly middle and high school instruction. Major emphasis will be placed on providing the necessary background to develop courses, instructional units, and lessons. Instructional activities will be aimed at promoting the subject literacy of their students. Teaching candidates will gain insights into methods of effective communication and interaction with students, utilization of technology for laboratory research and reference, and methods of evaluating student achievement. Process skills as well as content will be strongly emphasized.

SEED 422: World Language Instructional Methods for Middle and High School

This course is an undergraduate and graduate level instructional methodology course designed to meet the needs of teacher candidates in the undergraduate Secondary Education program and Secondary Education Master's program seeking certification in K-12 Spanish and German. This course focuses on the theories, methods, techniques, strategies, materials, technology, and assessment procedures that align with the standards put forth by the American Council for Teachers of Foreign Languages. Students will learn how to plan effective lessons and thematic units, implementing the national standards for world language instruction for planning, instruction and assessment. The teacher candidates will also adhere to the ACTFL recommendation that lessons are taught in the target language. In addition to completing written assignments, students will teach sample lessons to their peers and perform twenty hours of observation in the field.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SEED 425: English Instructional Methods for Middle and High School

This is an undergraduate and graduate instructional methodology course designed to meet the needs of teacher candidates in the undergraduate Secondary Education program and the Secondary Education Masters program seeking certification in Grades 7-12 English. This course focuses on the theories, methods, strategies, materials, and assessment procedures for effective teaching and learning in a secondary English classroom and that align with the standards put forth by the National Council of Teachers of English (NCTE). In this course, student experiences include classroom observation, microteaching, films, lectures, and construction of lesson plans and an instructional unit. Teacher candidates will learn how to plan lessons using the PDE-SAS lesson plan template and develop instructional units, implementing NCTE's standards for effective instruction and assessment. In addition, teacher candidates will teach sample lessons and complete 20 hours of field experiences. This course is designed to prepare teacher candidates with the strategies and instructional tools necessary to teach in middle school and high school English classroom settings during their student teaching (clinical) experience.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SEED 426: Social Studies Methods for Middle and High School

Social Studies tends to be misinterpreted as fact-based history, rote memorization of state capitols, and balancing budgets. The reality is that social studies can be a valuable tool in encouraging children to become active participants in our society. According to the National Council for the Social Studies (NCSS), the leading national organization for social studies education, "the purpose of social studies is to enable students to understand, participate in, and make informed decisions about their world." With this in mind, this course is an undergraduate and graduate instructional methodology course designed to meet the needs of teacher candidates in undergraduate Secondary Education program and Secondary Education Masters program seeking certification in Grades 7-12 Social Studies. This course explores the theories, methods, strategies, materials, and assessment procedures for effective teaching and learning in a secondary social studies classroom and that align with the standards put forth by the NCSS. This course is designed to provide preservice teachers in social studies with the knowledge, skills, and dispositions necessary to powerfully teach social studies at the secondary level. While social studies content is embedded in our discussions of classroom instruction, this course is structured to provide students with opportunities to apply theory, resources, and methods to social studies teaching and learning in the middle and high schools through micro-teaching, planning and media analysis tasks. We explore a myriad of topics and issues related to social studies content, pedagogy, and assessment, and offer students specific opportunities to lead these conversations during the semester. Much of our work together highlights the competing goals of social studies education, the relationship among teaching, learning and assessment, and constructing classrooms that reflect democratic ideals. In addition, there will be a strong emphasis on practical aspects of classroom instruction, such as synthesizing content into unit and individual lesson plans, working with state and national standards, and using a wide variety of strategies to relay content.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SEED 430: Mathematics Instructional Methods for Middle and High School

This course is an undergraduate and graduate level instructional methodology course designed to meet the needs of teacher candidates in the undergraduate Secondary Education program and Secondary Education Master's program seeking certification in middle level and high school level mathematics. This course focuses on the theories, methods, techniques, strategies, materials, technology, and assessment procedures applicable to the teaching of secondary school mathematics. Students will learn how to plan effective lessons, implement both state and national standards for mathematics, use appropriate technology, and prepare appropriate assessment instruments. In addition to completing written assignments, students will teach sample lessons to their peers and perform twenty hours of observation/service in the field.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

Social Media Theory & Strategy

SMTS 101: Introduction to Social Media Theory and Strategy

A survey of contemporary theories of social media that focuses on how social media affects individuals, communities, and cultures. Particular attention will be paid to themes such as identity, privacy, access, participatory culture, attention economies, place, and law. Students will be able to evaluate and analyze how social media impacts social, economic, and civic lives.

SMTS 224: Social Media Ethics

This course will explore the origins of ethical behavior and actions within the media and will look at both classical and contemporary approaches to ethical decision making and apply them to modern media practices, particularly social media. At the same time, the course will ask whether the media today are acting appropriately as regards ethical practice, and if not, why not. Not only does the course critique media practices but it will also search for suggestions that will most positively affect both the media institutions and the public with which they interact and upon which they rely for their livelihood.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SMTS 314: Social Media Analytics

Students will learn how to collect, analyze, and derive insights from social media data. The course focuses primarily on R programming as a freely available tool for social media analytics. While the course primarily focuses on Twitter data, the skills and abilities derived from the course will be easily transferrable to the analysis of other, popular social media platforms.

SMTS 316: Advanced Social Media Analytics

Using tools and techniques learned in COMM/ENGL 314, students will advance their skills for collecting, analyzing, and deriving insights from social media data. Students will practice and develop pattern recognition techniques as to advance the depth and range of their social media insights, interpretations, and predictions. Students will further develop skills in using both freely available and industry-standard digital social media analytics tools.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SMTS 322: User Experience Design and Research

This course explores the basic principles and practices of user experience design, usability testing, digital architectures, and user research. Students will develop an understanding of user-centered design (UCD) and will learn how to research user behaviors and experience.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SMTS 380: Social Media Theory and Strategy Capstone

This course is designed as the capstone course for Social Media Theory and Strategy majors, aimed at providing students with the opportunity to integrate the knowledge and skills they have acquired within the major. It will also provide experiences for students to exhibit competent communication and/or technical skills learned during their program of study in order to prepare for a career in social media.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SMTS 390: Social Media Internship

Supervised professional field experience related to social media theory and strategy. Internship tasks and responsibilities will vary with participating organizations. This internship will be available to students interested in pursuing careers in social media.

Sociology

SOCI 10: Principles of Sociology

The concepts, theories and methods that form the core of the sociological perspective on human behavior. This course is a prerequisite for all other SOCI courses.

SOCI 106: History and Culture of Turkey

Spanning two continents, Turkeys stands as a crossroads of some of the most important historical and cultural trends in the world. This course will explore the cultural history and current developments in turkey, through readings, lectures and study abroad experience in Turkey itself. Students will gain knowledge of the multiple historical influences on the development of Turkey by visiting major architectural, historical and archeological sites in various parts of the country. Students will also have an opportunity to experience and observe modern Turkish culture through lectures, participation in events, and visits to important Turkish institutions. This course will serve as a basis for a study abroad program in Turkey.

SOCI 110: Contemporary Social Problems

Current problems of urbanization, personal pathology, family interaction, poverty and race are viewed within the context of social theory.

SOCI 120: Marriage and the Family

An intensive analysis of contemporary marriage and family patterns and interactive processes in the United States viewed from historical and cross-cultural perspectives.

SOCI 122: Intimate Relationships

This is a practical course designed to help students understand how cultural, economic, political, and social factors influence the various ways that intimate relationships among adults are formed, maintained, and either succeed or fail.

SOCI 128: Domestic Abuse

This course is a sociological analysis of domestic conflict and violence in the United States of America, viewed and interpreted cross-societally from Western Historical and cross-cultural perspectives.

SOCI 150: Law and Society

An introductory course that surveys selective legal and socio-political views on the place of the legal system in society. Attention will be given to contemporary issues which raise significant or troubling questions for the main theoretical themes, such as the historical basis for the principles of the "rule of law" or an "autonomous legal system" and the social conditions for their existence or nullification.

SOCI 160: Sociological Imagination

This course that emphasizes sociological and social scientific approaches to writing and social analysis. Students will be able to explore a sociological or social scientific subfield of their choosing. This course is intended to prepare students for advanced social science topics, as well as provide opportunities for independent research. Additional topics include the history of sociology, IRB, research methods, social scientific writing, theoretical approaches, and analysis of scholarly sources.

SOCI 165: Social Inequality

Theories of social class and mobility with a discussion of problems of measurement and differential levels of wealth, prestige and authority.

SOCI 180: Sociology of Leisure

An analysis of work and leisure; their structure and functions in American Society; trends in the availability and use of leisure time and changes in preferred leisure activities.

SOCI 200: Statistics for the Social and Behavioral Sciences

The purpose of this course is to introduce the student to the concepts of descriptive and inferential statistics. The results of any research should be summarized by appropriate descriptive statistics such as central tendency, variability, and the shape of the distribution. Relationships will be studied using correlation, regression, and chi-square. Research which involves sampling will be analyzed by appropriate inferential statistics such as t-tests and ANOVA. Sampling error, hypothesis testing, significance levels, Type I Error, Type II Error, and power will be discussed. In addition, the student will be introduced to SPSS for Windows, Microsoft Excel, and/or other appropriate software for performing descriptive and inferential statistical procedures presented throughout the course. No students (Sociology or non-Sociology majors) may receive credit for both POLI/PSYC 200 and SOCI 201 due to substantial overlap.

SOCI 201: Quantitative Analysis in Sociology

The purpose of the course is to familiarize students with the basic concepts of quantitative analysis in sociological research and provide practical training in computer-assisted analysis at a beginner level. Emphasis is placed on hands-on experience with manipulation and analysis of quantitative data. Sociology majors may take either POLI/SOCI/PSYC 200 or SOCI 201 to fulfill core statistical training requirements. No students (Sociology or non-Sociology majors) may receive credit for both POLI/SOCI/PSYC 200 due to substantial overlap.

SOCI 205: The Sociology of Sport

This course is aimed at investigating and analyzing the contemporary social issues and problems associated with the growth, spread, diversity and increase in the world of sport.

SOCI 207: Families and Social Class

This course will examine contemporary American families, focusing on the different ways in which social class can affect family life. Theories of social stratification will provide a foundation from which to study various social classes, including upper, middle, working, and lower classes. Family life issues to be covered in this course include mate selection, family size, childbearing patterns, marriage/divorce/cohabitation patterns, childrearing patterns, education, life chances, and social mobility. In addition, special attention will focus on the intersection of social class, race/ethnicity, and gender as multiple dimensions of advantage/disadvantage for families.

SOCI 208: Childhood and Adolescence in American Society

This course explores the social factors that influence children from infancy through adolescence in the United States. Through course reading, assignments, and discussions, the course will cover the social implications (such as the family, school, media, and health care) in which children interact and the social forces which effect and shape children. This course will also look at these social institutions and the social world of children from children's perspectives, viewing children as active social participants with their own values and subcultures. The course will be of interest to those concerned about issues of social welfare and public policy as well as those who plan to work with children and adolescents.

SOCI 213: World Religions

This course will examine the great "World Religions" Judaism, Christianity, Islam, Hinduism, Buddhism, and East Asian Religions in terms of their historical developments and contemporary manifestations. The course will cover basic techniques of scriptural exegesis, explore the historical roots and expansion of each religion, and examine how the religions have diversified in the face of cultural and political developments locally and globally. Special focus will be given to religious issues that are involved in major geo-political conflicts, such as the attacks of September 11, 2001, the rise of fundamentalism around the world, and the conflicts in the Middle East and South Asia.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SOCI 214: Sociology of Visual Culture

The goal of this course is to provide students with skills for observing, analyzing, describing and critiquing visual imagery from a range of diverse theoretical perspectives. In particular, this course will emphasize 1) the significance of the "visual" in society 2) methods of "reading" visual material/productions 3) the role of the "visual" in sociological research.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SOCI 217: LGBTQ Studies

The purpose of the course is to introduce students to Lesbian, Gay, Bisexual, transgender, and Queer (LGBTQ) Studies. It will trace the conceptual distinctions drawn between sex, gender, and sexuality, as well as the history of diverse genders and sexualities. It will also examine contemporary issues facing LGBTQ individuals and communities. Emphasis is placed on feminist and social constructionist approaches to studying LGBTQ issues.

SOCI 220: Juvenile Delinquency

An analysis of the nature, type and incidence of delinquency within social milieu; an examination of the social characteristics of delinquents and the theories of delinquency, evaluation of the techniques of prevention and control by social agencies, and trends in delinquency.

SOCI 222: Rural Poverty

This course centers of the sociology of poverty in rural areas in the United States as well as in other, particularly third-world nations. The sociology of poverty is part of the broader study of stratification, a core substantive filed in the discipline. The course situates the topic of rural poverty into sociological theories and research on stratification. However, sociological theory and research on poverty and inequality are often aspatial or have an urban bias. We thus go beyond conventional approaches to studying poverty and add a spatial dimension. Our focus is: "Who gets what, where and why?" Attention is to spatial inequalities in socioeconomic well-being within the U.S. and cross-nationally.

SOCI 224: Immigration and Assimilation

This course seeks to expose students to the recent social literature on contemporary immigration to the United States, its origins, adaptation patterns, and long-term effects on American society. It focuses on why people move and the policies that let some people in while keeping others out. Consideration is given to the process by which foreign "outsiders" become integrated in their new home; of particular interest are debates around "straight-line" and "segmented" assimilation. This course also sheds light on second-generation immigrants' identity, mobility and integration into the dominant culture. The course ends with an overview on the future of immigration, challenges faced by undocumented immigrants and policies and debates that surround the attempt to "fix" our broken immigration system.

SOCI 227: Work and Workplaces

Moving beyond viewing work as purely economic activity, this course examines the social and cultural aspects of work and workplaces. Non-industrial and industrial work will be examined in cross-cultural settings, focusing on the role of work in affecting identity, status and meaning. Particular emphasis will be placed on work in the contemporary global economy in both industrialized and post-industrialized countries. Course readings will be drawn from ethnographic studies carried out by both anthropologists and sociologists.

SOCI 230: Urban Sociology

This course examines urban life in both the United States and globally with emphasis on patterns of city growth, social ecology and urbanism as a way of life. Other topics may include: built environment, migration, globalization, political-economy, and sustainability.

SOCI 232: Marriage and the Family in Cross-Cultural Perspective

This course examines the forms taken by marriages and families in various world societies. The following questions will be addressed: What aspects of marriage and family are the same for all humans, and what aspects are variable? What factors account for major cross-cultural differences in the organization of marriage and the family? Why are some features the same (or nearly so) all over? Is there a biosocial base? How are marriage and family relationships used as metaphors in organizing other aspects of social life?

SOCI 235: Sociology of Gender

The course will deal with the implication of the sociological perspective on gender differences in contemporary society. More specifically, discussion will be focused on such aspects as gender inequality as an aspect of social stratification, origins of gender differences, gender socialization, gender and social policy, gender and personal relationships, and the future of gender.

SOCI 236: Writing Culture: Ethnographic Research Methods

Students learn methods of anthropological field research. This course introduces students to basic issues concerning

ethnographic research and description. Students learn qualitative research methods, use these methods to gather information and then report on their findings.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SOCI 240: Population Problems

An exploration of the causes and consequences of population pressures with special attention to the impact of population growth on resources and environment.

SOCI 241: Race And Ethnicity

The sources and consequences of prejudice and discrimination; minorities in the social structure; strategies and programs to prevent and control inter-group tensions and conflicts.

SOCI 245: Sociology of Deviance

Selected kinds of behavior which violate group norms; the processes through which deviance is learned and performed; the consequences of deviant behavior in terms of societal reactions.

SOCI 246: Globalization and Development

This course surveys the social causes and consequences of underdevelopment in Third World societies. One of its basic premises is that development and underdevelopment must be defined in terms of quality of life as well as strictly economic indicators. A prominent (but not exclusive) focus is the problem of world hunger. This issue is used as a gateway to other significant development related issues (e.g. population, industrialization, urbanization, rural development).

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SOCI 247: Environmental Sociology

This course examines the intersection of different environments and social life from both a U.S. and global perspective. Topics covered may include: built environments, environmental racism, natural disaster, famine, sustainability, urban development/sprawl, and social movements.

SOCI 250: Criminology

An intensive review of the major theories of criminal behavior and their applications in crime prevention and control. Examination of leading crime types and criminal behavior systems.

SOCI 270: Sociology of Organizations

The study of modern man's interactions to and within large-scale organizations with emphasis on the characteristics and structure of bureaucracy.

SOCI 271: White Collar Crime

This class is designed as an intermediate level sociology course for students interested in the scientific study of white collar crime. The course will examine various individuals and businesses that commit white collar crimes, the contributing factors for these types of crimes, the various methods of detection and measurement of these crimes, the different types of white collar crime and their effects on the specific victims and society in general and the theories attempting to explain the causes of white collar crime.

SOCI 275: Social Foundations of Human Behavior

This course deals with the paradox of society's persistence and the individual's uniqueness. The focus of discussion will be on the question: How can we explain how men are held together and, at the same time, set apart? The course will be organized from the theoretical perspective of symbolic interaction within sociology.

SOCI 280: Social Movements

The purpose of this course is to introduce students to the concept of social movements and collective behavior. It will examine earl interests in crowds, riots, and manias, as well as how the rise of early movements like the civil rights and women's rights movements created broader recognition and interest in the various ways people mobilize and challenge institutionalized politics. It will address what social movements are, how they come to be, who is involved in them, how the larger society shapes them, and how they influence society.

SOCI 290: Social Gerontology and Social Welfare

This course is aimed at analyzing the process of aging from a sociological perspective and studying the resources that our society provides for the over-sixty population through social welfare measures. There will be double pronged emphasis: one placed upon various social problems confronting them in American society; the second emphasis will be on the array of social welfare services available, the social policies implicit in the provision of such services, and the social work practices that enable older persons and their families to secure such services.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SOCI 300: CERTIFICATE CAPSTONE

This is a capstone course for the Diversity, Equity, Inclusion, and Community certificate. At the conclusion of the course, students will be able to discuss and advocate for greater equity and inclusivity in various communities and/or workplaces. Students enrolled in the course will produce a final project that applies certificate learning outcomes.
This capstone course cannot be used for the Sociology BA degree.

SOCI 310: Foundations of Sociological Theory

Consideration of the significant developments in sociological thought. Special emphasis will be placed on the contributions of Marx, Weber, Simmel, Pareto, and Durkheim.

SOCI 350: Methods of Social Research

An introduction to sociological research covering research design, data collection, processing, and analysis, sampling, evaluation of research studies.

SOCI 370-378: Selected Topics in Sociology

Extensive readings, critical evaluations and papers on selected research monographs. Selection of topics will vary, depending upon the needs of eligible students. This course may be repeated for credit.

SOCI 379: Independent Study

Before registering the student is required to consult with the faculty member in the discipline to be studied who will supervise the independent study. May be repeated for credit.

SOCI 380: Senior Seminar in Sociology

This course consists of readings and discussions in the area of the individual student's interest in preparation for the comprehensive examination in Sociology. Required of all Liberal Arts students majoring in Sociology.

SOCI 390: Internship in Sociology

The student is placed in a sociological fieldwork situation in which practical vocational experience can be acquired in some agency or institution related to the student's future career plans. Interested students should apply through their advisor.

SOCI 395: Honors Independent Study/Thesis

Honors Independent Study/Thesis.

SOCI 398: Honors Supplementary Research

SOCI 450: The Sociology of Education: School and Modern Society

The educational system in the United States is viewed from a sociological perspective, focusing upon the social forces that shape the schools and the internal social structure and processes which influence its mission in society.

Social Work

SOWK 100: Introduction to Social Work and Social Welfare

This course provides an overview of the development of social welfare and social work practice. The historical development of social welfare is related to the emergence and the development of the social work profession. The course introduces knowledge, values, and skills as the common base of generalist social work practice. The problem solving approach to social work practice with multi-level system is introduced. Required of all social work majors.

SOWK 130: Poverty and Social Welfare

This course defines poverty and examines groups in poverty in the United States. It traces poverty in America from a historical perspective, reviews major social welfare programs designed to respond to poverty and examines their effectiveness. Special populations and groups at risk encountered by social workers in practice will be examined with emphasis on viewing individual, family, and community functioning from a person-in-environment perspective. Major oppressive institutions and their effects on people in poverty are examined. Social work methods for social change to prevent, alleviate and resolve poverty are introduced.

SOWK 160: Human Behavior and Social Environment

This course teaches students to evaluate and apply biological, psychological, and social theories to client's situation with a particular emphasis on the examination of the effects of the interplay of biological, psychological, social, economical and cultural elements of the social environment on human functioning. The impact of social and economic forces on the individual's behavior are presented. Systems promoting or deterring people in the attainment and maintenance of optimal health and well-being are explored with particular attention on the effects of these systems on ethnic and racial minorities, sexual minorities, women, and persons with disability. Required of all social work majors.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SOWK 200: The Professional Context of Social Work Practice

The course builds upon and reinforces the foundation of generalist social work knowledge, social work values, principles, ethics, attitudes, and skills introduced in the Introduction to Social Work Course. Students study the Code of Ethics of the National Association of Social Workers and practice ethical decision making. The course reinforces the skills necessary to implement the phases of the problem-solving approach to social work practice with multi-level client systems (individuals, groups, families, communities, organizations). Students will be required to participate in a 30-hour volunteer field/laboratory experience. Open only to Social Work majors and minors. A grade of "C" or better is required in this course to enter SOWK 250.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SOWK 250: Social Work With Individuals: Practice I

The Social Work Practice with Individuals course starts a series of social work practice courses in which the skills of the

problem solving approach are practiced with multi-level client systems (individual, groups, families, communities, and organizations). In this course students practice relationship building, interviewing techniques, case recording and further develop their problem-solving skills which were reinforced in the Professional Context of Social Work Practice Course. Students will be expected to participate in a laboratory experience involving a helping relationship project. Open to majors only. Required of all social work majors. A grade of "C" or better is required in this course to enter SOWK 265.

SOWK 255: Social Welfare Policy

The course defines social welfare policy in the context of social policy and examines its philosophical and historical roots. The policy making process is examined and the major actors associated with it are identified. A significant part of the course will be spent in the study of major welfare policies and the groups affected by them. Strategies and involvement of people for policy change are examined.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SOWK 265: Social Work Practice With Groups and Families: Practice II

This course is the second in the series of social work practice courses in which the skills of the problem solving approach are practiced with multi-level client systems (individual, groups, families, communities, organizations). The course focuses on concepts, methods, and skills in social work practice with groups and families. Family development and dynamics will be studied and social work intervention techniques with emphasis on problem solving will be examined. Through class discussions, exercises and group projects, students will apply their understanding of group dynamics and family assessment, and demonstrate social work practice skills with groups and families. Required of all social work majors. Open to majors only. A grade of "C" or better is required in this course.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SOWK 280: Social Work Practice With Communities and Organizations:

This is the third course in a series of social work practice courses. This course reinforces and applies social work knowledge, values, and skills using the problem solving approach and focuses on intervention strategies with communities and organizations. Students practice generalist social work within a systems theory framework. A policy practice emphasis is applied for advocacy and change strategies with agencies and communities. Particular attention will be given to strategies of change with disenfranchised and minority populations. Required of all majors. Open to majors only. A grade of "C" or better in this course is required to enter SOWK 381 and SOWK 382.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SOWK 285: Essential Skills for Helping People

This is a course for social work majors and minors who wish to practice skills as they are carried out in professional social work practice. Students will engage in Problem-Based Learning, a cooperative learning experience in which the skills introduced in our social work sequence up to SOWK 200 Professional Context of Practice, will be reinforced and practiced as students follow a case study from engagement and assessment to termination and evaluation. These skills will include developing empathy, creating professional relationships, active listening, strength-based assessment, self-assessment, policy analysis and advocacy, social work record keeping, practice evaluation, and the use of supervision in practice. Students develop an appreciation for life-long learning by engaging actively in a real social work case study, which provides the vehicle for the hands-on practice of course material. The course will count as an elective in the social work program.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SOWK 286: Social Work and Substance Abuse

This survey course provides students with an introduction to substance abuse. The students will explore current understanding of the prevention of substance abuse/dependence; components of comprehensive substance abuse treatment

programs, populations at risk and evidence-based practice. The person-in-environment perspective will be used as an overarching framework for assessment, delivery, and evaluation of services. In addition, students will be introduced to the professional literature available for lifelong learning.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SOWK 290: Social Gerontology and Social Welfare

This course is aimed at analyzing the process of aging from a sociological perspective and studying the resources that our society provides for the over-sixty population through social welfare measures. There will be double pronged emphasis: one placed upon various social problems confronting them in American society; the second emphasis will be on the array of social welfare services available, the social policies implicit in the provision of such services, and the social work practices that enable older persons and their families to secure such services.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SOWK 315: Human Services Administration and Social Policy

This is an analysis of the administrative and public policy processes in social welfare agencies. The course builds upon the foundations presented in Social Welfare Policy and specifically focuses on the unique values and needs of human service agencies.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SOWK 320: Case Management - an Interdisciplinary Approach

The course will cover principles, theory, and the historical development of case management as an interdisciplinary method of delivering health and human services. Emphasis will be placed on the development of skill in implementing the phases of this method of practice (assessment, goal setting, case planning, monitoring progress, and termination and evaluation). Appropriate groups of client populations will be identified and issues related to their unique needs in relation to their social environment will be examined. Required: a grade of "C" or better for social work majors.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SOWK 321: Professional Dimensions of Case Management

This course is the second course in case management and is focused on the professional context of case management including behaviors and functioning of the case manager. Organizational and social policy context of case management are examined both at national and international levels. The course examines the case manager's use of self in exercising professional roles, duties, activities, and interactions with people served. The course covers the role of professional values that are necessary to practice case management across fields, disciplines, and clienteles. Various professional codes of ethics will be examined and ethical decision making techniques will be learned. Issues related to personal safety, conflict resolution, legal issues and documentation of services will be considered. Professional case management societies domestically and abroad will be studied with attention to cross national comparisons of best practice models.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SOWK 325: Social Work and Human Sexuality

This course explores the socio-cultural, physiological, and psychological variables associated with human sexual expression, identity, orientation, and behavior. Attention will also focus on clinical issues most often presented in social work practice and women and gender studies by individuals and couples, e.g., desire discrepancy in couples and affairs outside a committed relationship. Specific sexual dysfunctions identified in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) will be explored in terms of their etiology and the current treatment models used to address them. The field of Sex Therapy, past and present, will be discussed as well as the evidence-based practices for treatment. This course is not designed to create sex therapists but to help social workers feel more comfortable dealing with the sexual concerns of their clients.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SOWK 328: Child Welfare and Social Work Practice

This course introduces the student to the field of Child Welfare and examines both social policy and social work practice concerns. Emphasis will be placed on child protective services, foster care, and adoption. Developmental issues, as well as natural and foster family functioning will be studied. Special social work intervention strategies such as foster and adoptive family assessment, abuse assessment, and child advocacy will be learned.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SOWK 360: Methods and Practice of Social Work Research

The course reviews the classic social and behavioral research process and develops skills in formulating research problem(s) and questions, conducting a comprehensive literature review, establishing hypotheses, and choosing research designs. Data collection instruments, analysis techniques, and report writing are emphasized. Ethical and moral issues which arise when dealing with human subjects, as well as sensitivity to cultural diversity of the research participants are included. Emphasis is placed on social work practice evaluation techniques, including single-subject as well as experimental and quasi-experimental designs. Computers and information technology for social work practice are introduced. This course must be taken concurrently with SOWK 382 or with permission of the instructor.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SOWK 370: Selected Topics in Social Work and Social Welfare

This is a course for students of social work who wish to deal with a specific social work topic or system in greater detail than current curricular offerings permit. Topics will depend on needs and interests of eligible students. May be taken a maximum of three (3) times.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SOWK 371: Selected Topics in Social Work and Social Welfare

This is a course for students of social work who wish to deal with a specific social work topic or system in greater detail than current curricular offerings permit. Topics will depend on needs and interests of eligible students. May be taken a maximum of three (3) times.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SOWK 372: Selected Topics in Social Work and Social Welfare

This is a course for students of social work who wish to deal with a specific social work topic or system in greater detail than current curricular offerings permit. Topics will depend on needs and interests of eligible students. May be taken a maximum of three (3) times.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SOWK 373: Selected Topics in Social Work and Social Welfare

This is a course for students of social work who wish to deal with a specific social work topic or system in greater detail than current curricular offerings permit. Topics will depend on needs and interests of eligible students. May be taken a maximum of three (3) times.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SOWK 374: Selected Topics in Social Work and Social Welfare

This is a course for students of social work who wish to deal with a specific social work topic or system in greater detail than current curricular offerings permit. Topics will depend on needs and interests of eligible students. May be taken a maximum of three (3) times.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SOWK 375: Selected Topics in Social Work and Social Welfare

This is a course for students of social work who wish to deal with a specific social work topic or system in greater detail than current curricular offerings permit. Topics will depend on needs and interests of eligible students. May be taken a maximum of three (3) times.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SOWK 376: Selected Topics in Social Work and Social Welfare

This is a course for students of social work who wish to deal with a specific social work topic or system in greater detail than current curricular offerings permit. Topics will depend on needs and interests of eligible students. May be taken a maximum of three (3) times.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SOWK 377: Selected Topics in Social Work and Social Welfare

This is a course for students of social work who wish to deal with a specific social work topic or system in greater detail than current curricular offerings permit. Topics will depend on needs and interests of eligible students. May be taken a maximum of three (3) times.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SOWK 378: Selected Topics in Social Work and Social Welfare

This is a course for students of social work who wish to deal with a specific social work topic or system in greater detail than current curricular offerings permit. Topics will depend on needs and interests of eligible students. May be taken a maximum of three (3) times.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SOWK 379: Independent Study

The student must confer and reach agreement with the faculty member who will guide the independent study. The student and the faculty member must agree upon a topic, course content, evaluation procedures, reading list, and amount of credit prior to registration for the course. This material (course content, evaluation procedures, reading list, etc.) must be filed with, and receive the approval of, the faculty of the discipline involved and of the departmental chairperson. May be repeated for credit. Student must have completed 12 clock hours in the major to enroll.

SOWK 381: Field Instruction in Social Work I

This is the first of two semesters (total 480 hours) of field instruction in social welfare agency settings which are required under the supervision of a professional social worker. Students apply foundation knowledge, skills, values, and ethics of professional generalist practice. Through supervision, students enhance their awareness of self, develop written and oral communication skills necessary for analysis of professional practice, and apply critical analytic skills for implementing and evaluating agency

policies and programs. Students operationalize the unique values, functions and roles of professional social work practice and develop competency in identifying and assessing situations where the relationship of people and their social environment needs to be enhanced or changed. The professional responsibility of advocacy toward change and recognition of the impact of policy and programs on oppressed groups is an integral part of the applied learning. Open only to Social Work majors. Required of all Social Work majors. A grade of "C" or better is required in this course to enter SOWK 383. Must be taken concurrently with SOWK 382. Offered in fall only.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SOWK 382: Professional Seminar in Social Work I

This is the first of two semesters of Professional Seminar in Social Work which are required. The Seminars complement the Field Instruction and provide a structured learning opportunity where students process their practice experiences and integrate the common base of social work values, skills, and knowledge of generalist social work in a systems theory perspective. The Seminars also assist students to expand their knowledge of the human services field beyond the confines of their own placement. Topics and policies of social work and social welfare are discussed, based in large part, on the experiences of students in the field through written logs, client summaries, and classroom discussions of experiences including feelings about their social work practice. Open to Social Work majors only. Required of all Social Work majors. A grade of "C" or better is required in this course to enter SOWK 384. Must be taken with SOWK 381. Offered in Spring only.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SOWK 383: Field Instruction in Social Work II

This is the second semester of field instruction (a total of 480 hours) in social welfare agency settings which is required under the supervision of a professional social worker. Students apply foundation knowledge, skills, values, and ethics of professional generalist practice. Through supervision students enhance their awareness of self, develop written and oral communication skills necessary for analysis of professional practice, and apply critical analytic skills for implementing and evaluating agency policies and programs. Students operationalize the unique values, functions and roles of professional social work practice and develop competency in identifying and assessing situations where the relationship of people and their social environment needs to be enhanced or changed. The professional responsibility of advocacy toward change and recognition of the impact of policy and programs on oppressed groups is an integral part of the applied learning. An agency-based research project is required in this semester of fieldwork. Open to Social Work majors only. Required of all Social Work majors. Must be taken concurrently with SOWK 384. Offered in Spring only.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SOWK 384: Professional Seminar in Social Work II

This is the second of two required semesters of Professional Seminar in Social Work. The Seminars complement the Field Instruction and provide a structured learning opportunity where students process their practice experiences and integrate the common base of social work values, skills, and knowledge of generalist social work in a systems theory perspective. The Seminars also assist students to expand their knowledge of the human services field beyond the confines of their own placement. Topics and policies of social work and social welfare are discussed, based in large part on the experiences of students in the field through written logs, client summaries, and classroom discussions of experiences including feelings about their social work practice. An agency-based research paper is required. Open to Social Work majors only. Required of all Social Work majors. Must be taken with SOWK 383. Offered in Spring only.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SOWK 395: Honors Independent Study/Thesis

Honors Independent Study/Thesis.

SOWK 398: Honors Supplementary Research

SOWK 400: Foundations in Human Behavior in the Social Environment

This course, for foundation-year graduate students in social work, teaches students to critically evaluate and apply biological, psychological, and social theories to client situations across the lifespan. Effects of the interplay of biological, psychological, social, economical and cultural elements of the social environment on human functioning are examined. Systems promoting or deterring people in the attainment and maintenance of optimal health and well-being are explored with particular attention on the effects over the life course of these systems on populations at risk, ethnic and racial minorities, sexual minorities, women, and persons with disability.

SOWK 450: Foundations of Social Work Practice with Individuals

Students will learn a planned change process that includes relationship building, prevention, planning, interviewing techniques, case recording, termination and evaluation. Attention to the evolution of social work practice from an historical and international perspective will establish the context for this introduction to practice with individuals in the context of the agency setting. Students will be expected to participate in a laboratory experience involving a helping relationship project. Knowledge and skills relevant to engaging diversity in practice and advancing human rights and social justice will be emphasized. Issues of ethical decision-making, evidence based practice and professional identity will be integrated throughout the course. This course is required of all Master's of Social Work students.

SOWK 455: Foundations of Social Welfare Policies

This course, for foundation-year graduate students in social work, provides an historical perspective for understanding current issues in social work and social welfare. The policy making process is critically examined and the major actors associated with it are identified. A significant part of the course will be spent in the study of major welfare policies and the groups affected by them. Strategies and involvement of people for policy change are examined.

SOWK 460: Foundations of Social Work Research Methods

This course, for foundation-year graduate students, uses the scientific inquiry model for social and behavioral science research in social work practice. Students develop skills in formulating research problems and questions, conducting a comprehensive literature review, establishing hypotheses and choosing research designs, both quantitative and qualitative. Data collection instruments, analysis techniques and report writing are emphasized. Ethical issues related to human subjects, as well as sensitivity to the diversity of research participants are included. Emphasis is placed on social work practice evaluation techniques, including single-subject as well as experimental and quasi-experimental designs. Computers and information technology for social work practice are introduced. The use of appropriate statistical techniques in data analysis is covered.

SOWK 465: Foundations of Social Work Practice with Groups and Families

This course for foundation level graduate students in social work continues the study of the problem solving approach with multi-level client systems (individual, groups, families, communities, organizations). The course focuses on concepts, methods, and skills in social work practice with groups and families. Family development and dynamics will be studied and social work intervention techniques with emphasis on problem solving will be examined. Through class discussions, exercises and group projects, students will apply their understanding of group dynamics and family assessment, and demonstrate social work practice skills with groups and families.

SOWK 480: Foundations of Social Work Practice with Organization

This course for foundation level graduate students in social work continues the study of the problem solving approach with multi-level client systems (individual, groups, families, communities, organizations). This course reinforces and applies social work knowledge, values, and skills using the problem solving approach and focuses on intervention strategies with communities and organizations. Students practice generalist social work within a systems theory framework. A policy practice emphasis is applied for advocacy and change strategies with agencies and communities. Particular attention will be given to strategies of change with populations at risk.

SOWK 481: Generalist Internship I

This internship is the first of two foundation-level, graduate semesters (total 450 hours) of field instruction in social welfare agency settings which are required under the supervision of a professional social worker. Students apply foundation knowledge, skills, values, and ethics of professional generalist practice. Through supervision, students enhance their awareness of self, develop written and oral communication skills necessary for analysis of professional practice, and apply critical analytic skills for implementing and evaluating agency policies and program. Students operationalize the unique values, functions and roles of professional social work practice and develop competency in identifying and assessing situations where the relationship of people and their social environment needs to be enhanced or changed. The professional responsibility of advocacy toward change and recognition of the impact of policy and programs on oppressed groups is an integral part of applied learning, as is development of professional identity. Must be taken concurrently with SOWK 482, Integrated Professional Generalist Social Work Practice Seminar I.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SOWK 482: Integrated Generalist Social Work Practice Seminar

This seminar, the first of two for foundation-level MSW students, begins an effective bridge to align the liberal arts perspective expected of entering graduate-level students and the advanced level family-in-environment content. The following concepts will be introduced and reinforced: the history and philosophy of the social work profession, social work values and ethics, the Generalist Intervention Model of Social Work, populations at risk, cultural diversity, promotion of social and economic justice, and fields of social work practice. The Seminars complement the Field Instruction and provide a structured learning opportunity where students process their practice experiences and integrate the common base of social work values, skills, and knowledge of generalist social work in a systems theory perspective. The seminars also assist students to expand their knowledge of the human services field beyond the confines of their own placement. Topics and policies of social work and social welfare are discussed, based in large part, on the experiences of students in the field through written logs, client summaries, and classroom discussions of experiences including feelings about their social work practice. Must be taken concurrently with SOWK 481.

SOWK 483: Generalist Internship II

This internship is the second of two foundation-level, graduate semesters of field instruction (total 450 hours) of field instruction in social welfare agency settings which are required under the supervision of a professional social worker. Students apply foundation knowledge, skills, values, and ethics of professional generalist practice. Through supervision, students enhance their awareness of self, develop written and oral communication skills necessary for analysis of professional practice, and apply critical analytic skills for implementing and evaluating agency policies and program. Students operationalize the unique values, functions and roles of professional social work practice and develop competency in identifying and assessing situations where the relationship of people and their social environment needs to be enhanced or changed. The professional responsibility of advocacy toward change and recognition of the impact of policy and programs on oppressed groups is an integral part of applied learning, as is development of professional identity. Must be taken concurrently with SOWK 484, Integrated Professional Generalist Social Work Practice Seminar II.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SOWK 484: Integrated Generalist Social Work Practice Seminar

This seminar, the second of two for foundation-level MSW students, continues aligning the liberal arts perspective expected of entering graduate-level students and the advanced level family-in-environment content. The following concepts will be integrated: professional use of self, social work values and ethics in the context of the mandate of the setting, the Generalist Intervention Model of Social Work, populations at risk, cultural diversity, promotion of social and economic justice, and fields of social work practice. The Seminars complement the Field Instruction and provide a structured learning opportunity where students process their practice experiences and integrate the common base of social work values, skills, and knowledge of generalist social work in a systems theory perspective. The seminars also assist students to expand their knowledge of the human services field beyond the confines of their own placement. Must be taken concurrently with SOWK 483.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SOWK 491: Internship for Advanced Standing I

Offered to advanced-standing MSW students, this internship is the first of two graduate semesters (total 450 hours) of field instruction under the supervision of a professional social worker. While foundation social work practice is based on 10 competencies and their associated practice behaviors, advanced practice augments these competencies with the development of a knowledge concentration specific to advanced generalist practice. The purpose of this internship is to bridge foundation and advanced studies by 1) highlighting those foundation competencies that are most significant to this program's mission, and 2) allowing students to develop the skill of articulating to a variety of constituents the connection between conceptual frameworks and their increasingly complex, multi-level practice behaviors. Through supervision, students enhance and articulate their awareness of self and further the development of a professional identity as social workers. They articulate critical analysis for ethical decision-making and practice implementation and engage in practice-informed research. They articulate methods of assessing and intervening to advance human and civil rights through an understanding of the impact of policy and the strengths and challenges associated with diversity. Responding to the context of practice, students learn the importance of agency function and worker role to multi-level, advanced practice. Must be taken concurrently with SOWK 492.

SOWK 492: Generalist Social Work Practice for Advanced Stand

This seminar for advanced standing students complements the field instruction by providing a structured learning opportunity. While foundation social work practice is based in 10 competencies with the development of a knowledge concentration specific to advanced generalist practice. The purpose of this internship is to bridge foundation and advanced studies by 1) giving students the opportunity to integrate an articulate those foundation competencies that are the most significant to the programs mission, and 2) allowing students to articulate the connection between conceptual frameworks and their increasingly complex, multi-level practice behaviors. Students articulate verbally and in writing their process of developing a professional use of self and professional identification. They articulate critical analysis for ethical decision making, practice implementation and practice-informed research projects. They articulate methods of assessing and intervention to advance human and civil rights through and understanding of the impact of policy and the strengths and challenges associated with diversity. Responding to the context of practice, students learn the importance of agency function and worker role to multi-level advanced practice. The seminar assists students to expand their knowledge of the human services field beyond the confines of their own placement through their shared experiences as discussed in class. Must be taken concurrently with SOWK 491.

SOWK 493: Internship for Advanced Standing II

Offered to advanced-standing MSW students, this internship is the second of two graduate semesters (total 450 hours) of field instruction under the supervision of a professional social worker. While foundation social work practice is based on 10 competencies and their associated practice behaviors, advanced practice augments these competencies with the development of a knowledge concentration specific to advanced generalist practice. The purpose of this internship is to bridge foundation and advanced studies by 1) highlighting those foundation competencies that are most significant to this program's mission, and 2) allowing students to develop the skill of articulating to a variety of constituents the connection between conceptual frameworks and their increasingly complex, multi-level practice behaviors. Through increasingly reflective supervision students enhance and articulate their awareness of self and further the development of a professional identity as social workers. They articulate critical analysis for ethical decision-making and practice implementation and complete a practice-informed research project. They articulate methods of assessing and intervening to advance human and civil rights through an understanding of the impact of policy and the strengths and challenges associated with diversity. Responding to the context of practice, students learn the importance of agency function and worker role to multi-level, advanced practice. Must be taken concurrently with SOWK 492.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SOWK 494: Generalist Social Work Practice for Advanced Stand

This seminar, the second of two incoming MSW students with advanced standing status, continues to provide a structured learning opportunity for students enrolled in field instruction. The course continues to bridge foundation and advanced studies by 1) giving students the opportunity to continue the process of integrating and articulating those foundation competencies that are the most significant to the programs mission, and 2) allowing students to practice the articulation of the integration of

conceptual frameworks into their increasingly complex, multi-level practice behaviors. Emphasis is placed on the following: independent, practice-informed program evaluation; autonomous articulation of social work principles and professional identity; engagement of diversity in practice along with advocacy toward human rights and social justice; and professional use of self within the social work role as it exists in agency context. Must be taken concurrently with SOWK 493.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

Spanish

SPAN 101: Elementary Spanish I

SPAN 101 is an introductory level course for students with no previous or minimal experience in the language.

SPAN 102: Elementary Spanish II

SPAN 102 is the sequence to SPAN 101 and is designed for students with one semester of college Spanish or one year of high school Spanish Emphasis is on oral aspects of the language with substantial work on reading and writing skills and an introduction to Hispanic culture.

SPAN 103: Intermediate Spanish III

Students who have successfully completed SPAN 101 and SPAN 102 or the equivalent (per the CAPE language placement test) continue the development of basic language skills (speaking, listening, reading and writing) and the exploration of Spanish-speaking cultures. Course content is based on the "5C's" of second language acquisition: communication, cultures, connections, comparisons and communities. This course is taught in Spanish.

SPAN 104: Intermediate Spanish IV

Students who have satisfactorily completed Elementary Spanish I and II, or equivalent, continue the development of the basic skills in aural comprehension, speaking, and writing. In addition, emphasis is placed on independent readings.

SPAN 105: Intermediate Spanish for Business I

This course, the first half of the Intermediate Spanish for Business sequence, integrates a four-skills approach to intermediate Spanish with an emphasis on real-life language tasks involving business contexts and Hispanic cultures. Topic-specific business vocabulary and thematic readings are emphasized while incorporating the "5C's" of second language acquisition (communication, cultures, connections, comparisons, and communities). (Taught in Spanish).

SPAN 106: Intermediate Spanish for Business II

This course, the second half of the Intermediate Spanish for Business sequence, integrates a four-skills approach to intermediate Spanish with an emphasis on the continued study of real-life language tasks involving business contexts and Hispanic cultures. Topic-specific business vocabulary and thematic readings are emphasized while incorporating the "5C's" of second language acquisition (communication, cultures, connections, comparisons, and communities). (Taught in Spanish).

SPAN 110: Spanish for Educators

This course is designed to introduce to educators and participants the language and the culture of the different groups that make up the Spanish-speaking community in the areas surrounding Kutztown University. Participants will be learning the basics of the Spanish language, which will allow them to better communicate in Spanish with both learners and their parents/guardians who speak Spanish. In addition to introducing the Spanish language, this course will include a selection of films, readings written by Hispanic authors dealing with the Hispanic experience in the USA, and speakers from the Hispanic community.

SPAN 207: Writing in Spanish for the Professional World

This course focuses primarily on written forms created in the professional world, including but not limited to letters, memoranda,

email, and business reports, such as executive summaries and minutes from meetings. Through modeling and practice of forms, researching external sources, and a variety of hands-on activities and projects, students will gain experience communicating in a professional environment. In addition to written forms, this course also allows students to practice job interviewing and to analyze team dynamics during group projects. (Taught in Spanish).

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPAN 212: Spanish Composition

This course is designed to improve the student's writing skills in Spanish. Special attention will be devoted to learning some of the basic types of writing: descriptive, narrative, expository, persuasive and the research paper.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPAN 213: Advanced Conversation in Spanish

This course is designed for students who have successfully completed the intermediate level of Spanish (022 or the equivalent) and who are not "native" speakers of Spanish. The focus is on oral communication in Spanish. The course will be conducted in Spanish and oral projects will be used for purposes of grade assessment.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPAN 214: Written and Oral Communication for Spanish-speaking Heritage

Written and Oral Communication for Spanish-speaking Heritage Learners (SHLs) is a course designed for those learners who are currently and linguistically connected to the Spanish-speaking community in PA and beyond. The aim of this course will be to offer enhanced/increased oral and written proficiency of Spanish as it explores the linguistic diversity of Latinos through activities aligned with the three modes of communication: interpretive (reading and listening); interpersonal (authentic oral and written interpersonal communication); and presentational (writing and speaking). This course will also serve to reconnect SHLs to cultural issues of their community. (In Spanish)

SPAN 220: Applied Linguistics in Spanish

Introduction to general linguistics, emphasizing the practical application of the basic structural and phonetic patterns of Spanish to language teaching. Students will be introduced to the fundamental principles of phonology, morphology, syntax, semantics, language acquisition, foreign language acquisition, foreign language methodology, sociolinguistics and neurolinguistics. (In Spanish.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPAN 222: Don Juan in the Western World

Don Juan in the Western World explores the influence of the legendary Spanish figure of Don Juan on the literature, music and film of Western Europe and the Americas. All works not originally written in English will be studied in their English translation. This course will be taught in English.

SPAN 225: Introduction to Spanish/English Translation

This course develops basic knowledge, skills and techniques required for translation as well as continued growth of linguistic resources such as vocabulary, structures and style within a Spanish/English linguistic and cultural context. The student will learn how to address translation problems related to culture and language as well as the fundamentals of applied translation from different fields such as medicine, advertising, sports, computer science, etc. The student will also acquire basic knowledge of translation theory.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPAN 230: Cultural Issues through Spanish-language Film

This course is designed to introduce students to the culture, history, politics, social and economic issues of the Spanish-speaking world through film. Problems such as immigration, exile, gender issues, the role of minorities in the modern world, the Spanish-speaking world in the age of globalization, and other important topics, are all present in Spanish-language film. This course will require the viewing of films outside the regular classroom hours. (Taught in Spanish.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPAN 240: Latin American Women's Expression in Translation

This course explores the panorama of the experiences of Latin American women as expressed through literature, music, film, and art. This interdisciplinary course includes the examination of artistic, cultural, political, historical, and socio-economic contexts and contributions of women through a chronologically and geographically Pan-American approach. The course is taught in English.

SPAN 247: Modern Latin American Literature in Translation

An in-depth study of outstanding Twentieth Century literary works of Latin American writers. The survey will include representative works from the major literary genres: novel, essay, short story, drama and poetry.

SPAN 251: Survey of Spanish Literature in Translation I

This course traces the development of Spanish literature from its origins through the nineteenth century. Representative readings of the major literary types (In English translation).

SPAN 252: Survey of Spanish Literature in Translation II

This course traces the development of Spanish literature from the nineteenth century through the present. Representative readings of the major literary types (In English translation).

SPAN 291: Advanced Business Practices and Cultures I

This course will build upon the foundation of Spanish business vocabulary, discourse and practice laid in SPAN 105/106 while developing conceptual knowledge of general management, accounting and finance principles. The course will also develop geographic literacy and cultural understanding of the Spanish-speaking world with a primary emphasis on Spain, Mexico, and Central America. (Taught in Spanish).

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPAN 292: Advanced Business Practices and Cultures II

This course will build upon the foundation of Spanish business vocabulary, discourse and practice laid in SPAN 105/106 while developing conceptual knowledge of goods and services, marketing and markets, including financial markets. The course will also develop geographic literacy and cultural understanding of the Spanish-speaking world with a primary emphasis on South America and the Caribbean. (Taught in Spanish).

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPAN 301: Survey of Spanish Literature I

The development of Spanish literature from its origins through the end of the eighteenth century. Representative readings of the major literary types. (In Spanish.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPAN 302: Survey of Spanish Literature II

A survey of the literature of Spain of the nineteenth century to the present. Representative readings of varied literary types. (In Spanish.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPAN 311: Spanish American Literature to 1910

SPAN 311 will survey the development of Spanish American Literature from its origins to 1910. Representative readings of the major literary types. (In Spanish.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPAN 312: Spanish American Literature from 1910 to the Present

SPAN 312 is a continuation of SPAN 311 and will survey the development of Spanish American Literature from 1910 to the present day. (In Spanish.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPAN 315: Rebels and Romantics

This course focuses on the Romantic movement in Spain. From a nuanced understanding of the late eighteenth century to a discussion of the "death" of high Romanticism in 1844, the class centers on the political and historical context of liberal Romanticism with its emphasis on individualism, alienation, freedom, rebellion, national history and poetic genius. (Taught in Spanish).

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPAN 320: Contemporary Spanish Novel

SPAN 320 will survey the development and history of the Spanish Peninsular Novel from 1898 to the present. Representative works and authors from this period will be studied. (In Spanish.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPAN 325: Advanced Syntax and Stylistics

This course is designed for those who have successfully completed SPAN 212, and who are ready for additional work toward mastering the fine points of syntax. In addition, the course will offer extensive practice in analyzing literary and colloquial styles and will provide the practice needed to develop the ability of the student to express him/herself in writing and speaking in acceptable idiomatic styles. Greater proficiency, ease and enjoyment in reading prose and poetry in various styles will be a concomitant result of the course. (In Spanish.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPAN 330: Contemporary Spanish Drama

This course studies the development of modern and contemporary Peninsular Spanish Drama from 1898 to the Present. Representative works from the Generation of '98, the Spanish Civil War, Franquist Spain, and the New Democratic Spain will be studied. The course will include extensive reading of plays as well as written and oral work on criticism, history, authors and periods. (In Spanish.) A trip to NYC or Philadelphia to see a play is a course requirement.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPAN 339: Latin American Popular Culture

This course examines Latin American popular culture from the nineteenth century to present. The primary focus is on defining popular culture versus high culture through comics, film, telenovelas (Spanish soap operas), fashion, music, art, festivals and religion. (Taught in Spanish).

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPAN 340: Spanish Culture and Civilization

Spanish life and culture from its origins to 1898 as seen in literature, art, music and philosophy. The folklore, linguistic and social aspects of culture will also be covered to acquaint the student with the complexities of the national background. (In Spanish.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPAN 341: Modern Spain 1898 - Present

Modern Spain 1898 - present is designed as a socio-political-economic study of Spain since the loss of her colonial empire. It is a study of historical, literary and cultural trends and genres as well as the development and progression of the arts and literatures in Spain within the context of the growth and development of its social, economic and political institutions. The course will relate developments in Spain to those in Europe and the world. (In Spanish.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPAN 343: Bilingualism and Sociolinguistic Issues in the Spanish Speaking

This course examines Hispanic bilingualism and sociolinguistics, with particular emphasis on Spanish in the U.S., but includes Spanish in contact with other languages throughout Latin America and Spain. In this course we will consider language contact from historical, sociological, theoretical, educational and political perspectives. This course will be taught in Spanish.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPAN 345: Latin American Culture and Civilization to the Nineteenth Century

A selective study of important Latin American historical, social, literary and cultural trends and artistic movements and values from the pre-Columbian period to the nineteenth century. Emphasis will be placed on the Latin American versions of key Western-period terms such as: Renaissance, Baroque and the Enlightenment. Some literary selections and artistic works are selectively introduced in order to illustrate the cultural trends under study. (In Spanish.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPAN 346: Latin American Culture and Civilization from the Nineteenth

This course, which could be taken independently from the previous, continues the study of important Latin American cultural trends and values from the nineteenth century to the present. Emphasis will be placed on the Latin American versions of key Western-period terms such as romanticism, avant-garde approaches as well as on locally generated movements such as Modernismo, Arielismo, Indigenismo, etc. Some literary selections and artistic works are selectively introduced in order to illustrate the cultural trends under study. (In Spanish.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPAN 348: Mexican Culture and Civilization

This course is a panoramic exploration of the depth and variety of Mexican Culture and Civilization. This course will incorporate a multidisciplinary approach to the historical, political, cultural, artistic, and socio-economic movements that have influenced and continue to influence Mexico as a nation. Cultural manifestations such as art, music, narrative texts and film will be

examined. Oral and written practice in critical thought will further mastery and expression of the Spanish language. The course is taught in Spanish. Three semester hours. Three contact hours.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPAN 350: Spanish Drama of the Golden Age

This course will present the development of the Spanish national drama in the Sixteenth Century and its culmination in the latter part of the Seventeenth Century. Students will become familiar with the contribution of the Spanish theater to the development of a national awareness and those traditional values considered to be essentially Spanish. Students will become familiar with the versification forms used by the dramatists of the era. (In Spanish.)

SPAN 355: Spanish Literature of the Golden Age

Emphasis on the development of the different forms of the Spanish novel, the various genres of poetry and dramatic developments of the period. (In Spanish.)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPAN 358: Voices of Central America

A multi disciplinary introduction to contemporary Central America, this course, taught in Spanish, will explore the following aspects of Guatemala, Honduras, El Salvador, Nicaragua, Costa Rica, Panama and Belize: Peoples, geography, arts, and literature in a socio-political, economic and historical framework. The course will use extensive Internet resources, film, theatre as well as guest lectures. Some off-campus activities will be required.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPAN 360: Study Abroad Experience

This course permits approved study abroad experiences to be counted in the student's Spanish major (B.A. and B.S.Ed.), minor or concentration. Prior to an approved study abroad experience, any students majoring in Spanish may, with the input and approval of her/his advisor, request that 1-6 credit hours be granted toward her/his major based on the activities to be undertaken. Any student minoring in Spanish or seeking a concentration in Spanish may request that 1-3 hours be granted based on the activities to be undertaken. Students are required to prepare a written request to the advisor giving a description of activities and a rationale for requesting credit. This course is available only to students majoring, minoring or earning an Elementary Education concentration in Spanish who complete an approved study abroad program and meet evaluation standards approved by the Spanish advisor.

SPAN 363: Spanish and Entrepreneurship

In this course, students will develop the habits and skills necessary to become entrepreneurs, or to apply the entrepreneurial leadership mindset to their work as employees, with a particular in-depth focus on the use of the Spanish language and an understanding of Hispanic cultures as they pertain to entrepreneurship in the Spanish-speaking world and its place within the global business context. The course, taught in Spanish, is usable for the Spanish major and minor.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPAN 368: The Caribbean: Race, Gender, and Cultural Politics

This course is a study of the cultural politics of identity formation in the Spanish-speaking Caribbean, particularly in Cuba, Puerto Rico and the Dominican Republic. Areas of focus will include: the textual and cinematic representations of slavery and of the Afro-Caribbean experience, from anti-slavery works through la poesía negra to the more recent manifestations of Afro-centrism; the Siboney movement; the Taíno revival; and Pan-Caribbeanism. The class is primarily discussion with some lecture. (In Spanish)

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPAN 370-379: Selected Topics in Spanish

This course entails an intensive study of a selected literary topic not included or not covered in depth in other Spanish courses. May be repeated for credit. (In Spanish.)

SPAN 380: Senior Seminar in Spanish

This course consists of extensive readings, intensive oral work in the form of discussions and in-class presentations, and written paper(s) in preparation for the comprehensive exams in Spanish. The content of the course will revolve around solidifying the students' knowledge of literary periods, characteristics and genre, principal authors, and their works with their historical and cultural content.

SPAN 390: International Internship in Spanish

This course is designed for the student wishing to spend an extended period of time abroad or at an approved domestic agency/organization in either an internship situation or non-traditional studies. Students must demonstrate that the internship or non-traditional program will be conducted in the foreign language of study and will be adequately supervised. They must present written details of the program including objectives and methods of study to their academic advisor for approval prior to the period of study. Students must also present a written journal, paper or other relevant materials to the Advisor on their return and be prepared to make a presentation about their experiences (1 - 9 hours).

SPAN 395: Independent Study in Spanish

Independent Study in Spanish.

SPAN 398: Honors Supplementary Research

SPAN 413: Major Spanish American Novelists of the New Narrative Period

This course is an intensive study of representative novels by major Spanish American writers of the "New Narrative Period." This period spans approximately five-and-one-half decades, from the mid-forties to the present. The course will focus on the writers' new visions and interpretations of the history, mythology and present realities of the Spanish American world. Additionally, the course will link the thematic content to the stylistic and structural innovations made by these authors in creating the "new Spanish American novel." (In Spanish)

SPAN 414: Major Spanish American Short Story Writers of the New Narrative

This course is an intensive study of representative collections of short fiction by major Spanish American Writers of the "New Narrative Period." The course also provides the students with the opportunity to study in depth and apply the latest critical approaches to textual analysis. (In Spanish)

SPAN 415: Mexican Literature: Voices of a Nation

This advanced course examines the complexity of Mexican Literature particularly as relates to the development and expression of national identity. This course will focus on a variety of narrative discourses (novel, short story, drama, essay and poetry) while contextualizing said narratives within appropriate cultural and historical chronologies. In-depth practice with literary and cultural analysis will be accompanied by opportunities for increased proficiency in oral and written expression. (In Spanish)

SPAN 425: Advanced Spanish Grammar and Composition

This advanced course examines the finer points of advanced Spanish grammar. With an emphasis on composition, an intensive

analysis and practice of the typical "problem areas" (such as the preterite vs. the imperfect, the indicative vs. the subjunctive, ser vs. estar, por vs. para etc.) will be approached through a contrastive method that is particularly insightful for individuals conversant in Spanish and English. In addition, the course will offer extensive practice in analyzing literary and colloquial styles and will provide necessary practice to further mastery and expression (oral and written) of acceptable idiomatic styles. Greater proficiency, ease, and enjoyment in reading as well as an increased awareness of cultural manifestations in writing will be concomitant results of the course. (In Spanish)

SPAN 431: Modern Spain through Literature and Film

This course studies the major political, cultural, social and economic changes that have taken place in Spain during the second half of the 20th century. Special attention is paid to the following periods: the civil war, the postwar period, the economic boom in the sixties, the transition from dictatorship to democracy and the establishment of democracy. The films and novels studied in this course dramatize the major events that have shaped Spanish history since the end of the Civil War. (In Spanish)

SPAN 435: Modern Latin American Drama

An intensive study of representative theatre works by major Spanish American, Central American, Mexican and Caribbean dramaturges of the twentieth century with an emphasis on the contemporary period. Students will read and evaluate plays and study appropriate critical approaches to modern theatre within the context of socio-political, economic and historic conditions and events. Attendance at selected plays is required. (In Spanish)

SPAN 447: Mexican Culture and Civilization

This course is an intensive exploration of the depth and variety of Mexican Culture and Civilization. This course will incorporate a multi-disciplinary approach to the historical, political, cultural, artistic, and socio-economic movements that have influenced Mexico as a nation. Various cultural manifestations will be examined including art, music, narrative texts and film. Extensive oral and written practice in critical thought will further mastery and expression of the Spanish language. (In Spanish)

SPAN 460: Hispanic Literature in the USA

This course is an in-depth study of several Hispanic writers writing in Spanish in the USA. It includes representative works from all major literary genres: novel, essay, short story, drama and poetry. Except for a few short texts written in English, the majority of the works are written in Spanish. (In Spanish)

SPAN 470: Selected Topics in Spanish

This course offers an intensive study of literary topics, cultural phenomena, styles, trends, criticisms, and writers not included or not covered in depth in other Spanish courses.

SPAN 495: Independent Study in Spanish

This course, which shall be taught in Spanish, is for students who wish to study and explore, in depth, aspects of Spanish and Latin American literatures, cultures and societies or a special topic in Spanish language. It is open to both graduate and undergraduate students. Students may register for this course more than once, up to a maximum of six semester hours of credit, so long as they do not repeat the same topic. The student must confer and reach agreement with the faculty member who will guide the independent study. The student and the faculty member must agree upon a topic, course content, evaluation procedures, reading list, and amount of credit prior to registration for the course. This material (course content, evaluation procedures, reading list, etc.) must be filed with and receive approval of the majority of Spanish professors and of the departmental chairperson.

Special Education

SPEE 101: Early Intervention for Students with Disabilities

The course is designed for perspective teachers of students with disabilities. This course will cover early intervention programming. Knowledge of preventing the full impact of a disability on a child, providing general curricula and instruction, universal design of instruction, disability specific instruction that meets the needs of the child's addressing disability, cultural, and language diversity from birth to age 8, and the transition to preschool or school age programming will be addressed.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPEE 200: Reading, Writing, and Teaching Unified English Braille

This course provides knowledge and skills in reading and writing braille 1 and 2 in the Unified English Braille code. It presents an overview of other means of communication used by the blind, including those with multiple disabilities. Experiences are structured to include writing braille with a Perkins Braille Writer, reading and transcribing braille material, basic textbook formatting, methods of teaching braille reading, and an introduction to computer systems used to produce Braille.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPEE 201: Cognitive Development of Diverse Learners in a Standards Aligned

This course provides the knowledge base to the terminology, identification, and issues commonly encountered when addressing the needs of diverse students with disabilities. Emphasis will be placed on diversity issues, federal and state legislative mandates pertinent to nondiscriminatory assessments, parental involvement and individualized educational plans; and professional practice and foundations in special education.

SPEE 202: Orientation and Mobility for Teachers of Students with Visual

This course covers exploration of space in the home and school environment and the wider community according to individual needs of students with visual impairments. Practical experiences are provided in orientation and mobility training under conditions of simulated blindness. Experiences are structured to sequentially afford environmental situations of increasing complexity. Students will learn how to utilize functioning sense modalities in conjunction with specially designed mobility techniques for the purpose of teaching individuals how to move safely, effectively, and independently in the environment.

SPEE 204: Anatomy of the Eye and Related Assessment of Students with Visual

This course provides lectures and demonstrations on anatomy and physiology of the eye. The course will cover structure and function of the eye, causes and implications of eye conditions, clinical assessment, functional vision assessment, environmental assessment, and stereotypical behavior assessment. This course will provide an introduction to learning media assessment. This course will cover the foundations of working with students with low vision. This course will discuss the relationship of visual impairment to other disabilities, neurological aspects of visual impairments, and educational implications. The course will provide opportunities for student use of low vision aids, activities with low vision simulation, and completion of a functional vision assessment, including environmental assessment, and stereotypical assessment.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPEE 216: Evidence-Based Practices in Mathematics for Students with

This course presents an in-depth study in the teaching of mathematics for special education majors using evidence-based practices. The course will present research-based methods that have been effective for students with disabilities in the area of mathematics. A variety of interventions and resources will be used to address specific mathematical skills. These interventions and resources will be integrated into daily instructional plans and/or used as a replacement academic resource. An emphasis on evidence-based practices in mathematics and procedures for mathematical interventions for students with disabilities ranging from the primary level of education to the secondary level will be introduced in this course.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPEE 221: Assessment for Students with Visual Impairments

This course addresses the assessment of students with visual impairment, the interpretation and application of assessment results, and reporting procedures from the collection of assessment data. The course will cover clinical assessment, functional vision assessment, learning media assessment, environmental assessment, travel skills screening, stereotypical behavior assessment and other forms of assessment for students with visual impairment. The course will provide opportunities for the completion of a vision assessment, including functional vision assessment, and learning media assessment.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPEE 223: Augmentative and Alternative Communication to Support Students

This course is designed for pre-service teachers in the application of augmentative and alternative communication for students with disabilities in academic settings. Topics of study will include: (1) concepts and terminology related to the field of Augmentative and Alternative Communication (AAC); (2) AAC modalities and categories; (3) AAC vocabulary and symbol selection; and (5) instructional and intervention approaches to provide students with communication needs assess the general education curriculum.

SPEE 300: Reading, Writing, and Teaching Unified English Braille, Nemeth

This course provides knowledge and skills in mastery of the Unified English Braille Code, Nemeth Code, and use of the abacus. Students will demonstrate competence in braille mathematics in both Unified English Braille and Nemeth code. Grade 3 braille, slate and stylus, braille foreign language, braille music, basic formatting, and extended experiences in reading and writing grade 2 braille will be covered. Advanced methods of teaching braille are emphasized throughout the course.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPEE 302: Adapting Materials and Methods of Instruction and Eval. for Teaching

This course provides strategies for teaching and adapting materials and instruction in content areas, communication skills (i.e., reading and writing Braille, reading and writing print with and without low vision devices, finger spelling), listening skills, use of technology, independent and daily living skills, habilitation, career/vocational concerns, physical education, transition from the educational setting, and leisure and recreation for students with visual impairments, including multiple disabilities and deafblindness. The course provides a theoretical framework for the concept of teacher as lifelong learner, assessment strategies for learning medium and reading medium, writing IEP's, and research applications.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPEE 313: Making Content Area Instruction Accessible for Students with

This course is an in-depth study of instructional planning for secondary-level students with disabilities. The course will present research-based methods that have been effective for students with disabilities in the area of science and social studies. A variety of interventions and resources will be used to address specific content area skills. These interventions and resources will be integrated into daily instructional plans and/or used as a replacement academic resource. An emphasis on evidence-based practices and interventions for secondary students with disabilities ranging from the primary level of education to the secondary level will be introduced in this course. Emphasis will be placed on evidence-based practices in science and social studies and procedures for effective content area interventions for students with disabilities at the secondary level.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPEE 314: Effective Instructional Strategies for Students with Disabilities in

This course addresses the knowledge base and skills necessary for general education teachers to successfully include students with disabilities into their classrooms. Emphasis is placed on structuring inclusive environments and designing and implementing appropriate accommodations for elementary and secondary students possessing specific disabilities.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPEE315: Building Collaborative Networks to Support Secondary Students w/

This course addresses the knowledge base and skills necessary for ALL teachers to successfully include ALL students (e.g. ELL, CLD, non-disabled, special needs) into their classrooms. Emphasis is placed on structuring inclusive environments and designing and implementing appropriate accommodations for ALL students within content specific classes. The focus of the course will be on professional collaboration, home-school collaboration, universal design for learning, access to the general education curriculum, and assistive technology.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPEE316: Literacy Development and Instruction in Core and Intervention Areas

This course is an in depth study in the teaching of literacy for struggling readers and special education students. The course will present characteristics and factors contributing to struggling readers. Pre-referral guidelines of federal and state laws will be discussed, including RTI, scientifically research-based and evidence-based instruction, and on-going progress monitor of student performance. The sequence of language, reading, and writing skills will be described as these areas pose challenges for student with disabilities. An emphasis on instructional tools, guidelines for instruction, organizational and teaching strategies, remedial methods and techniques for the child with a disability in preschool through secondary education will be introduced in this course.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPEE317: Intensive Reading, Writing, and Mathematics Intervention Approaches

This course presents an in-depth study in the teaching of reading, math, and written expression to students with disabilities. The course will present formal and informal assessments tools used to design effective individualized intervention. A variety of intensive teaching and learning strategies and resources will be used to address specific targeted skill needs. These strategies and resources will be integrated into daily instructional plans and/or used as a replacement academic resource. An emphasis on instructional tools, guidelines for instruction, organizational and teaching strategies, remedial methods and techniques for the child with a disability in preschool through secondary education will be introduced in this course.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPEE318: Assessment and Instructional Methods for Students with Disabilities

This course is an in-depth study of the purposes of atypical classes, curricular content and its organization, formal and informal assessment techniques, classroom management and the various methods of teaching the atypical child. The course will expose teacher candidates to informal and formal assessment, instructional delivery methodology and remediation strategies for the PreK-8 learner.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPEE320: Special Education Processes and IEP Development

This course addresses aligning IEPs for students with disabilities with the general education academic standards. Using the Pennsylvania Department of Education standards Aligned Systems, teacher candidates learn to develop IEPs that provide access to the general education curriculum for students with disabilities. Emphasis will be on the conceptual framework (Understanding by Design), specially designed instruction, on-going progress monitoring, and data based decision-making.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPEE322: Teaching Students with High Incidence Disabilities

This course provides information related to systematic strategic academic planning for students with mild disabilities (i.e. specific learning disabilities, mild mental retardation, mild behavior disorders). Students will be introduced to definitions,

etiologies, formative assessments, and evidence based practices for these high incidence populations. High incidence disabilities will be viewed across the life span, requiring persistent educational support.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPEE 327: Transition, Self-Determination, and Self-Advocacy for Adolescents

This course introduces preservice professionals to the specific educational, daily living, and employment needs of adolescents and adults with disabilities. Preservice professionals examine the historical and legal basis for providing people with disabilities with opportunities to lead independent lives and realize educational, vocational, and personal goals. Course content includes employment, and residential issues, post-secondary education, self-determination and choice-making, and adult life issues.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPEE 328: Positive Behavioral Intervention and Supports

This course will provide teacher candidates with the knowledge of alternative management techniques appropriate for facilitating learning in classrooms, within families, and in other environments. Included will be a study of characteristics, assessment procedures, and multidisciplinary services designed to support the K-12 learner with special needs.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPEE 330: Teaching Students with Low Incidence Disabilities

The course will address medical, physical, psychological, and educational aspects of students with low incidence disabilities and complex instructional needs. The major focus of this course will be teaching students with significant intellectual disabilities, autism, multiple disabilities, significant orthopedic impairments, other health impairment, and traumatic brain injury. Included will be an examination of evidenced- and research-based strategies relevant to the education of students with low incidence disabilities and complex instructional needs.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPEE 333: Assistive Technology for Individuals with Visual Impairments

This course reviews assistive technology devices available for children with visual impairments to access information in the classroom and support daily life activities. The course will provide experience with a variety of technologies utilized within the classroom. Instructional strategies, assessment, and progress monitoring of the technologies will be discussed.

SPEE 380: Independent Study

Qualified students will be permitted to conduct independent investigations, under supervision, in specific areas.

SPEE 381: Internship in Special Education

This course is designed to provide the student with educational opportunities outside the normal academic program which cannot be gained through the more traditional course structure. By serving as apprentices, interns, aides, or assistants in a variety of settings ranging from public institutions to private industries, businesses, the student will be able to augment and extend his or her educational experiences to achieve specific personal AND professional career objectives. Minimum of two hours for each academic credit hour. May be repeated for up to 6 credits.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPEE 390: Clinical Experience and Practicum: Visual Impairment I

This course provides for observation and participation in the performance of the duties of a teacher of students with visual impairments, including those with multiple disabilities in an itinerant, residential, or day school setting. Practicum sessions

provide for an opportunity to discuss problems, trends and issues, multi-cultural needs, interviewing techniques, scheduling, lifelong learner model for teachers and students, and organizational skills unique to the field.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPEE 391: Clinical Experience and Practicum: Visual Impairment II

This course provides for observation and participation in the performance of the duties of a teacher of students with visual impairments, including those with multiple disabilities in an itinerant, residential, or day school setting. Practicum sessions provide for an opportunity to discuss problems, trends and issues, multi-cultural needs, interviewing techniques, scheduling, lifelong learner model for teachers and students, and organizational skills unique to the field.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPEE 392: Clinical Experience and Practicum: Mentally/Physically Handicapped I

An opportunity is provided for observation and student teaching with special populations. Discussion periods are provided for classification techniques, methods and approaches.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPEE 393: Clinical Experience and Practicum: Mentally/Physically Handicapped

An opportunity is provided for observation and student teaching with special populations. Discussion periods are provided for classification techniques, methods and approaches.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPEE 433: Characteristics and Etiology of Autism Spectrum Disorders

This course covers the characteristics of autism and other related disorders, commonly referred to as Autism Spectrum Disorders (ASD) including; communications deficits, social skills, stereotypical behaviors, and typical responses to stimuli. Additionally, theoretical and scientific etiologies are discussed with various diagnostic instruments and procedures. Cultural perspectives of autism and related disorders with their relationships to educational services are also addressed.

SPEE 434: Applied Behavior Analysis

This course introduces principles of applied behavior analysis (ABA) and how it can serve individuals with autism, with special attention given to classroom settings. ABA coverage includes; reinforcement, punishment, thinning, stimulus control, prompting, fading, generalization, maintenance, and data collection with analysis. Specific empirical-based ABA methods such as discrete training, direct instruction, and verbal behavior will be discussed.

SPEE 435: Assessment and Instructional Intervention for Individuals with

This course examines instructional strategies that have been shown to be effective in promoting the development of communication and social skills by students with ASD. Augmentative and alternative communications systems (AAC) and approaches for teaching social skills in home, school, and community environments along with coordination of services and advocating for students with Autism Spectrum Disorders will be discussed.

SPEE 436: Practicum with Students with ASD: Collaboration with Families,

An opportunity is provided for observation and for student teaching of students with autism spectrum disorders (ASD). Discussion periods are provided for classification of techniques, methods, and approaches.

Sport

SPRT 111: The American Woman in Sport

The course will focus upon physical and social-psychological factors which affect the performance of women in a variety of sport forms. Consideration will be given to recent legislation which has helped to define women's participation in the world of athletics.

SPRT 120: Personal Nutrition

This course is intended to present the science of nutrition in a personal way to all students regardless of major. The aim of the course is to help individuals focus on their own eating practices and to evaluate their habits in keeping with guidelines that support good health.

SPRT 145: Lifeguard Training

This course is designed to provide the student who possesses good swimming skills with the knowledge and skills necessary to keep the patrons of aquatic facilities safe in and around the water. The course content and activities prepare students to recognize emergencies, respond quickly and effectively to emergencies, and prevent drownings and other incidents. On successful completion of the course, participants receive two certificates: one for American Red Cross Lifeguard Training and a second for American Red Cross CPR for the Professional Rescuer. Students must be prepared to demonstrate swimming proficiency during the first class meeting.

SPRT 160: Introduction to Sports Management

This course serves as an introduction to the field of sport management. The course will provide a broad overview, address essential topics, and expose students to basic management principles required to organize, manage, and administer sport business. Additionally, the course is designed to engage students in career exploration and preparation within the sport industry.

SPRT 195: Accounting Survey for Sport Management

This course is designed to provide a basic understanding of Accounting and other related financial issues that may be encountered by students entering the sport/recreation field. Students will be shown why a knowledge of basic Accounting concepts is a critical component of all sport/recreation related industries. Students will be expected to demonstrate how financial information is gathered, recorded and used in the decision making processes. This course is not acceptable for Business majors.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPRT 201: Scientific Basis for Human Movement

This course is designed to provide students with an overview of the scientific approaches used to study human movement and a working knowledge of the terminology that is used in each discipline. Knowledge of the research and theoretical perspectives in these disciplines will provide students with the foundation on which a broad based knowledge of the science of human movement can be built.

SPRT 205: Sport Behavior

This course is designed to introduce students to the behavioral, affective, and cognitive components of sport psychology. Research findings in the context of applied, educational and experimental sports psychology will be presented and discussed.

SPRT 210: Sport Management Practicum

This is an experiential course in which students will be exposed to a self-selected, introductory, and supervised professional fieldwork experience in the sport management field. Through hands-on experience, students are given the opportunity to acquire knowledge, skills, and values held by professionals in the sport management industry. The course will also allow students to build on the competencies developed in SPRT 160. This one credit course may be repeated up to three credit hours, but may not be repeated at the same job site. Credits earned in this course will be graded "Pass/Fail".

SPRT 212: Sport Public Relations and Communication

This course is designed as an introductory class to provide a general overview of public relations and communication in the sport industry. The course will examine and discuss concepts directly related to sport management. In addition, students will further explore issues and problems found in sport public relations and communications.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPRT 216: Exercise Physiology

This course is designed to provide an in-depth analysis of the effects of physical activity upon the structure and function of various organ systems. Application of theoretical concepts to physical performance enhancement and clinical rehabilitation will be emphasized.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPRT 220: Introduction to International Sport

This course is designed to introduce the diversity of sport in countries other than the United States. It is intended to provide a theoretical foundation and experiential opportunities to enhance students' knowledge of sport in other countries. Additionally, the class will analyze current issues in sport globally for their relevance to sport management theory and practice. The system of sport in the United States is uniquely American. As international sport grows in popularity, understanding sport in other countries is increasingly important. This course will enhance and deepen the preparation of students pursuing a career in the business of sports. This is a 3 credit course repeatable up to 3 times for a maximum of 9 credits.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPRT 222: Fundamentals of Coaching

This class will give students a foundation on which to build a deeper understanding of the coaching profession. The focus of the class will be the application of sport sciences, sport pedagogy, sport management and sport first aid as they relate to coaching. In addition, two National Federation Interscholastic Coaching Certifications may be earned in Coaching Principles and Sport First Aid by meeting course requirements and achieving an 80% on the American Sport Education Program Examinations.

SPRT 226: History of Sport

The course is designed to provide a historical overview of recreational and physical education philosophy and practice and sporting activity. Emphasis is given to historical, multi-cultural approaches toward sport and investigates their contributions to current attitudes and practices and the etiology of modern participatory and spectator sports. Topical areas will include, but are not limited to, the Greek "Ideal," Ancient Olympic Games, "The Turner" Movement, "Muscular Christianity," Sport of Native Americans, Influences of English Immigrants, Women's Emancipation and Participatory Sport, Afro-American Influences, The Modern Olympic Games, Evolution of the NCAA and Intercollegiate Sport and Contemporary Issues.

SPRT 230: Leadership and Team Building in Sport

This course is designed to provide students with the methods and skills of leadership and team building, which will enhance all areas of sport and business management. Students will receive instruction in various components and essentials of high-performance teams. The course will provide students with the opportunity to plan, present and experience strategies for creating a culture of teamwork, methods for team building and conflict resolution. Skills and information necessary to stay current with the trends in the field of leadership, collaboration and building a supportive work environment will be emphasized.

SPRT 236: Personal Selling in Sport

This course is designed to produce skills essential to personal sales positions in the areas of sport management. The course will introduce students to the discipline of personal selling by covering the principles underlying the basic sales process, theory and practices, methods, and techniques. In addition, students will further explore ethical and legal considerations in personal selling.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPRT 240: Foundations of Health Promotion

This course is designed to explore the historical foundation of, rationale for and current components of community and organizational health promotion programming.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPRT 250: Methods of Group Fitness Instruction

This course is designed to provide future fitness professionals with methods, content knowledge, practical experience and pedagogy skills needed to design and implement safe group exercise classes. The students will learn to enhance the value of the fitness activities they offer clients leading to greater career success. In addition, information regarding physical activity and special populations related to cardiac conditioning, diabetes, seniors and pregnancy will be emphasized.

SPRT 255: The Art of Mindful Self Defense

This course will focus on the principles of mindful self-awareness and personal safety training. Stress management and personal reflective tools will be introduced to provide the student with means to combat the growing academic and societal stresses and the anxiety that accompanies them. Self-defense training has long been employed successfully to help instill confidence and a sense of self-control while offering a means to develop self-awareness and increase self-esteem.

SPRT 260: Principles of Sport Finance

This course examines the financial tools that sport managers use to run their sport businesses. As such, it explores traditional and innovative methods of revenue acquisition and financial management in sports organizations, the financial business structure of sports organizations, and the financial planning and forecasting processes that make organizations effective. Various other aspects of finance are discussed as they relate to sports organizations, including the time value of money, capital structuring, stocks and bonds, inventory management, and taxation.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPRT 265: Managing Sport Organizations

This course is designed to address the structure and strategies of sport organizations and their effectiveness. It provides information to facilitate organizational change, to enhance leadership style, and to improve management decisions and organizational effectiveness. Special attention is devoted to the role that sport governing bodies play in delivering services to consumers.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPRT 267: Applied Concepts of Personal Fitness and Health

This course will provide students with the opportunity to learn and participate in physical activities designed to develop fundamental skills in health and skill related fitness. Students will be involved in a comprehensive personal fitness and health course consisting of cardiovascular conditioning, muscular fitness, power, balance, agility, coordination, endurance, and flexibility activities.

SPRT 270: Sport and Society

This course is designed to explore the sociological aspects of sport. Students will study research and theory used to explain the

relationship between sport and society in the areas of socialization, children, deviance, violence, gender, race, social class, economy, media, politics, religion and future trends in sports.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPRT 276: Statistics in Sport

This course will introduce students to the basic principles of statistics. A special emphasis will be placed upon the fundamental concepts and theories of statistics unique to sport. Students will be exposed to descriptive and inferential statistics enabling them to apply knowledge in their professions.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPRT 285: Sport Marketing

This course is designed to address the various techniques and strategies used in meeting the needs and wants of sport consumers. It also focuses on how sport can be used to assist in the marketing of other companies and products. Special attention is devoted to the uniqueness of sport marketing in comparison to traditional marketing, the importance of market research in identifying and segmenting sport consumers, and the implementation of marketing programs.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPRT 290: Fundamentals of Sports Law

This course is designed to introduce students to a variety of legal principles associated with leisure and sports and to expand their legal knowledge to the leisure and sports industry. Relevant areas of law will be examined through case study. Discussions on current legal issues and topics in the recreation and sport industry will constitute a significant portion of the class.

SPRT 296: Professional Seminar in Sport Management

This course is designed as a capstone academic experience for sport management seniors. By integrating and applying previous coursework in the major, the course serves to prepare students for their upcoming internship in the sport management industry. The course will cover topics related to professionalism, communication, critical thinking, problem-solving, and ethical decision-making in the sport management field. The course will also embed an experiential component of learning in which students will be exposed to a self-selected, introductory, and supervised professional fieldwork experience in the sport management field. Through such hands-on experience, students are given the opportunity to acquire knowledge, skills, and values held by professionals in the sport management industry.

SPRT 300: Applied Sport Psychology

This is designed to build on the psychology components introduced in SPRT 205 Sport Behavior. Research findings in the context of applied sports psychology will be presented and discussed, and coupled with students developing procedures for applying sport psychology techniques.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPRT 305: Emergency Care and Risk Management

This course will introduce the student to the principles of emergency care and risk management. The focus of the course will be on the preventive planning and skill development necessary to anticipate and respond to potential risks within the student's professional interest area, major, or personal life.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPRT 310: Fitness Assessment and Exercise Programming

This is designed to provide students with the opportunity to develop a solid understanding of assessment, programming and evaluation of health-related physical fitness components. Analysis of various health and fitness assessment tools including those employed to evaluate aerobic fitness, muscular strength, muscular endurance, flexibility, and body composition will be examined. Emphasis will be on developing baseline assessments for use in fitness program development in variable populations. Practical experience in fitness and wellness programming will be an integral part of this course.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPRT 312: Intercollegiate Athletic Administration

This course is designed to further enhance students' knowledge of the administrative and management aspects of intercollegiate athletics programs, with a particular emphasis on the National Collegiate Athletic Association (NCAA). Additionally, this class will analyze current issues in intercollegiate athletics for their relevance to athletics management theory and practice.

SPRT 313: Sport Analytics

This course introduces students to topics and practices in modern sports analytics. Specifically, students will use the R programming language and numerous associated packages to obtain, manipulate, and visualize otherwise static data. By using publicly accessible data from both Major League Baseball (MLB) and the National Football League (NFL), students will learn to apply analytical practices to investigative inquiries. Students will be tasked with asking pertinent research questions, collecting the relevant data. using Rand other associated packages, and then disseminating their findings through clear oral. written, and visual communication.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPRT 315: Prevention and Care of Athletic Injuries

The various types of injuries that occur in athletics are discussed with regard to causative factors, frequency, location and relationship to specific sports. Preventive techniques, treatment, procedures and rehabilitative programs are discussed, demonstrated and practiced. All aspects of prevention and care of athletic injuries are investigated.

SPRT 317: Sponsorship in Sport

This course is designed to help students gain a deeper understanding of sport marketing by examining in-depth sport sponsorship as an effective marketing tool. Through the exploration of various types of sponsorship and case studies, this course will focus on providing students with a firm understanding of how prospects are sought out, formulated, evaluated, and activated to maximize the sponsor's ROI and ROO. Students will be exposed to a step-by-step process of developing sponsorship proposals that lead to building a mutually beneficial relationship.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPRT 320: Sport Ethics

This course examines ethical theory and moral deliberation as applied to athletics, sport, and sport industries. Through critical analysis and personal reflection of relevant scenarios and case studies, students will develop and refine their personal value system as it applies to sport and athletics.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPRT 325: Sport Consumerism

Success of sport organizations depends on their understanding of customers. Knowing how sport consumers are similar and different, how they perceive sport products, and how they respond to different marketing activities will enable sport practitioners to better fulfill consumer needs/wants and create consumer value. This course is designed to introduce theories in sport consumer behavior and the analytic techniques used to answer a variety of questions about sport consumers. The course work emphasizes the development of specific and practical marketing expertise and skills, including methods of market research.

Special attention is devoted to the practical application of these theories and contemporary issues and problems found in the field of sport.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPRT 330: Event and Facility Management

This course is designed to provide "product-oriented" experiential opportunities for in-depth development and refinement of operational skills needed to successfully complete a capstone internship experience and to succeed in entry level event and facility management career opportunities.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPRT 333: Principles of Strength and Conditioning

This course is designed to provide students the opportunity to develop a solid understanding of the methods and techniques associated with the design of strength and conditioning programs to enhance human performance in sport. The use of different resistance modalities typically used to improve muscular endurance and muscular strength will be considered as well as plyometric programming, speed and agility drills and programming and the injury prevention effects of appropriate training. Emphasis will be placed on proper form and utilization of various workout designs to meet the unique needs of athletes of all ages. Practical experience in resistance training programming will be an integral part of this course.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPRT 335: Methods and Evaluation in Athletics

This course is designed to provide students with an in-depth study and application of skills necessary for coaches and athletic/sport administrators. Students will examine instructional strategies, skill and tactical analyses, organization and administration, evaluation techniques and management strategies of athletic programs.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPRT 340: Internship in Coaching and Fitness

experience under the supervision of a school, fitness or recreation facility or community professional for one semester. Students will apply their knowledge and skills of coaching and fitness in a real-life situation. Student will work with a sport team or fitness/recreational organization for a minimum of one hundred hours. The field experience will provide the opportunity for students to practice, integrate, and apply coaching and fitness methods and principles. The experience is related to but differs from classroom learning in that students will apply their knowledge and skills of coaching and fitness in real-life situations.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPRT 345: International Sport Business

This course is designed to address the magnitude of global expansion and development of sports. It provides an introduction to business opportunities and barriers in the global marketplace. Special attention is devoted to contrasting the US sport industry with international markets. The topics address major social, cultural, ethical, and business issues facing international sport business.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPRT 350: Internship in Sport Management

This course is designed to provide a capstone sport/recreation field experience. Students will apply and refine knowledge and skills requisite to entry-level event and facility operations while participating in the activities of an established professional

organization. May be repeated for up to 12 credits.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPRT 366: Personal Fitness Trainer

This course is intended to prepare the student with knowledge and skills basic to the field of personal fitness training. Areas of educational development will include basic human anatomy, physiology, risk management, legal liability, fitness program development and evaluation. A student who successfully completes this training, combined certifications in CPR and First Aid, will be positioned to participate in a certification exam that may lead to the acquisition of a certificate in Personal Fitness Training. This course includes an entrepreneurial focus.

SPRT 372: Selected Topics in Leisure and Sport Studies

This course provides students with an opportunity for in-depth study of topics of current interest in the field of Leisure and Sport Studies. The format for the course will vary to best address educational goals as they relate to the selected topic. Students may register for this course more than one time, up to a maximum of six semester hours or credits, provided the same topic is not repeated.

SPRT 375: Research Methods for Sports Management

This course is designed to assist students in becoming thoughtful professionals who understand the purpose and value of academic research, in developing knowledge of conceptual foundations and methodological tools of quantitative and qualitative research, and in applying these skills to the field of sport management.

SPRT 380: Independent Study in Sport Management

Independent Study provides an opportunity for individuals to pursue scholarly activity in an area pertinent to the discipline of Sport Management not covered within a regularly offered undergraduate course in Sport Management. Credit for the course may be scheduled for one to three semester hours in a single semester for no more than three credits of independent study overall. Permission of the faculty member instructing the independent study as well as that of the departmental chair of the degree program or certification area is required.

SPRT 385: Senior Seminar in Coaching and Athletic Administration

This capstone course provides an opportunity for senior coaching and athletic administration Leisure and Sport Studies majors to critically examine selected, significant issues and problems within their discipline, and enhance professional development skills necessary for success in the workplace. This required course should be taken during the school year of expected graduation.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

SPRT 395: Honors Independent Study/Thesis

Honors Independent Study/Thesis.

University Studies

UNST 1: University Studies: The First Year Seminar

University Studies: The First-Year Seminar introduces students to the critical strategies, resources, and responsibilities of a university education. The course employs substantive reading, writing, and critical thinking assignments from across the curriculum, in addition to research and fieldwork, to increase the student's ability to effectively function in the University

community. The common course requirements for each UST section are the same, though the specific focus of each individual seminar may differ.

UNST 15: First Year Seminar: University Studies

The Department of Advisement First-Year Seminar introduces first-semester first-year students assigned to a program in the Department of Advisement to the critical strategies, resources, and responsibilities of a university student. The seminar will build the students' foundation knowledge and understanding of what it means to be a college student, utilize resources and develop skills for success, and make wise, informed decisions in planning for a future career. Toward this end, the students enrolled in this course will participate in a number of relevant experiences that facilitate and strengthen their personal appreciation and intellectual understanding of their role as a student at the University and the support available to them to ensure their success. This course will meet twice a week for 8 weeks for 50 minutes per session. This will give the students all of the information they need up front so they will be fully prepared by the second half of the semester. Students will continue to have contact with the instructors as their advisees. Students will receive a letter grade for this course. Please note that the proposed UNST 015 is not to be used as a repeat of UNST 001, and it may not be taken if a student has already taken another first-year seminar (e.g. BUSN 001, EDUC 015)

UNST 100: Prior Learning Assessment and Portfolio Development Seminar

This course guides students in developing a written portfolio which demonstrates documented college-level learning through experience in various fields. During the seminar, students will analyze experiences, skills, and knowledge they have gained and present this learning clearly and concisely through writing and the organization of appropriate documentation. Students will learn to assess and communicate clearly, as well as to plan the course of their learning, confirm or choose their majors, and develop goals for their professional futures. Skills for enhancing communication and critical thinking and utilizing professional resources will be emphasized, along with development of a resume and professional portfolio. The purpose of the completed portfolio is to connect prior learning to the learning objectives of courses in academic programs in order to earn credit for college-level learning completed outside the classroom.

Women's, Gender & Sexuality Studies

WGST 16: Core to the Cosmos: Contributions of Women to Astronomy

From the edge of the cosmos to the cores of planets, the scientific discoveries of women shape our understanding of space. Using the perspective of influential women in astronomy, the course explores major astronomical and planetary science discoveries, such as the expansion of the universe, life cycles of stars, formation of the solar system, and the structure of the Earth as well as their role in space exploration and science missions. This course does not satisfy major, concomitant, or specialization requirements for Secondary Education and/or Liberal Arts Science majors or count toward major GPA for Physics majors.

WGST 45: Women in Mathematics

This course examines women and minorities who have made significant contributions to the field of mathematics. Both their lives and their work will be explored as well as gender and multicultural issues surrounding their endeavors. Furthermore, mathematical topics related to their contributions will be discussed.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

WGST 67: Self Defense for Women

This course is clearly a Women's Studies course since the central focus is the development of skills and knowledge relative to women's ability to function effectively in an increasingly violent environment.

WGST 100: Introduction to Women's, Gender, and Sexuality Studies

This course introduces students to the fundamental issues of gender and considers how gender constructions affect attitudes about bodies, sexuality and power with a focus on women's histories and waves of feminism.

WGST 114: Women and Religion

This course explores the complex involvement of women in the many religions of the world. Students will investigate textual and/or oral religious traditions regarding women and their places in the cosmos. Students will also explore texts written by women or practices devoted to or performed by women. The course will emphasize cultural and spiritual diversity in women's lives, as well as issues of religious empowerment, piety, leadership, scriptural interpretation, and theoretical questions involving gender, spirituality, the body, and social, ethnic, and racial differences.

WGST 130: Interpersonal Communication

This course is an introduction to the theory and practice of interpersonal communication. It is designed to create an increased awareness and application of the concepts, skills, and strategies that are important to enable students to become interpersonally competent communicators in their personal and professional relationships.

WGST 175: Archetypal Women in Myth and Literature

This course examines powerful female figures, including goddesses, queens, and warriors, in mythical and literary texts and interprets their symbolic and cultural significance through the lenses of archetypal, mythological, and feminist literary criticism.

WGST 209: Women in Music

This course will examine the contributions of women as composers, performers and conductors of music from the Middle Ages through the twentieth century. Focus will remain mainly on the roles of women in the sphere of classical music, although some jazz and popular music will be included. Class is limited to 25 students. (This course is also offered under the MUSC 209 designation.)

WGST 211: Women in the Arts

This course will provide an overview of women's creative achievements, experiences and status in the visual arts. The focus of this course is on gender; however, issues relating to the intersections of gender with race, class, national origin, ethnicity, age, and sexual orientation will also be discussed. As well, the course will explore the portrayal of women and the way in which cultural definitions of gender shape women's aesthetic expression.

WGST 217: LGBTQ Studies

The purpose of the course is to introduce students to Lesbian, Gay, Bisexual, transgender, and Queer (LGBTQ) Studies. It will trace the conceptual distinctions drawn between sex, gender, and sexuality, as well as the history of diverse genders and sexualities. It will also examine contemporary issues facing LGBTQ individuals and communities. Emphasis is placed on feminist and social constructionist approaches to studying LGBTQ issues.

WGST 228: Women in Education

Women's changing roles in education will be looked at from the perspectives of a student, a teacher, and an administrator. Women's impact and contributions to education at all levels of education will be examined. The role of the institution and the current status of women at all levels of education will be a major focus.

WGST 237: Women Writers in Performance

This course is designed to use performance theory and process to analyze significant literary works and key themes in women's writing. Students will use performance theory, feminist theory, and post-modern theory to engage with texts from women writers from diverse cultural and historical backgrounds. We will accomplish this through close readings, class discussions, performance workshops, and performances of texts by female authors.

WGST 240: Latin American Women's Expression in Translation

This course explores the panorama of the experiences of Latin American women as expressed through literature, music, film, and art. This interdisciplinary course includes the examination of artistic, cultural, political, historical, and socio-economic contexts and contributions of women through a chronologically and geographically Pan-American approach. The course is taught in English.

WGST 248: Nonverbal Communication

Students will explore some facets, principles, implications, and effects of non-verbal communication. The course will focus on non-verbal codes such as kinesics (body movement), paralanguage (vocalic communication), facial expressions and eye movement, proxemics (space), haptics (touch), and chronemics (time), and artifacts (including art and architecture but also jewelry, clothing, hairstyles, and body modification). Student presentations will highlight how communication is a "package" of symbols.

WGST 250: Women and Leadership

This course will focus on stimulating critical thinking about women and leadership and encourage a re-examination of the historical and contemporary beliefs about women and leadership. The learner will have an opportunity to examine one's own leadership behaviors as the interaction of leadership, gender, context and culture within a context of historical foundations as well as contemporary research will be examined. This course meets criteria set forth for General Education Goals #7 (globalization) and #9 (diversity).

WGST 251: Women, Money and Power

Gender is a significant construct through which societies structure and define themselves. This course uses a gender lens to examine money, finance, taxation, public policy and the social contract. Particular attention is paid to women's experience with financial literacy, financial responsibilities, public policies, and contemporary barriers to full economic security for women and families in our society. Policy and personal strategies for asset building also will be addressed.

WGST 261: Introduction to Health Communication

This course is designed to introduce students to the field of health communication. It will explore health-related communication as it applies to the dissemination, interpretation, and impact of health-related messages. Students will learn about communication between health-providers and patients/clients, health education initiatives and campaigns, as well as communication dynamics in health organizations. Students will gain both knowledge and experience in the use of communication to promote individual and public health.

WGST 271: Sexualities and Communication in Everyday Life

This course is an introduction to the study of sexualities and communication in everyday life. The course is designed to develop a student's ability to think critically about and analyze issues of sexualities in multiple theoretical and often overlapping-perspectives used by scholars to explore and understand sexualities in the broad field of communication.

WGST 272: Women and Violence in Contemporary World Texts

This course will investigate the complex relationship women around the world have with violence. Though formerly only regarded as those in need of protection, women who perpetrate violence have forced a shift in gender roles ascribed to violence. Looking at written and visual texts that depict women as both victims/survivors and perpetrators of violence will allow students to discuss the ways women's shifting role in violent movements and in texts has changed both the gender ideology and the political climate in a rapidly globalizing world. This course work will look at the ways women's relationship to violence is constructed and question ideas that women are "naturally" non-violent. While this course does not condone the use of violence, it does study ways women use violent tactics to resist oppression, enact revenge, and find a voice.

WGST 274: Women, Writing and Rhetoric

While the spoken and written word have long been studied for their rhetorical intent and success, this study has been conducted primarily through a male lens. As such, womens contributions to rhetoric throughout history, like so many other aspects of womens experience, have yet to be fully explored. Women, Writing, and Rhetoric seeks to expand the study of rhetoric with a multi-layered consideration of how rhetoric has been informed by, and informs, a female consciousness. This is an elective course for English majors, Womens Studies minors, and those seeking a concentration in Composition, Rhetoric, and Literacy Studies.

WGST 278: Women Writers Around the World

The focus of this course is modern and contemporary literature by women around the world. Students will read selected fiction, non-fiction and poetry, and examine these works primarily, but not exclusively, from the perspectives of Feminist Critical Theory.

WGST 285: Gender Communication

This course provides a study of gender as it influences verbal and nonverbal communication, and shows how gender communication impacts the lives and experiences of women and men. The course will explore multiple ways communication in schools, family, media and society in general creates and perpetuates gender roles.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

WGST 310: Seminar in Women's Studies

This course will provide the requisite structure to assist advanced students to integrate the multi-disciplinary courses of a Women's Studies minor. Students will read, discuss, debate and write about current research and scholarship on women which will be selected to synthesize their under-standings of gender issues in a complex world. Topics will also be selected to support the students' major areas of study and career goals. The course may be team-taught or taught by a faculty member in cooperation with guest specialists.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

WGST 316: Politics, Sex, and Gender

An extensive examination of the constitutional and legal bases of sex-based discrimination in the United States. The course will focus specifically on statutory law and judicial decisions relating to discrimination of both men and women.

WGST 318: Picturing Gender

This course investigates the role of art in shaping a culture's understanding of gender. Drawing upon themes from a variety of historical eras from the ancient world through the 19th century in Europe and the United States, it explores how art both reflects and moulds the understanding of gender roles as they are played out across the lifespan as well as range of sexual orientations. Topics pertaining to gender such as social class, power, spirituality, sexuality, work leisure, family life and age will be addressed.

WGST 321: Popular Culture

This course explores how popular culture is created and reflected within a range of media and genres-including television, film, music, fiction, social networks, gaming, and digital technology. Students will learn how to explain and critique popular culture from a variety of theoretical perspectives. The course focuses on how popular culture challenges or reinforces stereotypes, creates communities, and reflects social and political realities.

WGST 323: Native American Women Writers

This course provides undergraduate students an introduction to selected Native American Women Writers across several genres. Students will experience a variety of writings which move across traditional boundaries (such as nonfiction, poetry, fiction, theory, activist, and so on). The course also provides students an opportunity to consider Indigenous Feminism in

theory and practice. Students will consider issues of gender, identity, cross-cultural understanding, individuality and community by intellectually engaging with the texts and performances of Native American women. This class may also include the opportunity for digital storytelling, blogging, interviewing, and community engagement.

WGST 324: Race and Gender in the German-speaking World

This course explores traditional, historical, and current concepts of race and gender in German speaking countries. Taking an interdisciplinary approach, the course investigates evolving definitions of race and gender in a changing Europe. Employing historical, political and gender theoretical texts as well as examining artistic and popular cultural productions, the course examines ways that politics, economics, and cultural representations influence developing trends. Taught in English.

WGST 325: Social Work and Human Sexuality

This course explores the socio-cultural, physiological, and psychological variables associated with human sexual expression, identity, orientation, and behavior. Attention will also focus on clinical issues most often presented in social work practice and women and gender studies by individuals and couples, e.g., desire discrepancy in couples and affairs outside a committed relationship. Specific sexual dysfunctions identified in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) will be explored in terms of their etiology and the current treatment models used to address them. The field of Sex Therapy, past and present, will be discussed as well as the evidence-based practices for treatment. This course is not designed to create sex therapists but to help social workers feel more comfortable dealing with the sexual concerns of their clients.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

WGST 329: Feminist and Gender Theories

This course provides an overview of the leading currents, issues, and debates in feminist literary theory, including gendered voice, difference vs. equality feminism, essentialism, and queer theory. Students will read theoretical and literary selections from nineteenth-, twentieth-, and twenty-first century feminists.

WGST 350: Leadership: A Communication Perspective

This course serves as an introduction to the study and practice of leadership from a communication perspective. To this end it explores communication variables involved when leaders attempt to influence members to achieve a goal. Particular focus will be on the relationship between communicating and leading. Topics include power, credibility, motivation, research on leadership traits, styles and situations, global leadership, ethics, and current models of leadership such as transformational, charismatic, and functional approaches.

WGST 359: Feminist Film Theory

In this course, students will investigate the intersections of feminist film theory and cinematic representations of gender as both subject and object. Gender equality, identity, fluidity, and freedom have been foregrounded in contemporary political and social conversations and accordingly in cultural products such as film. The course will examine the political, social, economic, and cultural implications of gender representations within the narrative, documentary and avant-garde traditions of feminist and anti-feminist film practices and theory. Special attention will be paid to marginalized and underrepresented communities to highlight conversations about human rights, civil rights, and equality.

WGST 370: Selected Topics in Women's Studies

This is a course for students who wish to deal with a specific women's issues topic or system in greater detail than current offerings permit. Topics will depend on needs and interests of students and faculty interest and expertise. May be taken a maximum of three (3) times.

WGST 374: Nineteenth Century Women's Literature

This course covers selected literary texts by nineteenth-century British and American women writers. It also focuses upon gender-specific conflicts and changing perceptions about the nature, roles, and rights of women during this important era in the history of literature by women.

WGST 380: Independent Study

This course is designed for students who wish to study a particular problem or selected topic in Women's Studies in depth with a qualified instructor. The student, in consultation with the designated instructor, will propose his/her program of study by defining the focus, setting objectives, and planning outcomes. Depending on the complexity or magnitude of the study, the student will be awarded one, two or three credits.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

WGST 387: Family Communication

Family Communication is designed to introduce students to communication in the family setting. The overall goal is to help you understand how, through communication, we develop, maintain, enhance or disturb family relationships. The course will examine the role of communication as it relates to family identities, family roles, relational maintenance, intimacy, conflict, decision-making, family stress and well-being. Students will learn verbal and nonverbal skills that can promote healthy family communication. This course will potentially be an important beginning in assessing the communication skills, that are inherent in your own family.

Prerequisites: The current prerequisites for this course can be found in the online Course Description.

WGST 390: Internship in Women's Studies

Students with a Women's Studies Minor are provided with an opportunity to apply skills and knowledge gained in the minor to a supervised work experience in an agency concerned with women's issues. Junior or Senior standing and approval of The Women's Studies Director are required.

WGST 394: Honors Independent Study

Through this course, the student will do work appropriate to their field of study. The specific methodology, content, and background required for this course depends on the field or fields in which it is completed. The student should develop their Independent Study proposal the semester before they register for the course. The course involves individual or small group independent study. A student may register for this course more than once. Maximum of 9 credits.

WGST 395: Honors Capstone Project / Independent Study

Through this course, the student will create a project or related set of projects of near professional quality in their field. The specific methodology, content, and background required for this course depends on the field or fields in which it is completed. Students should begin gathering background, skills and knowledge to take it as early as their sophomore year. They should develop their capstone project proposal the semester before they register for the course, and ideally will take two semesters to complete it. The course involves individual or small group independent study. A student may register for this course more than once. Maximum of 6 credits.

WGST 398: Honors Supplemental Work

Through this course, the student will do work appropriate to their field of study. The specific methodology, content, and background required for this course depends on the field or fields in which it is completed. The student should develop their Honors Supplemental Work proposal the semester before they register for the course. The Supplemental Work involves individual or small group independent study attached to another course. (This is analogous to a lab attached to a science course.) A student may register for this course more than once. Maximum of 9 credits.

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