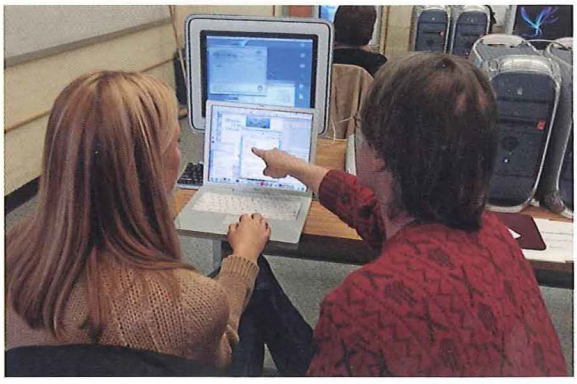
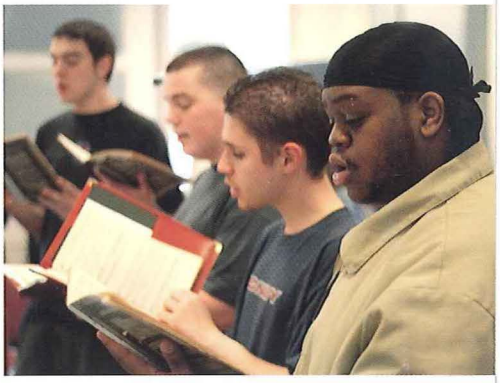
If you are unable to access the information in the Kutztown University Undergraduate Course Catalog, please contact the Registrar's Office at 610-683-4485.

2005-2007

Learn... to Make a Difference

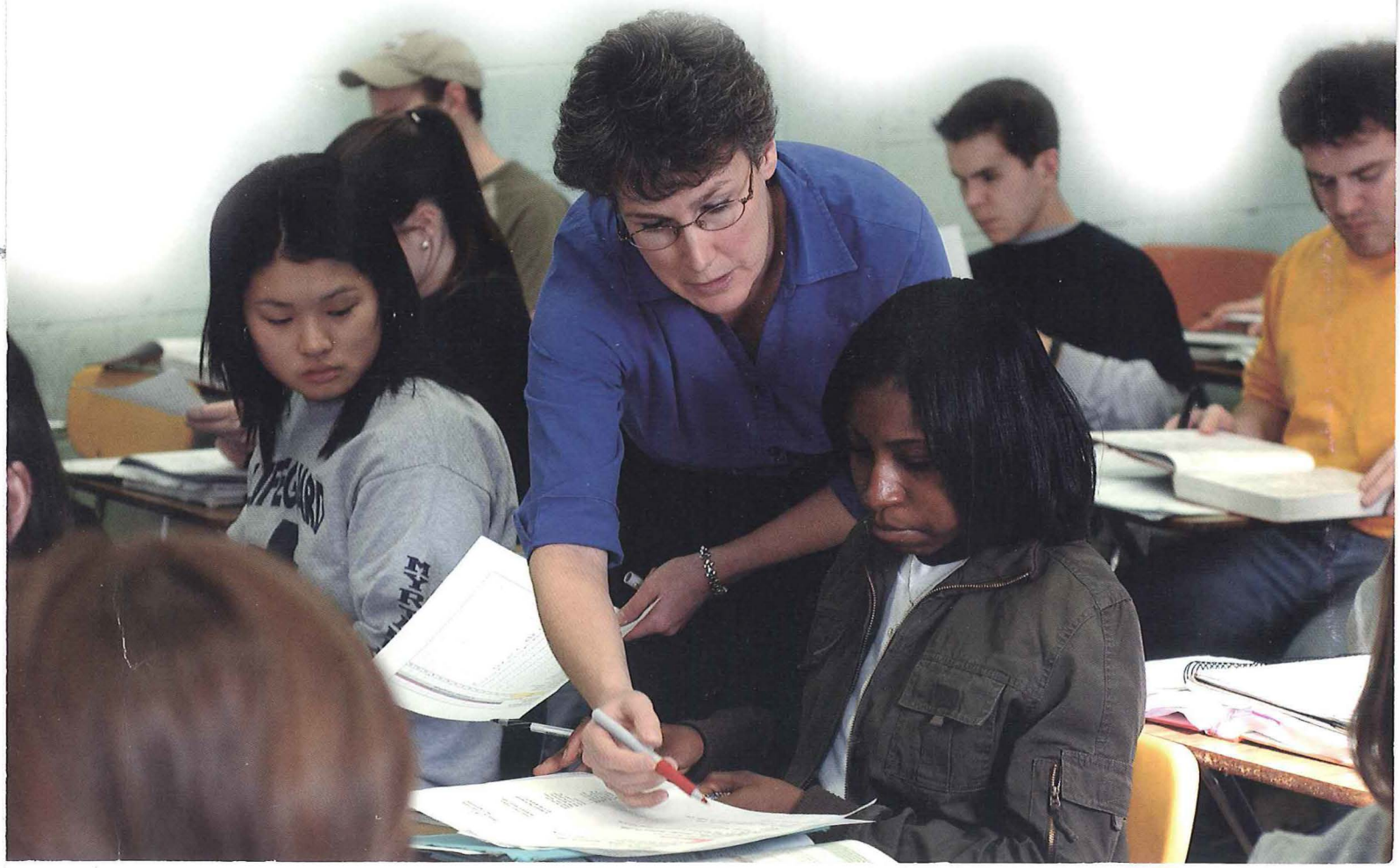






KUTZTOWN UNIVERSITY OF PENNSYLVANIA

UNDERGRADUATE CATALOG



REGULATIONS SUBJECT TO CHANGE

This catalog provides information about Kutztown University and its 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 the 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.

The material in this catalog was compiled in February 2005.

KUTZTOWN UNIVERSITY OF PENNSYLVANIA
UNDERGRADUATE CATALOG
2005 - 2007

ACCREDITATION

Kutztown University is accredited by
the National Council for Accreditation of Teacher Education,
the National League for Nursing,
the Council for Social Work Education,
the National Association of Schools of Music,
the National Association of Schools of Art and Design,
the Middle States Association of Colleges and Secondary Schools,
the Pennsylvania Department of Education,
and
the State System of Higher Education.

MEMBERSHIP ELIGIBILITY

Kutztown University is approved for membership eligibility
by the American Association of University Women.

Kutztown University is an equal opportunity/affirmative action employer and education provider in compliance with Title VII of the Civil Rights Act of 1964 and Title IX of the Educational Amendments, Executive Order 11246, Rehabilitation Act of 1973, Americans with Disabilities Act of 1990 and other related federal and state laws and regulations. We make reasonable accommodations for all persons to access our facilities and programs. Any inquiries about KU social equity policies and procedures including disability services should be directed to the Office of Human Diversity at (610) 683-4108 or (610) 683-4198.

KUTZTOWN, PENNSYLVANIA 19530

Communications Directory

For further information on any of the material contained in the catalog, contact the administrators listed below. Please address inquiries for general information about Kutztown University to the Office of University Relations. The University telephone number is (610) 683-4000; www.kutztown.edu.

Academic Advisement: undeclared ..... Dr. Brian Wlazelek
Director
(610) 683-4735

Academic Affairs ..... Dr. Linda Rinker
Provost and Vice President
(610) 683-4212

Admission to the University ..... Mr. William Stahler
Director of Admissions
(610) 683-4060

Athletics: games, schedules, policies ..... Mr. Jack Entriken
Interim Director
(610) 683-4095

Bookstore ..... Ms. Barbara Peterka
Manager
(610) 683-4009

Business, College of ..... Dr. Eileen Hogan
Dean
(610) 683-4576

Career and Community Services ..... Mr. Larry S. Sechney
Director
(610) 683-4647

Commuter Services/McFarland Student Union ..... Mr. Mike Demetor
Operations Director
(610) 683-4157

Counseling: psychological, emergency, referrals ..... Dr. Bruce Sharkin
Director, Counseling & Psychological Services
(610) 683-4072

Dining Services ..... Ms. Camille Bartlett
Administrative Services Manager
(610) 683-1314

Education, College of ..... Dr. Regis Bernhardt
Dean
(610) 683-4253

Fees, bills, refunds ..... Ms. Donna Wagaman
Bursar
(610) 683-4185

Financial Assistance: work, scholarships, loans ..... Ms. Anita Faust
Director of Financial Aid Services
(610) 683-4077

Grades: grading and academic standards ..... Ms. Kizzy Morris
Registrar
(610) 683-4488

Graduate Studies, College of ..... Dr. Charles Cullum
Dean
(610) 683-4212

Health & Wellness Center ..... Ms. Mary Gutekunst
Executive Director
(610) 683-4082

Housing & Residential Services ..... Mr. Kent Dahlquist
Director
(610) 683-4027

Human Diversity ..... Ms. Barbara Taliaferro
Assistant to the President
(610) 683-4198

Liberal Arts and Sciences, College of ..... Dr. Ed Simpson
Interim Dean
(610) 683-4305

Library: research, fines, borrowing rules ..... Ms. Margaret Devlin
Dean of Library Services
(610) 683-4484

Multicultural Services ..... Ms. Rhonda Branford
Director
(610) 683-4807

Off-campus Housing ..... Mr. Robert Watrous
Dean
(610) 683-1581

Public Safety and Police Services ..... Mr. William F. Mioskie
Director
(610) 683-4002

Student Conduct ..... Mr. Robert Watrous
Dean
(610) 683-1320

Student Involvement Services ..... Ms. Kristina Christmas-Kunkle
Director
(610) 683-1383

Student Teaching ..... Dr. Alan Kubacki
Interim Coordinator
(610) 683-4256

Transcripts ..... Ms. Kizzy Morris
Registrar
(610) 683-4488

Transfer Students ..... Mr. Raymond Bazylak
Coordinator
(610) 683-4787

Veterans' Affairs ..... Ms. Michelle Hughes
Director
(610) 683-4787

Visual and Performing Arts, College of ..... Dr. William Mowder
Dean
(610) 683-4500

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KU 2005-2006 Calendar

FALL SEMESTER — 2005

Residence Hall Occupancy Begins (New Students) ..... Saturday, Aug. 27
Residence Hall Occupancy for Incumbent Students ..... Sunday, Aug. 28
Residence Hall Occupancy continues for Incumbent Students ..... Monday, Aug. 29
Faculty Meeting ..... Monday, Aug. 29
Classes Start – 6:00 PM ..... Monday, Aug. 29
Undergraduate Late Registration and Drop/Add ..... Tues.-Fri., Aug. 30-Sep 2
Graduate Late Registration ..... Tues.-Fri., Aug. 30-Sep 2
(Evening Hours 4:30 – 6:30 PM) ..... Tuesday, Aug. 30
Life Long Learning Late Registration ..... Tuesday, Aug. 30
(Evening Hours 4:30 – 6:30 PM)
Saturday Classes Start ..... Saturday, Sept. 3
Labor Day Holiday (University closed) ..... Monday, Sept. 5
Follow Monday Schedule ..... Tuesday, Sept. 6
Saturday Classes to be held ..... Saturday, Oct. 8
Columbus Day Holiday- No Classes ..... Monday, Oct. 10
Mid Term ..... Friday, Oct. 14
Thanksgiving Recess
Begins – at end of classes ..... Tuesday, Nov. 22
Ends – 8:00 AM ..... Monday, Nov. 28
Last Day of Regular Classes ..... Saturday, Dec. 10
Final Examinations Begin ..... Monday, Dec. 12
Final Examinations End ..... Saturday, Dec. 17
Residence Hall Occupancy Ends ..... Friday, Dec. 16
December Commencement ..... Saturday, Dec. 17
Last Day of Semester ..... Saturday, Dec. 17

KU 2005-2006 Calendar

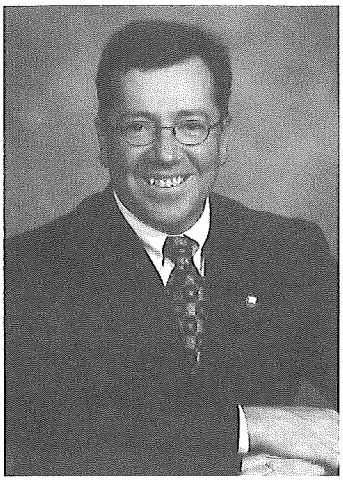
SPRING SEMESTER — 2006

Residence Hall Occupancy Begins ..... Sunday, Jan. 15
Martin Luther King Day Holiday ..... Monday, Jan. 16
Classes Start – 8:00 AM ..... Tuesday, Jan. 17
Undergraduate Late Registration and Drop/Add ..... Tues.- Fri., Jan.17-20
Graduate Late Registration ..... Tues.- Fri., Jan.17-20
Graduate Late Registration ..... Tuesday, Jan. 17
(Evening Hours 4:30 – 6:30 PM) ..... Tuesday, Jan. 17
Extended Learning Late Registration ..... Tuesday, Jan. 17
(Evening Hours 4:30 – 6:30 PM)
Saturday Classes Start ..... Saturday, Jan. 21
Saturday classes to be held ..... Saturday, February 18
President's Day Holiday ..... Monday, February 20
Follow Monday Schedule ..... Tuesday, February 21
Mid-term ..... Monday, March 6
Spring Break
Begins – at end of classes ..... Friday, March 10
Ends – 8:00 AM ..... Monday, March 20
Spring Recess
Begins – at end of classes ..... Tuesday, April 11
Ends – 8:00 AM ..... Saturday, April 15
Saturday classes to be held ..... Saturday, April 15
Last Day of Regular Classes ..... Saturday, May 6
Final Examinations Begin ..... Monday, May 8
Residence Hall Occupancy Ends ..... Friday, May 12
Final Examinations End ..... Saturday, May 13
May Commencement ..... Saturday, May 13
Last Day of Semester ..... Saturday, May 13

SUMMER SESSION — 2006

SESSION I
Begins ..... Wednesday, May 31
*Classes to be held Friday, June 2
Ends ..... Friday, June 30
SESSION II
Begins ..... Monday, July 10
Ends ..... Thursday, August 10

A Message from the President



Kutztown University has come a long way from its beginnings in 1866. That first year there were 11 faculty members teaching a student body of 318, of whom only 55 were women.

Also at that time there were three majors listed in the catalog: the Elementary Course, the Scientific Course, and the Classical Course. Alas, there were not enough classes offered in Latin and Greek to allow anyone to complete that course, and it was eliminated in 1877.

Today Kutztown University is forging a path of academic excellence into the 21st century. The University boasts a faculty of approximately 500, with a student body nearing 10,000, of whom more than 6,000 are women. The University is comprised of more colleges than there were majors offered in those early days, and now offers more than 70 bachelor's degrees and 15 master's degrees.

Beginning spring semester 2005, we have more than 90 high-tech classrooms on campus with the full range of web-based and traditional audio/visual instructional tools. In many of the classrooms, students with "wi-fi" laptops can download whatever their professors project on a screen or write on a white board.

CIO magazine, the leading magazine of the information technology industry, listed KU as one of the top 100 organizations in the world for IT efficiency. Only three other, much larger, universities have received that honor in the past 10 years.

Kutztown University is home to the most ethnically, racially, and culturally diverse student body in the Pennsylvania State System of Higher Education, and the student body more closely represents the area we serve than does the student body of any other university in the system. Here at KU we believe very strongly that an education is incomplete if it does not prepare students for the world in which they will work and raise their families, and that is an increasingly diverse world.

We welcome — indeed, we seek — students who want to learn and grow both in the classroom and beyond. I invite you to come, join us, learn ... to make a difference.

VISION STATEMENT (2003-2008)

Kutztown University will be the region's center for excellence in academics, culture, and public engagement, in order to prepare our students to meet lifelong challenges and responsibilities within a complex and diverse community.

We shall be the region's center for excellence in academics by:

- Building strong undergraduate and graduate programs that foster learning and reaffirm our commitment to a substantive, diverse, and vibrant environment;
- Implementing an academically focused enrollment management process to recruit and retain a diverse student body of academic quality;
- Integrating appropriate technologies and information resources within the academic environment;
- Promoting scholarly activity and research by supporting grants and sponsored projects and providing rewards for creativity.

We shall be the region's center for cultural enrichment by:

- Providing leadership in preserving and celebrating our historical and cultural traditions;
- Continuing our outstanding artistic traditions;
- Celebrating the cultural wealth of diverse populations.

We shall be the region's center for public engagement by:

- Providing service to the region;
- Being stewards of place, *scholars in the community*;
- Developing institutional connections through partnerships;
- Promoting economic development of the community by providing a variety of programs and resources.

Over the next five years, we shall embrace these initiatives and implement our vision by:

- Enhancing communication with all stakeholders;
- Establishing an institutional identity, based on our achievement and traditions;
- Renewing our commitment to civility within our diverse community and the region;
- Becoming a Tier 2 institution and establishing KU as the first choice among prospective constituents.

MISSION STATEMENT (approved 11/2/00)

Kutztown University of Pennsylvania, a member of the State System of Higher Education, is actively dedicated to excellence in learning and to the success of its diverse community of students. The University prepares its students to meet lifelong intellectual, ethical, social, and career challenges and responsibilities by providing quality programs that engage them in critical, analytical, and aesthetic inquiry. Further, Kutztown University is committed to continuous improvement, partnerships, and collaborations that encourage the development of citizens who contribute to a global society.

Goals

- **Learning and Success of Students**
  Prepare Kutztown University students to meet lifelong intellectual, ethical, social, and career challenges and responsibilities.
- **Scholarship**
  Develop, interpret, evaluate, apply, and disseminate knowledge to and on behalf of the Kutztown University community and society.
- **Collaboration**
  Collaboration with public and private agencies, institutions, organizations, and businesses on behalf of the Kutztown University community and society.
- **Globalization**
  Prepare Kutztown University students to respect and celebrate human diversity as they develop inclusive and international perspectives.
- **Technology**
  Prepare Kutztown University students to use current technologies to enhance their learning and knowledge.

University Goals Academic Effectiveness

I. Students receiving undergraduate degrees will:
   - A. Be able to exercise reasoning through logical argument and problem solving.
   - B. Be able to read critically and with comprehension.
   - C. Be able to write English clearly, grammatically, and effectively.
   - D. Be able to communicate orally with clarity and precision.
   - E. Be able to understand the structure of mathematics and be able to perform mathematical functions with sufficient skill to apply them to their professional and personal pursuits.
   - F. Possess a heightened sensitivity toward the human spirit and particularly for the ethical and social considerations inherent in making decisions.
   - G. Understand the aesthetic dimension of human experience to the degree necessary to appreciate the fine and performing arts.
   - H. Possess a fundamental understanding of and appreciation for the interrelationships between the biological and physical universe and society.
   - I. Possess a fundamental understanding of the history, the system of government, and the economics of the United States, and acquire the values and attitudes necessary for responsible citizenship.
   - J. Possess a fundamental understanding of and appreciation for the history and the interrelationships of the nations and the cultures of the world.
   - K. Possess a fundamental awareness and appreciation of human diversity and its importance for society.
   - L. Appreciate the importance of health, fitness and learning throughout their personal and professional lives.
   - M. Be able to access a variety of sources of information to fulfill needs for continued learning throughout their personal and professional lives.
   - N. Be able to understand and use computers in their personal and professional lives.

II. Students receiving undergraduate degrees in professional programs should possess sufficient knowledge and skills to perform successfully in related positions of employment.

III. Students receiving undergraduate degrees who apply and are accepted for graduate study should be competent to perform graduate level work.

IV. Students receiving graduate degrees should:
   A. Be competent to pursue increasingly independent scholarship, and creative investigation in their disciplines. This may include further graduate study.
   B. Be competent to perform at more advanced levels of employment in their professions.

V. Non-degree students completing credit or non-credit degree work through Lifelong Learning should be able to achieve their personal or professional objectives.

VI. Conditionally admitted students satisfactorily completing develop mental programs should demonstrate competence to continue course work toward an undergraduate degree.

Student Services Effectiveness

Students will receive services which permit:

A. The achievement of maximum benefit from classroom instruction with minimum distractions caused by personal problems.

B. The development of a meaningful rapport with and a strong sense of involvement in the University community through cooperation and communication with faculty, administration, student affairs personnel, and support staff.

C. The acquisition of maximum knowledge of themselves and a full exploration of their natural development stages in relationship to their environment.

D. The development of sense of personal and pro-social responsibility to the University and to the larger community.

E. An awareness of and a sensitivity to the varied and often conflicting freedoms, values and attitudes which confront them in a university setting.

F. A clean, safe, healthy environment in which to carry out their classroom and extra-curricular activities.

G. Activities related to admission, registration, and financial aid to be carried out with maximum support and assistance.

H. An awareness of the appropriate options and choices for careers, employment, or postgraduate study available to them by the time they graduate.

I. The cultivation of, the appreciation for, and a sensitivity to human diversity and its importance for the campus and societal communities.

Institutional Advancement

A. The University should identify those specific populations qualified to pursue university study, and ensure that they are aware of its programs and services.

B. The University should build positive relationships with its alumni, promoting their active participation in alumni programs and their support of the University.

C. The University should project a positive image to the general public through its programs, services, and accomplishments.

D. The University should seek public and private resources to support its educational opportunities and needs, and student scholarships.

E. The University should provide leadership in creating cooperative partnerships with educational agencies, businesses, industries, government, health, and other organizations.

F. The University should initiate positive relationships with the local communities.

Human Resources Development

A. The University should promote an active affirmative action policy among faculty, administrators, staff, and students.

B. The University, within its policies of equal opportunity and affirmative action, should consciously seek the highest quality in the selection, performance and retention, and professional development of faculty, administrators, and staff.

HISTORY

Shortly after the close of the Civil War, residents of upper Berks County were able to turn their thoughts from mere survival on the frontier toward building a modern society. One of their first concerns was the preparation of young people to take their places in the developing industrial economy.

Before any of these dreams could be realized the inadequate number of school teachers had to be bolstered. To that end, on September 15, 1866, the Keystone Normal School was established on what is now the site of Old Main.

The depth and sophistication of teacher training continued to increase with the complexity of industrialized society, however, and the needs of a burgeoning industrialization in the region placed more and more demands on teacher preparation. Kutztown University moved to fill this need and, in 1928, the institution was designated Kutztown State Teacher's College and authorized to confer the Bachelor's degree.

Eventually, the area's need for liberally educated personnel to staff its industries outstripped the need for teachers. In 1960, the Department of Education changed the institution's name to Kutztown State College and diversified its goals toward "A center for learning for the best possible education of the youth of Pennsylvania in the arts and sciences and preparation of able and dedicated teachers."

Since 1960 the school has grown, teaching a student body of 8,000 with more than 50 programs of study. In addition, the University reaches out to the community with credit and non-credit Lifelong Learning courses. On July 1, 1983, the institution became Kutztown University of Pennsylvania of the State System of Higher Education. Since that time the institution has continued to grow and diversify in facilities, research and staff toward the future.

LOCATION

Perhaps one of the most fortunate aspects of living and studying at Kutztown University is its attractive location. The campus rolls across approximately 325 acres of hilltop overlooking the Borough of Kutztown, Pennsylvania. The town itself is home to about 5,000 residents and is just a five-minute walk from campus.

TRANSPORTATION — Kutztown is located halfway between Reading and Allentown, PA, on Route 222. Either city may be reached in half-an-hour by car or by a bus that picks up passengers in the center of campus. Philadelphia can be reached in an hour-and-a-half and New York City in two-and-a-half by car or by bus service. Interstate Route 78 is less than ten minutes from campus. The Lehigh Valley International Airport in Allentown is approximately 45 minutes by car and has a busy schedule of flights direct to major cities all over the country as well as connector flights to Philadelphia and Pittsburgh.

RESOURCES PROVIDED

The **Rohrbach Library** is a focal point of academic life at Kutztown University. The Library houses collections of books, periodicals, pamphlets, newspapers, maps, microforms, non-print media, and micro-computer programs. At present the collection consists of more than 500,000 volumes of books and periodical materials, representative federal and state documents, 45,000 maps, subscriptions to approximately 2,000 periodicals and newspapers, 15,000 units of non-print media, and more than 1,000,000 units of various kinds of microforms. Electronic resources numbering over 14,000, include full-text articles from general, Business and Health periodicals, subject

databases, such as ERIC and PsycLit, and the Encyclopedia Britannica. The map collection is one of the finest in the state and includes Braille maps, city plans, and topographic and raised relief maps.

The **Audiovisual Center** administers a comprehensive collection of audiovisual materials and equipment, including digital cameras and projectors. Additionally, the Audiovisual Center houses a microcomputer laboratory, microcomputer software collection and a materials production area.

The **Curriculum Materials Center** provides in-service teachers and other interested patrons with a wide range of the newest teaching and learning resources for examination, evaluation, and stimulus for curriculum revision.

Rohrbach Library provides a wide range of services to patrons. These include the circulation of open-collection and reserve materials, laptops and other equipment, on-line data base searching, document delivery services, a vision enhancement technology center, and interlibrary loan. Computer-based, on-line data base searching produces custom-made bibliographies on complex subjects for students and faculty pursuing advanced research. Interlibrary loan is available to obtain from libraries throughout the United States books and periodical articles not owned by Kutztown University. The library also provides a café for students.

The Rohrbach Library staff is responsible for developing and organizing the Library collections and for administering programs of library orientation and instruction. Librarians meet frequently with classes from all areas of curriculum to discuss specialized research tools. The 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.

OTHER RESOURCES provided by the University to support the academic programs include a science complex which holds classrooms, laboratories, an astronomical observatory and planetarium; the Sharadin Art Gallery; broadcasting quality television studios; a modern language laboratory installation; and a Speech Clinic for students. Also available are various content area tutoring labs, peer tutoring, Supplemental Instruction, reading and study skills instruction, and a microcomputer lab.

The University has a campus-wide fiber optic network with a Gigabit Ethernet backbone that links students, faculty, and staff to campus computing resources as well as Internet resources throughout the world. ResNet, with port per pillow Ethernet connections to the residence hall rooms and four residence hall computer labs, serves the on-campus student population.

Computer Systems/Labs — The academic computing needs are supported by more than ten computer labs with nearly 700 personal computers, about a quarter of which are available on a 24 hours a day and seven days a week. Our three-year computer replacement cycle, along with our university-wide Microsoft Campus Agreement, ensures that all computer labs, as well as all university-owned computers, are equipped with current technology and the latest software. The University currently supports more than 2000 personal computers and supports network connectivity for all of them. We also offer campus-wide virus protection that students are encouraged to use on their personal systems. A Unisys Clearpath mainframe computer and several application-specific servers, with implementation underway of a state-of-the-art SAP system, support the administrative needs of the University.

E-mail and Personal Web Space — Each student receives a unique web-based e-mail account accessible 24 hours a day from anywhere in the world. Students are required to use this e-mail address to ensure they receive prompt notification of important university news. Students also receive personal web space along with server space to store important documents and school work. Kutztown University also provides students with access to over 1800 academic newsgroups for courses, clubs and other activities.

Smart Classrooms — The University has more than 60 state-of-the-art technology rich classrooms that offer our instructors a computer with network, cable and internet capabilities, a screen projector, and a full sound system with ancillary equipment (DVD, VCR, and many with special devices like document cameras and smart podiums, etc.) to assist in course instruction.

Student Computer Discounts — Through Kutztown University, students are able to receive discount prices on personal computers through Gateway, Dell, HP, and Apple. The University also offers discounts on Microsoft software through our Microsoft Select Agreement for students. McAfee virus protection is offered as free software to all Kutztown University students.

SERVICES TO THE SCHOOL DISTRICTS

Upon request, the University makes available to school districts clinical, consultative, and placement services, campus conferences, loan exhibits, and audiovisual materials. An individual teacher or a school district may arrange for the use of these services by communicating with the director of the particular service required.

Center for Communication Disorders — In conjunction with the degree in Speech-Language Pathology, the University offers the services of speech clinicians to University students and to the public. Individual diagnosis of and therapy for problems in voice, articulation, language, fluency and hearing are provided under the close supervision of a clinical supervisor.

The Center for Communication Disorders also conducts the University required speech and voice screening test to incoming freshmen and transfer students.

Placement Service — The placement service of the University maintains a close relationship with members of the faculty and supervisors of student teachers. Requests from school administrators for teachers are acknowledged, arrangements for personal interviews are made, and confidential credentials are issued.

Professional Conferences — Special conferences in library science, art education, elementary education, secondary education, special education, business, history and many other academic fields are sponsored annually or biennially by the University. The programs are designed as a service to teachers and administrators in eastern Pennsylvania.

Audiovisual Center — The Kutztown University Audiovisual Center maintains a large collection of audiovisual materials and microcomputer hardware and software. Whenever possible the Center cooperates with local school districts and public agencies by sharing these resources. A comprehensive description of services and policies may be obtained by contacting the Media Specialist within the Audiovisual Center.

Television Services — The University's Department of Television Services provides video support to members of the University and local

communities. The Department provides services such as satellite downlinks of programming, videoconferencing, video-taping presentations and/or guest lecturers, and producing programming in support of numerous educational objectives. Additional information can be obtained by contacting the Department.

ADVISING CENTER FOR UNDECLARED STUDENTS

The Advising Center for Undeclared Students provides a full range of advising services for undeclared students who are exploring academic majors, changing academic majors, or preparing to meet acceptance requirements for new academic majors. Full-time faculty advisors and volunteer faculty advisors from a variety of academic departments assist students with exploring academic majors, developing realistic academic plans consistent with their interests, and selecting courses that help students meet their academic goals. Advisors also help students interpret and apply academic policies and access academic support resources as needed.

In addition, the Advising Center for Undeclared Students provides supplemental advising services for students in academic jeopardy. In this program, advisors review academic performance, adjust course schedules, and help students develop plans for returning to good academic standing.

The Advising Center for Undeclared Students is located in 119 Stratton Administration Center and can be reached at (610) 683-4735. For more information please visit our website (www.kutztown.edu/acad/advisement).

STUDY ABROAD OPPORTUNITIES

The International Studies Office offers numerous options for studying abroad. Students may select Kutztown University sponsored semester-long or summer study programs in such locations as Spain, Costa Rica, and Kenya. In addition, Kutztown University is a member of The College Consortium for Inter-national Studies, a partnership of more than 120 colleges and universities that sponsor more than 75 study abroad programs designed to enhance international/intercultural perspectives for students as they earn academic credit that transfers back to their home institution.

Students at Kutztown University also may apply to study for a summer, a semester, or an academic year through the many student exchange collaborations with colleges and universities in Europe, England, Latin America, and Africa.

Additional information may be obtained from the International Studies Office, located in 204 Stratton Administration Building or by calling (610) 683-1390.

STUDENT TEACHING IN ENGLAND

This program provides a student an opportunity to complete the second assignment of student teaching, either semester, in the British school system. This program is designed to give student teachers an opportunity to become acquainted with another teaching system, learn about the English culture and to travel internationally. The program has arrangements with The College of St. Mark and St. John, Plymouth. Selection is made through an interview and recommendation process. For additional information contact the Director of Student Teaching, Beekey Education Center, Kutztown University.

COLLEGE OF BUSINESS EXCHANGE PROGRAM OPPORTUNITIES

The College of Business at Kutztown University is a leader in International Business Education and students have the exciting opportunity to study in international partner institutions through-out the world. In a global marketplace, students who travel and study in another country gain an employment edge on the competition. Exchange opportunities are available in England, Hungary, Denmark, Spain, Holland and Germany. International Business majors are required to complete an international exchange experience. Additional information and application materials are available in the Dean's Office, College of Business.

COLLEGE OF BUSINESS INTERNSHIP OPPORTUNITIES

Students in the College of Business have the opportunity to earn professional experience and academic credit by participating in the College of Business Internship Program. Qualified students, who have completed approximately 75 credits, provide valuable service to companies and institutions while gaining invaluable experience and developing professionally. It is a true "win-win" situation for all. Three to six internship credits may be earned. Information and application forms are available by contacting the College of Business Internship Coordinator or the Dean's Office, College of Business.

CENTER FOR LIFELONG LEARNING & PROFESSIONAL DEVELOPMENT

The Center for Lifelong Learning was created in an effort to meet the educational, training, and personal learning needs (credit and non-credit) of the community at large.

Lifelong Learning opportunities may take the form of credit course work as a means of transition to regular degree admission; educational experiences for enjoyment and self-fulfillment through workshops and short courses; and programs which meet the training and professional development needs of business, public schools, social agencies, health care organizations, and the other professions.

For information concerning Lifelong Learning, see UNDERGRADUATE ADMISSION (page 13).

SUMMER SESSIONS

A wide selection of courses and special programs, both graduate and undergraduate, is offered during two five-week sessions each summer.

Summer School permits academic acceleration for students enrolled during the regular session or provides them an opportunity to make up scholastic deficiencies. Graduate students can further their professional education while prospective freshmen may get an early start for the Fall semester in the "Early Bird" Program. Students may register for up to nine (9) semester hours each session.

A summer catalog is published each March. Further information may be obtained by visiting our web page: www.kutztown.edu/summerschool, or by calling (610) 683-1397 to request a Summer Sessions catalog.

Undergraduate Admission

GENERAL ADMISSION REQUIREMENTS

Admission is granted on the basis of the following principles: general scholarship, character and personality as they may be determined by scholastic records, recommendations, and aptitude tests. Candidates for admission must satisfy the requirements outlined below:

1. General scholarship as evidenced by graduation from an approved secondary school or equivalent preparation as determined by the credentials evaluation division of the Pennsylvania Department of Education.
2. A multiple regression formula weighting the high school rank and SAT/ACT scores is used to determine a Predicted Grade Point Average for the applicant. The University reviews and establishes the Predicted Grade Point Average necessary for admission.
3. Either the Scholastic Aptitude Test or the American College Test is required of all candidates. The purpose of these examinations is to provide further evidence of ability to do college work. It is the responsibility of the applicant to request the forwarding of his scores to the Director of Undergraduate Admissions, Kutztown University. Students admitted with a score below an established level on the verbal portion of the college boards will be required to satisfy the developmental requirement in English. Students admitted with a score below an established level on the math portion of the college boards will be required to satisfy the developmental requirement in math. It is recommended that either SAT/ACT test be taken no later than the fall of the senior year.
4. Satisfactory character and personality traits as well as proper attitudes and interests as determined by the high school principal, guidance director, or other school officials acquainted with the student.
5. All students must complete and submit a Health Record form which includes information updating immunizations no later than the sixth week of the first semester attended. The Health Record form is distributed with orientation materials or is available through the Health Center.
6. For admission to a special curriculum, the University may require the candidate to take an appropriate aptitude test or supply further evidence of ability to succeed in his chosen field.

THE ADMISSION OF FRESHMEN — All applications for admission should be sent to the Undergraduate Admissions Office, P.O. Box 730, Kutztown University, Kutztown, Pennsylvania 19530-0730.

The items necessary to complete for admission are as follows:

1. Application for admission form.
2. $30.00 application processing fee (not refundable nor applicable to any university fee).
3. Secondary school transcript.
4. Results of either the Scholastic Aptitude Test or the American College Test.
5. Health Form (after the student has been accepted).
6. DD 214 where applicable (veterans only).

No action on any application will be taken by the admissions committee until all the necessary steps for admission have been completed and all required information is in the hands of the committee.

Prospective students are required to obtain a social security number before applying for admission.

THE ADMISSION OF TRANSFER STUDENTS — Transfer admission decisions are based upon academic performance at all previously attended, regionally accredited colleges or universities. Good academic standing, i.e., a 2.0 Q.P.A. on a 4.0 Q.P.A. scale, inclusive of all prior college course work, constitutes a minimum threshold for admissions consideration for transfer students. All students applying for TEACHER EDUCATION PROGRAMS must present a minimum cumulative GPA of 3.00 to be considered for admission. Decisions on transfer applicants who completed less than the equivalent of 30 semester hours will be based upon a synthesis of high school and collegiate records as well as standardized test scores (SAT/ACT).

In accordance to the State System of Higher Education Academic Passport and Student Transfer Policy, Pennsylvania Community College and System students who meet the established eligibility criteria shall be granted an Academic Passport, which shall provide entry to any System University. This is limited to graduates of PA Community Colleges holding the Associate of Arts (A.A.) or Associate of Science (A.S.) degree(s) or incumbent students of State System universities with 12 credits or more of college level work. All students must have a cumulative grade point average of 2.0 or greater. Admission is guaranteed only to the University and not to a specific program.

In addition to previous College Transcripts all transfer and re-entry students seeking admission to an undergraduate degree program at Kutztown University are required to submit an official final high school transcript stating the date of high school graduation or a copy of a GED Diploma issued by the Pennsylvania Department of Education granting equivalency of a high school diploma. This document must be received in order to begin processing the admission application. Applicants must request their high school to send the document which has the school seal, signature of the designated school official and date of graduation affixed. The document must arrive in a sealed envelope to be considered "official."

THE ADMISSION OF FORMER STUDENTS — Students who withdraw from the University and later apply for re-admission are required to meet the curriculum requirements effective at the time of their re-entry. Decisions of the committee on admission are final.

The 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 will not be counted toward graduation. Such courses may no longer be considered to be current or be required for the degree. The registrar determines the acceptability of these credits. However, students may request the re-evaluation of the Registrar's decision by submitting a petition to the Undergraduate Exceptions Committee.

ADVANCED REGISTRATION DEPOSIT — An advanced registration deposit of $100 must be paid when an applicant receives a

letter of admission. The Advanced Registration Deposit will be credited to basic fees upon registration. This fee is non-refundable under any conditions.

Students who were not in attendance in the previous semester, when re-admitted, are required to pay the $100 deposit fee.

For additional information concerning admission to undergraduate degree programs contact the Admission Office, Kutztown University, Kutztown, PA 19530 or phone (610) 683-4060.

HOUSING DEPOSIT — A new student who has requested on-campus housing on the admission application and has paid the $100 Advanced Registration Deposit (ARD) will be identified to the Housing and Residence Life Office. When on-campus housing is available, the Housing and Residence Life Office will send the student a housing "offer." This offer will include a housing contract and a statement form. The statement form will indicate a due date for payment of the required $125 housing deposit and directions for completion of the statement form. To accept the housing offer and secure on-campus housing, the $125 housing deposit must be paid by the date specified on the statement form. The housing deposit is applied towards the student's housing fee for the spring semester.

The $125 housing deposit is refundable if the student cancels housing by the established deadline dates.

Housing spaces are guaranteed for entering first-time fall freshmen under the following conditions: a) the student is accepted for admission; b) the student has requested on-campus housing; or, c) the Admissions application and the 100 ARD are received by May 1.

Housing for entering transfer and readmit students is limited, and is based on the number of spaces filled by incumbent resident students and the number of housing cancellations received. Housing for incumbent students currently living off-campus, or commuting, is limited and is based on availability.

REGULATIONS CONCERNING REGISTRATION — The last day of official "Drop-Add" period shall be the latest date for enrollment as a full-time student in the Fall/Spring semesters.

LATE REGISTRATION — The official registration date for each semester is published in the Calendar of Events on the insert in this catalog. Any student registering during or after late registration will be charged the normal late registration fee.

CHANGE OF NAME AND/OR ADDRESS — Once enrolled, students who change their address must do so in writing by filling out a form in the Registrar's Office or by mailing a letter to the Registrar's Office.

STAGE REQUIREMENTS FOR PROFESSIONAL EDUCATION TEACHER CANDIDATES AT KUTZTOWN UNIVERSITY

STAGE I: REQUIREMENTS FOR ENTRANCE INTO UNDER-GRADUATE PROFESSIONAL EDUCATION PROGRAMS

Teacher Candidates must:

- complete 48 semester hours
- pass all PRAXIS I tests (Pre Professional Skills Tests) required by the PA Department of Education (PDE) for certification. Passing scores are determined by PDE.
- achieve a 3.0 quality point average (QPA).
- complete with a grade of "C" or better six semester credits of college level mathematics.
- complete with a grade of "C" or better three semester credits of English composition and three semester credits of English literature.
- complete with a grade of "C" or better three semester credits of SPE 010, Fundamentals of Speech.

Note: *Teacher candidates must pass all professional education courses with a "C" or better. Any teacher candidate for whom three letters are received from KU faculty, KU administrators, and/or public school personnel documenting the student's unsuitability for teaching may be denied entrance to any field experience including student teaching (applies to Stages I, II, & III).*

STAGE II: REQUIREMENTS FOR EARLY FIELD EXPERIENCES

Teacher Candidates must:

- complete prerequisite(s) for early field experiences.
- maintain 3.0 QPA.
- complete the 30-hour departmental observation requirement prior to reaching 64 semester hours. Re-entry, transfer and change of major students must complete the observation requirement prior to the professional semester.
- obtain a clear criminal background report as required by Acts 34 & 151 prior to registering for the professional semester.
- obtain a criminal background report from the Federal Bureau of Investigation (FBI), if a PA nonresident.

Teacher candidates convicted of offenses may be removed from the professional semester assignment.

Note: *The dean, assistant dean, and department chairs will determine continuation in the teacher education program. Teacher candidates denied clearance for Stage II: 1) will NOT be permitted to pursue their Professional Semester of Early Field Experience; 2) will NOT be permitted to pursue a teacher education major; 3) will NOT be permitted to enroll in additional courses within teacher education programs; 4) must declare a major outside of teacher education, if they plan to continue at Kutztown University.*

STAGE III: REQUIREMENTS FOR STUDENT TEACHING & PRACTICUM

Teacher Candidates must:

- complete the professional semester or Early Field Experience. This requires a satisfactory recommendation from field experience cooperating teachers and the KU coordinator.
- complete all courses in the major required for student teaching.
- maintain the 3.0 QPA.
- receive a positive recommendation from the department chairperson or screening committee. This recommendation will be withheld if three letters are received documenting the teacher candidate's unsuitability for teaching.
- obtain a clear criminal background report as generated under Acts 34 & 151 prior to registering for the student teaching semester.
- obtain a criminal background report from the FBI if not a PA resident. Teacher candidates convicted of any offense during the time of their student teaching may be removed from their student teaching assignment.

Teacher candidates convicted of any offense may be removed from the student teaching assignment.

Note: *Teacher candidates (including newly admitted, re-entry and transfer students) must achieve a minimum of "C" in both assignments of student teaching to successfully complete the program. Teacher candidates must maintain a 3.0 QPA to become eligible for PA teacher certification.*

RIGHT TO APPEAL — Students have the right to appeal decisions to the dean of the College of Education who chairs the Council for Teacher Education.

IMPORTANT NOTICE — U.S. CITIZENSHIP OR A WRITTEN DECLARATION OF INTENT TO BECOME A U.S. CITIZEN WITHIN SIX YEARS IS A REQUIREMENT FOR PA CERTIFICATION.

UNDERGRADUATE CREDIT COURSE WORK AVAILABLE THROUGH LIFELONG LEARNING

Evening and off-campus undergraduate credit courses are open on a space-available basis to all adults whose qualifications indicate that they are able to complete the courses successfully. Admission to course work at the University does not mean admission to a degree program. Students registering for undergraduate credit courses may take up to a total of 21 credit hours of work through Lifelong Learning, but no more than 9 hours in a given semester. Students wishing to continue taking credit work after 21 hours must make formal application as a degree candidate through the Office of Admission. Students who are registered through Lifelong Learning may apply for admission to the University before reaching the 21-hour limit, with the understanding that they will be evaluated for regular admission based on criteria applied by the Office of Admissions. Once students request formal admission as degree candidates and are subsequently admitted, they will be assigned advisors from an appropriate academic discipline.

ACADEMIC INFORMATION FOR LIFELONG LEARNING STUDENTS

Initial information concerning the general education curriculum core may be obtained by contacting the University's Center for Lifelong Learning at (610) 683-1382. This office is located in Room 125, Old Main and is open from 8:00 a.m. to 12:00 noon and from 1:00 to 4:30 p.m. weekdays during the academic year. The office is open from 8:00 a.m. to 12:00 noon and from 12:30 to 4:00 p.m. during the summer.

Academic Policy Information

CLASS ATTENDANCE

Students have the right to expect that the criteria for student evaluation will be explained at the beginning of the course.

Regular class attendance is expected. Students should not be absent from classes without adequate reason.

Excused absences include, but are not limited to, illness, scheduled university-related activities, death in the family, jury duty, and impassable roads.

An instructor need not allow a student to make up any work, normally graded in the course, which is missed as a result of an unexcused absence.

Students assume the responsibility for notifying their professors when they are expecting to be absent from class for an extended period of time, generally a week or more, because of illness, accidents, or emergencies. Students who will be absent from class for an extended period may contact the Vice President for Student Affairs at 683-4020 for assistance in notifying professors. Medical complications or other circumstances that require extended absences may also be handled by the Vice President for Student Affairs.

COURSE AND SCHEDULE SELECTION

The ultimate responsibility for compliance with academic requirements for graduation, selection of courses, and class schedules rests entirely with the student.

FACULTY ADVISOR — Although course and program planning is the responsibility of the student, each student is assigned a faculty advisor in the student's major field of interest who will provide assistance in course selection. Each faculty advisor designates certain hours when students in classes and assigned advisees may schedule meetings regarding work in courses or other problems. Office hours are posted at each faculty office.

CREDIT FOR COURSES — No credit can be given for courses for which students are not officially registered in the Office of the Registrar.

PASS/FAIL — Students having completed at least 32 semester hours of college-level work with at least a 2.75 average may take one course per semester on a pass/fail basis provided that no more than 18 semester hours in the undergraduate program (exclusive of Physical Education) would be taken on that basis.

Only courses in General Education permitted under "electives'' in Categories II-V can be taken pass/fail. Pass/fail is also an option for "free electives" or "Arts and Sciences electives" if the student's major program includes these areas. Students should be careful in selecting courses for this procedure because courses that are prescribed in the major program including the specified electives under the major, concentration, or concomitant courses cannot be taken pass/fail.

The pass/fail option is available to students for break, summer and regular semesters.

The pass/fail form must be submitted by the student to the Registrar's Office before the end of the drop/add period to exercise this option.

The student may change his/her mind but must notify the Registrar in writing that he/she wishes to select the normal grading system for a specific course. This change must be done before the first class meeting.

Evaluation for course work under pass/fail which would constitute "A" or "B" or "C'' work will receive a grade of "pass." Evaluation which could constitute "D'' work will receive the notation of "no credit.'' Work which would normally be evaluated as "F'' will count as "Fail.'' The determination of the grade, A, B, C, D, F, I, Pass or Fail will be made by the instructor at the end of the course. A pass/fail grade will not be computed in a student's semester or cumulative average, but credit for the course in the case of a "pass'' will count toward credits needed for graduation.

Any student who withdraws from a course he/she is taking on a pass/fail basis after the last day to withdraw from a course without the possibility of penalty shall receive a grade of "W." Any student taking a course on a pass/fail basis who withdraws from the course in the period of two weeks before the first day of final examinations would receive an automatic grade of Withdrawn Failing. The grade of Withdrawn Failing would not be computed in either the semester index or cumulative quality point average.

AUDITING COURSES — Students may take courses "not for credit" provided there is room in the class after all registrations for credit have been handled. The student pays full fee for auditing and may audit no more than one course per semester.

Under auditing privileges, students are not required to take examinations and may take such only with approval of the instructor. No grade will be given in the course. Once the student has enrolled "Not for Credit,'' enrollment status may not be changed to "credit'' except through special action by the Undergraduate Exceptions Committee upon receipt of approval from the department chairman and the appropriate college dean. Once a student has enrolled in a course for credit a change to "Not For Credit'' status is not permitted.

REPEATING COURSES — Students may repeat courses in which a "D" or "F" is received. Credits attempted the first time will not be part of the divisor when computing quality point average. Courses in which a "C" or above is earned cannot be repeated.

SCHEDULE AND CURRICULUM CHANGES

Change of Major, Minor, or Academic Advisor — The general University policy regarding eligibility for a change of major is that any student may request a change of major. Because a certain college and/or department may have additional criteria which must be fulfilled before approval for a change of major is given, the student should check the college and departmental requirements carefully.

Students who wish to change into the "undeclared'' category may do so by requesting such a change at the Advisement Center located in the Administration Building.

All changes of major, minor, or academic advisor are made to be effective during the Drop/Add period of either the Fall or Spring semester. Requests for a change of major, minor, or academic advisor, which are completed during a Drop/Add period, will take effect immediately. Requests for a change of major, minor, or academic advisor, which are completed after a Drop/Add period, will be processed, but will not take effect until the following semester. 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 which are in force as of the effective date of the change, addition, or re-entry.

A student who wishes to change his/her major, minor, or academic advisor should go to the following offices to initiate the process for formal change:

1. to add a major in the College of Business — go to the Dean of the College.
2. to add a major in the College of Education — go to the specific departmental chairperson.
3. to add a major/minor in the College of Liberal Arts and Sciences — go to the specific departmental chairperson.
4. to add a major/minor in the College of the Visual and Performing Arts — go to the specific departmental chairperson.

Double Major — available on the following basis:

A. A student must successfully complete all the required work under each major.
B. A student must successfully complete all courses in one of the two concomitant areas.
C. All course prerequisites must be fulfilled.
D. Clearance for graduation must be approved by both departments or areas.
E. A quality point average of at least 2.0 is required in each major.
F. A student may have to successfully complete a comprehensive examination in each major.

Major-Minor — based on the following criteria:

A. The minor area requires between 18-20 semester hours.
B. Each department indicates the specific sequence(s) of study which constitutes the minor(s).
C. At least three (3) courses of study in the minor must be in upper division.
D. A quality point average of at least 2.0 is required in the minor.

WITHDRAWALS

Withdrawal from a Course — 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.

Withdrawal from individual courses prior to the end of the 6th week of classes will not be recorded on the student's transcript. Withdrawal from individual courses from the seventh week of classes up to two weeks before the beginning of final examinations will be recorded as "W" grades. Withdrawal from individual courses within two weeks of the beginning of final examinations will be recorded as "WF" grades. PLEASE NOTE: a "WF" will be computed as an "F". The "W" has no affect on the QPA.

Any student taking a course on a pass/fail basis who withdraws from the course within two weeks of the beginning of final examinations will receive an automatic grade of "Withdrawn Failing." "Withdrawn Failing" will not be computed in either the semester index or the cumulative quality point average.

The latest date for withdrawal from individual courses without penalty of a grade of "WF" in a Winter Break or Summer Session will be published prior to the beginning of the specific session.

Withdrawal from the University — Any student leaving the University prior to the end of any academic term must officially withdraw. The student should contact the Counseling Center (Stratton Administration Building) to initiate the formal withdrawal process. After the withdrawal form is completed, the student submits it to the Registrar's Office (Stratton Administration Building). The date the Registrar's Office receives this withdrawal form with the student's original signature is the student's official date of withdrawal from the University. Please note that failure to complete the withdrawal process may result in failing grades in all courses being taken at the time 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 "WF" grades for all courses.

For extenuating circumstances as verified by the Counseling Center or the Health Center, and with the approval of the Undergraduate Exceptions Committee, a student can receive a "W" for all courses when withdrawing from the University.

GRADING

The system of grading used at Kutztown University is as follows:

A – excellent	B – above average
C – average	D – below average
F – failure	I – incomplete

An "I" grade will be considered as a failure until the condition has been removed. A grade of "I" indicates that the student has not satisfied all requirements of a given course. All deficiencies must be removed by the end of the ninth week of the next regular semester. This deadline does not negate the authority of the instructor to impose a deadline that is earlier than the end of the ninth week of the next regular semester. Failure to meet this requirement automatically changes the "I" to "F."

Final Examinations — Final examinations can constitute no more than 1/3 of the final grade.

DEAN'S LIST

At the end of each semester a scholarship list, known as the Dean's List, is made public. Eligibility for inclusion on the list is determined by a semester quality point average of 3.60 provided the student is registered for at least 12 credits under letter grading and is pursuing study for a degree at Kutztown University.

GRADUATION WITH HONOR — Kutztown University recognizes a student's scholastic achievement upon graduation by recording honors on the permanent record, the commencement program and on the diploma itself. The cumulative quality point average necessary for this

distinction is: with honor (cum laude) 3.40; with high honor (magna cum laude) 3.60 and with highest honor (summa cum laude) 3.80.

CLASSIFICATION

Students are classified as freshmen if they have less than 30 earned credits; as sophomores when they have earned between 30 and 59.9 credits; as juniors when they have earned between 60 and 89.9 credits, and as seniors after they have earned 90 or more credits. The credits used to determine the classification of students include those earned at this university and those earned at other institutions accepted by Kutztown University on the basis of official transcripts received from those institutions.

QUALITY POINT AVERAGE

The quality point average is a measure of a student's academic standing. For purposes of computing the quality points earned, each letter grade carries a given number of quality points as shown:

A carries 4 quality points
B carries 3 quality points
C carries 2 quality points
D carries 1 quality point
F carries 0 quality points

To determine the quality point average for a given semester, use the formula indicated:

COURSE	SEMESTER HOURS	GRADE	SH x QP	TOTAL Q.P.
Course I	3	A	3x4	12
Course II	3	B	3x3	9
Course III	2	C	2x2	4
Course IV	3	D	3x1	3
Course V	2	F	2x0	0
Totals	13			28
Quality Point Average (Q.P.A.)			2.15	

The cumulative quality point average is determined by dividing the total of all quality points earned by the total semester hours of all credits attempted. An exception to this occurs when a student repeats a course, whereupon the credits attempted the first time the course was taken will not be part of the divisor. Students may repeat only courses in which they initially received a "D" or an "F." Because a repeat course can affect the cumulative quality point average significantly, it is important that the student make certain that the records show all repeat courses.

The Q.P.A. in a student's major program is based on all courses taken which the department allows to count toward the major, regardless of whether the student uses the courses to fulfill major program requirements, as electives or concomitant courses or within General Education requirements.

Multiple prefix courses are counted in the total number of credits allowable in a student's major even if they are taken with a prefix other than the student's major. This includes courses taken under general education.

PLEASE NOTE: *Grades earned in courses taken at another institution will not be included in determining a student's quality point average as only grades earned at Kutztown University affect this average.*

ACADEMIC ELIGIBILITY

All newly admitted, re-entry and transfer students must meet the following minimum requirements of Grade Point Average (GPA) for continuing enrollment in good standing.

FULL-TIME ENROLLMENT IN GOOD STANDING BEYOND THE SECOND REGULAR SEMESTER
Admission to the second regular semester and to all subsequent semesters 2.00

PART-TIME ENROLLMENT IN GOOD STANDING
Minimum of 24 semester hours attempted and every 12 credits thereafter 2.00

A cumulative quality point average (QPA) of 2.0 or higher is required of all students by the end of their second full-time semester or at the completion of 24 semester hours for part-time students at Kutztown University. Students earning a quality point average lower than 2.0 at the completion of their first semester will receive a LETTER OF NOTIFICATION indicating the student is not meeting university standards. It will call attention to the support services that the student may use to remediate academic difficulties.

ACADEMIC WARNING

If, at the completion of the second semester or any subsequent semester, a student' s cumulative QPA falls below 2.0, he/she will receive an ACADEMIC WARNING for the following semester. Part-time students will be evaluated every 12 credits beginning with the completion of 24 credits and will receive an ACADEMIC WARNING whenever this evaluation shows their QPA to have fallen below 2.0. A student is allowed only one semester of ACADEMIC WARNING.

In an ACADEMIC WARNING semester, the student:

- is strongly recommended to see his/her faculty advisor and to use University support services, such as the Advising Center and the Department of Developmental Studies to remediate academic difficulties.
- may lose eligibility to receive financial aid if in the fifth semester or beyond.
- may register for no more than 13 credits for the subsequent semester without permission of Advising Center or Department of Developmental Studies.
- may not request a Leave of Absence

Should the cumulative QPA of any student who has received an ACADEMIC WARNING fall below 2.0, the student will be placed on ACADEMIC PROBATION for the subsequent semester. A part-time student who has received an ACADEMIC WARNING must bring his/her cumulative QPA up to 2.0 or higher within 12 semester credits attempted, or be placed on ACADEMIC PROBATION.

Any student who withdraws from the University while under ACADEMIC WARNING, during the period in which students receive a grade of "W" or WF", will be considered to have completed a semester under ACADEMIC WARNING and will be readmitted only under ACADEMIC PROBATION.

ACADEMIC PROBATION

Should the cumulative QPA of any student who has received an ACADEMIC WARNING fall below 2.0, the student will be placed on

ACADEMIC PROBATION for the subsequent semester. A part-time student who has received an ACADEMIC WARNING must bring his/her cumulative QPA up to 2.0 or higher within 12 semester credits attempted, or be placed on ACADEMIC PROBATION. During the semester of ACADEMIC PROBATION the student:

- Is not considered to be in good academic standing.
- Is strongly recommended to see his/her faculty advisor and to use University support services, such as the Advising Center and the Department of Developmental Studies to remediate academic difficulties
- May lose eligibility to receive financial aid if in the fifth semester or beyond
- Is limited to 13 semester credit hours unless permission is granted by the Advising Center or Department of Developmental Studies.
- Is prohibited from participating in any intercollegiate activities or leadership positions in student organizations.

No exception to the conditions of ACADEMIC PROBATION may be made without prior approval of the Undergraduate Exceptions Committee.

If a student under ACADEMIC PROBATION earns the QPA required for good standing, but then again falls below the required minimum QPA, the student will be automatically DISMISSED.

Each student is entitled to receive one ACADEMIC WARNING and to be placed on one semester of ACADEMIC PROBATION. These semesters may be consecutive or they may be separated by one or more semesters with a cumulative QPA of 2.0 or higher.

Should a student under ACADEMIC PROBATION voluntarily withdraw from the University, before the "WF" period, the student may seek readmission. This readmission will be under ACADEMIC PROBATION. If the student withdraws during this second semester of ACADEMIC PROBATION, he/she may not be readmitted without approval from, and under conditions established by, the Undergraduate Exceptions Committee. Any student who withdraws from the University while under ACADEMIC PROBATION, during the period in which students receive a grade of "WF," will be considered to have completed a semester under ACADEMIC PROBATION and will be automatically DISMISSED .

DISMISSAL

A student DISMISSED from the University following a semester of ACADEMIC PROBATION may seek readmission only under unusual circumstances. Following academic DISMISSAL, in special situations the student may petition the Undergraduate Exceptions Committee to consider a request for readmission

- Petition for readmission must include a clear statement and/or evidence indicating the student's potential for academic success.
- If the petition is approved, the student shall be admitted on ACADEMIC PROBATION for one semester and must comply with all standing restrictions of ACADEMIC PROBATION in addition to requirements imposed by the Undergraduate Exceptions Committee.
- If the petition is approved, the student shall be admitted on ACADEMIC PROBATION for one semester. During that semester, the student must comply with all standing restrictions of ACADEMIC PROBATION as well as any additional requirements imposed by the Undergraduate Exceptions Committee.

POLICY ON ACADEMIC FORGIVENESS FOR UNDERGRADUATES

Rationale — 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.

Policy — The academic forgiveness policy shall apply to undergraduate students who withdraw from Kutztown University and seek readmission after a period of no less than four years. Upon readmission, students who request academic forgiveness will start with a quality point average of 0.00. The quality point average 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 calculation of the overall quality point average is based solely on grades earned after re-entry. Students will maintain credits earned previously in courses for which a final grade of "C" or better was recorded. As in the case of transfer from another institution, credit toward a degree will not be granted for courses in which a grade less than "C" was earned during the previous period of enrollment. This policy does not replace or alter the "10-year" rule and students must be aware that courses in the major taken over 10 years prior to re-entry may not be applicable toward a degree. In order to gain benefit from the academic forgiveness policy, the student must fill out an informed consent form, available in the Registrar's Office. This appeal must be initiated during the first semester of attendance after readmission.

ACADEMIC HONESTY POLICY

Kutztown University is committed to the personal and intellectual growth of its students. The principal context in which this growth occurs is the University's courses, and the educational process depends upon an open and honest atmosphere of positive cooperation between faculty and students. In order to maintain this atmosphere, professors must evaluate the academic performance of students fairly and students must demonstrate their mastery of subject matter honorably. Any acts of academic dishonesty by students, such as plagiarism on written papers or cheating on exams, threaten to undermine the educational and ethical goals of the University for its students. Such violations are of the utmost seriousness. The goal of the following policy and procedures is to promote a climate of academic honesty for all individuals at the University.

Responsibilities of Faculty Members and Administrators — It is the responsibility of faculty members who become aware of acts of academic dishonesty to investigate, gather evidence, bring charges, and participate in the resolution of cases that they initiate, and administer appropriate sanctions according to the policy and procedures set forth below. As a preventive measure against such acts, instructors are strongly encouraged to inform students at the beginning of each course that they intend to uphold this policy. In addition, whenever there is a potential for ambiguity as to how the policy applies to specific course activities and assignments, instructors should explain clearly to students what procedures, activities, and resources are allowed. Administrators who become aware of breaches of the Academic Honesty Policy may participate, as co-accusers with the instructor, in bringing charges of academic dishonesty.

Responsibilities of Students — It is the responsibility of students to be aware of this policy and abide by it at all times. Ignorance of this policy will not be an acceptable defense if charges are lodged. Students accused of academic dishonesty who fail to meet the time deadlines contained in the procedures set forth below will forfeit their rights to a formal hearing and to appeal a sanction. Students are encouraged to bring cases of academic dishonesty that they observe or know about to the attention of their instructors or to officials of the University. They should be willing to testify at subsequent formal hearings about such matters. Students have the right to participate, as co-accusers with the instructor, in bringing charges of academic dishonesty against other students.

Definitions of Academic Dishonesty — Academic dishonesty involves any attempt to obtain academic credit or influence the grading process by means unauthorized by the course instructor. Academic dishonesty includes, but is not limited to, the following situations and examples.

1. Providing or receiving unauthorized assistance in course work and lab work, or unauthorized assistance during examinations or quizzes.
2. Using unauthorized notes, materials, and devices during examinations or quizzes.
3. Plagiarizing the work of others and presenting it as one's own without properly acknowledging the source or sources. At its worst extreme, plagiarism is exact copying, but it is also the inclusion of a paraphrased version of the opinions and work of others without giving credit. It is not limited to written materials. It includes the wrongful appropriation in whole or in part of someone else's literary, artistic, musical, mechanical, or computer-based 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. Falsifying or inventing data to be presented as part of an academic endeavor.
6. Gaining unauthorized access to another person's or the University's computer system. Violations include tampering with or copying programs or data or access codes associated with coursework.
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 answers on exercises, exams, 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 for someone else or arranging to have someone take examinations or quizzes in place of the person registered for the course.

ADVANCED STANDING

Advanced standing credit will be given for equivalent courses completed at regionally accredited institutions of collegiate level in which a minimum grade of "C-" is earned. No student may obtain a degree without a minimum residence of one year (thirty-two semester hours) at Kutztown University. Students transferring from another college are subject to the regulations stated on page 12.

Students transferring from any institution of higher education to Kutztown University will be required to complete half of the minimum semester hour degree requirements in their major 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.

10-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 will not be counted toward graduation. Such courses may no longer be considered to be current or be required for the degree.

The Registrar determines the acceptability of these credits. However, students may request the re-evaluation of the Registrar's decision by submitting a petition to the Undergraduate Exceptions Committee.

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. Kutztown University administers both the General Examination and the Subject Examinations. Advanced standing and credits are awarded for each CLEP examination when the student earns an acceptable score as recognized by Kutztown University.

The General Examination measures college-level achievement in five areas of the Liberal Arts and Sciences. These areas are: Mathematics, Humanities, Natural Sciences, Social Sciences and History. The CLEP Subject Examination measures achievement in specific college courses. These exams 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: Mathematics – 3 credits; Humanities – 6 credits; Natural Sciences – 6 credits; and Social Sciences & History – 6 credits. For specific CLEP subject Examinations and course credits, please see chart above.

Students must go to the Academic Services Office to arrange for CLEP testing. Those students who have already taken CLEP tests must have their test scores forwarded to Academic Services for evaluation. There is an administrative fee for entering a CLEP score on a student's official record.

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 valuation 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 Admissions, the Office of the Registrar or the Center for Lifelong Learning.

ADVANCED PLACEMENT

Students enrolled in Advanced Placement courses during their senior year of high school are administered the Advanced Placement Examinations in

CLEP SUBJECT EXAMINATIONS		KUTZTOWN UNIVERSITY COURSES
American Government	POL 010	American Government
History of the U.S. I	HIS 025	History of U.S.: The Formative Years and the Federal Republic
History of the U.S. II	HIS 026	History of U.S.: The Emergence of Modern America
American Literature	ENG 103, 104	American Literature I & II
Analysis and Interpreting Literature	ENG 010	Introduction to Literature
Calculus with Elementary Function	MAT 171	Calculus I
College Algebra	MAT 105	College Algebra
College Algebra — Trigonometry	MAT 115	Precalculus Mathematics
Freshman College Composition *(Including 90-min. essay section)*	ENG 023	College Composition I
College Level French Language *(1 semester of study/credit)*	FRE 011, 012	Elementary French I & II
College Level French Language *(2 semesters of study/credit)*	FRE 103, 104	Intermediate French III & IV
College Level German Language *(1 semester of study/credit)*	GER 011, 012	Elementary German I & II
College Level German Language *(2 semesters of study/credit)*	GER 103, 104	Intermediate German III & IV
College Level Spanish Language *(1 semester of study/credit)*	SPA 011, 012	Elementary Spanish I & II
College Level Spanish Language *(2 semesters of study/credit)*	SPA 103, 104	Intermediate Spanish III & IV
Introduction to Educational Psychology	PSY 140	Educational Psychology
English Literature	ENG 113, 114	British Literature I & II
Biology	BIO 104	Principles of Biology
General Chemistry	CHM 100, 102	General Chemistry I & II
Introductory Psychology	PSY 011	General Psychology
Human Growth and Development	PSY 110	Child Psychology
Principles of Macroeconomics	ECO 011	Principles of Macroeconomics
Principles of Microeconomics	ECO 012	Principles of Microeconomics
Introductory Sociology	SOC 010	Principles of Sociology
Trigonometry	MAT 106	Trigonometry
Western Civilization I	HIS 014	History of Civilization A
Western Civilization II	HIS 015	History of Civilization B

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 the courses. Applicants earning a grade of "3-Qualified''or better are given advanced standing and university credit. Advanced Placement scores should be submitted as soon as possible after formal acceptance to the University. Contact Academic Services for further information.

CREDIT BY EXAMINATION

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 to the Academic Services Office a request for the privilege of taking an examination in the course for the purpose of establishing credit for it (Challenge Examination). Appropriate forms are available in the Academic Services Office, 204 Stratton Administration Building.

A $25.00 administrative fee is charged for each Challenge Examination. 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 by the Academic Services Office.

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
- — who failed a challenge examination and want to repeat credit by examination
- — who do not have verification of required qualifications by department chairperson and faculty offering the examination
- — who do not have the agreement of the department/faculty member to offer the examination

INDIVIDUALIZED INSTRUCTION

1. In all circumstances of Individualized Instruction:
   a. The course must be a regular university catalogue course.
   b. The course is not scheduled to be taught in the particular semester.
   c. The course assignment must be approved by the Dean of the College in which the course is offered. The student initiates request for Individualized Instruction with the Dean of the College in which the course is offered.

2. Individualized Instruction is available only to degree undergraduate students who have passed no less than 32 semester hours, to degree graduate students only after approval of degree candidacy.
3. Individualized Instruction may be assigned/approved only foe required courses in the student's degree curriculum. The student is expected to have observed all required sequence(s) of degree courses and to have registered for courses within the usual schedule of semester offerings appropriate to the student's degree and/or major.
4. A student is permitted to enroll in only one course under Individualized Instruction during the term of study.
5. A student enrolled in a course under Individualized Instruction may meet with the instructor regularly for at least 5 contact hours per credit offered. Examinations and other work will be comparable to the requirements of the course when regularly offered.
6. Any course in which a student receives a grade of "D" or "F" may not be repeated via Individualized Instruction.

INDEPENDENT STUDY

Independent study is a course of study specific in nature, content and level which is not provided as a regular offering of study at the University. An independent study is designed by a faculty member and student subject to the approval of the department in which the course of study is undertaken. The option of independent study within a department must be listed in the current University Bulletin or have been approved for inclusion in the Bulletin. A student wishing to pursue independent study should contact the chairperson or a faculty member in the department in which the independent study will be taken.

UNIVERSITY HONORS PROGRAM

The University Honors Program is designed to provide advanced academic opportunities for some of the most proficient and highly motivated students at Kutztown University. The program, totally undergraduate in nature, is open to qualified students in the College of Business, the College of Liberal Arts and Sciences, the College of Education, and the College of Visual and Performing Arts.

Freshmen who have been identified as potential Honors students based on their high school record and SAT scores, transfer students from other Honors programs, and incumbent students who have earned a cumulative QPA of 3.25 or higher are invited to join our Honors Program.

An Honors Diploma is awarded to those students in the program who have met all college requirements, have completed at least twenty-one (21) semester hours in Honors courses, have attained a minimum cumulative quality point average of 3.25, and have completed a two-unit service component. Withdrawal from the program, for any reason, requires written notification from the student to the Director. A student whose cumulative average drops below 3.25 will be advised, following one "makeup" semester, to withdraw from the program. A grade of "C" (or lower) shall not count toward Honors Credit. A second "C'' or lower grade in an Honors course will lead to automatic exclusion from the program. A student may not enroll in an Honors course on a Pass/ Fail option. Undergraduate students who are not members of the Honors Program may take an Honors course if they have a quality point average of 3.0 in fifteen (15) credits taken at the University. Permission of the Honors Program Director is required.

For more information interested students should visit the Honors Program Office, Old Main 108 and 112.

INTERNATIONAL STUDIES MINOR

The International Studies Minor is designed to supplement and broaden the curriculum base of students majoring in any field, thus enhancing their global awareness. This minor program has immediate relevance and application for students across a wide variety of majors (e.g. business, education, the arts, geography, history, political science, public administration, languages, and the social sciences.) The 18-credit program allows for maximum flexibility and integration into the student's specific area of study. Using an extensive list of courses from a wide variety of disciplines, a student creates an individualized program with the consultation and approval of an international studies advisor, subject to the general guidelines established by the International Affairs Committee. Emphasis is on the assembling of a cohesive group of courses with a common theme that complements the student's major.

Graduates with an International Studies Minor will be more fully prepared to interact with citizens of many nations in our global culture. This program is of special interest for students seeking careers in international sectors of multinational corporations, governmental agencies at all levels, private agencies with inter-national perspectives, and international organizations such as the U.S. Foreign Service and United Nations Agencies.

For more information about the minor requirements and a copy of the check sheet, interested students should visit the International Studies Office located in Room 204, Stratton Administration Building, or call (610) 683-1390.

MODERN LANGUAGE PLACEMENT POLICY

Computerized Adaptive Placement Exam for Spanish, French, and German will allow accurate and efficient testing and placement of entering Spanish, French, and German students. The placement test policy should effectively resolve the dilemma of students taking the inappropriate level language course. Policy as follows:

- As of June 2002, all students beginning the language sequence must take the placement exam prior to registration.
- Based on test results, students will be placed in an appropriate level course. Modern Language Studies faculty may move individual students into different levels other than those indicated by the exam, based on additional information about a student or a student's performance in class.
- Upon successful completion (C or better) of the course in which they were placed, students will receive credits for the courses below the level in which they were placed. Up to nine credits may be given. For example, if a student places into Spanish 021 and completes Spanish 021 with a C or better, she/he receives the earned grade for 021, plus six credits for 011 and 012.
- Students should take the placement test the semester immediately prior to the semester in which they would take the course. If a year or more has elapsed since last taking the placement exam, it is recommended that the student re-take the placement exam.
- Students who choose to take a course which is below the range in which they score, unless otherwise authorized by Modern Language Studies faculty, may take the course pass/fail only and on a "space available" basis.

ENROLLMENT IN 400 LEVEL COURSES:

Courses numbered 400-499 are graduate level courses. Enrollment is limited to junior, senior, and graduate students. Undergraduate students at the Junior or Senior level with less than a 2.90 cumulative quality point average must obtain the permission of the instructor.

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. *(See section on Quality Point Averages on page 16.)*
3. Fifteen (15) semester hours of the last 30 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. Concerning minimum hours in the major, see "Advanced Standing," page 18.

   Grades earned in courses taken at another institution will not be included in determining a student's quality grade point average as only grades earned at Kutztown University affect this average. However, a minimum grade of "C-" must be earned for the credit to be accepted at Kutztown University.

LEAVE OF ABSENCE POLICY

Students in academic good standing may be granted a leave of absence for medical reasons, study abroad, and other reasons by the Office of the Provost. A leave may be granted for one semester, with the possibility of renewal for a consecutive semester. At the conclusion of the leave a student may register to continue studies without repeating the admissions process. Students must request a leave of absence within the first six weeks of a semester.

STUDENT TEACHING PROGRAM

The University provides for a semester of full-time student teaching in local public, private and parochial schools, intermediate units, day care centers, agencies, campus Early Learning Center and in England.

Student teachers are placed in a seven county area that extends roughly thirty miles from the KU campus. The University cannot honor requests to place the student teacher to a specific school or locale.

Fourteen semester hours of student teaching and practicum constitute the minimum requirement in this area of professional education. All persons registering for student teaching shall have completed Stage III of the Requirements for Admission to Teacher Certification Programs.

The student teacher will receive a written evaluation and a letter grade at the end of each seven credit student teaching assignment. One evaluation from the cooperating teacher and one from the University supervisor will be placed in the student's file in the Career Services Office.

In Art Education and Library Science, student teaching or library practice is done at the elementary and secondary levels. In Elementary Education, students are assigned to an equal period of time of student teaching in primary, and intermediate/middle school classrooms. A student in Early Childhood will receive one assignment in kindergarten or pre-kindergarten. In Secondary Education, a student's specialization permits one assignment of student teaching in a middle school or junior high school and equal time of student teaching in a senior high school.

In Special Education (Speech and Language Pathology) an attempt will be made to have one assignment in a clinical setting and one equal assignment in a school setting.

In Special Education-Elementary (Mentally and/or Physically Handicapped) students are assigned to an equal period of time of student teaching in special education and elementary classrooms since upon successful completion of the program the student is eligible for dual certification. All Special Education majors in M/PH are required to have participatory experiences in areas covered by the certificate.

Special Education-Elementary (Visual Impairment) students are assigned to an equal period of time of student teaching in special education and elementary classrooms since upon successful completion of the program the student is eligible for dual certification.

STUDENT TEACHING REQUIREMENTS

Admission to student teaching is by application to the Coordinator of Student Teaching (one year prior to scheduling the student teaching semester) and fulfillment of the following requirements:

1. Completion of a minimum of 90 semester hours with a minimum quality point average as required under Act 354 as listed in Stage Requirements.
2. Stage II criteria under Requirements for Admission to Teacher Certification Programs must be completed and on file with the department chair before the Application for Student Teaching is processed. Refer to pages 13-14 in the catalog for a listing of criteria for Stage I, II, and III under Requirements for Admission to Teacher Certification Programs.
3. Student has met all of the following Stage III requirements during the semester prior to Student Teaching and Practicum:
   a. The student must successfully complete the Professional Semester or Early Field Experience. This requires a satisfactory recommendation from the cooperating teacher and the University coordinator.
   b. The student must complete all courses in the majors that are required for student teaching.
   c. The student must receive a positive recommendation from the departmental chair or screening committee. This recommendation will be withheld if three letters are received from faculty documenting the student's unsuitability for teaching.
   d. The student must receive a totally clear criminal background report (Act 34). The departmental chair or screening committee will meet with students who are deficient. Students have the right to appeal Stage II or Stage III decisions to the dean of the College of Education who chairs the Council for Teacher Education.
4. The following must be completed and on file in the Student Teaching Office before assignment are released:
   a. application for student teaching;
   b. vita (five copies) using the guidelines available from the Student Teaching Office;
   c. TB test;
   d. clear Act 34 and Act 151 reports;
   e. verification of professional liability insurance.

GRADE APPEAL POLICY

I. Introduction

This grade appeal policy provides a process for redress of grievance between a student and a faculty member concerning a final grade in a course taken at Kutztown University. Two important points to be kept in mind concerning the application of this policy are: (1) all uses of the word "grade" in this policy refer to the final grade in a course; (2) the Grade Appeal Board (GAB) may consider approving changes only to P (pass) and W (withdraw). Any requests for changes to specific letter grades, therefore — a change from a D to a C, for example — would not be considered by the GAB.

Consistent with the position of the AAUP, students should have protection through orderly procedures against unsubstantiated academic evaluation. Students who believe that their final course grade reflects unsubstantiated academic evaluation may initiate and pursue a grade change appeal in accordance with provisions of this document. Students shall not suffer academic recrimination because of participation in this procedure. At the same time, all academic rights and privileges of faculty members are to be honored in this process, and changes in final course grades are to be made only when there is clear evidence of unsubstantiated academic evaluation.

All grade change appeals shall be initiated in a timely fashion. If a grade change appeal is not resolved during the preliminary steps of this procedure, and the student wishes to pursue further an appeal for a change of grade, the student may file a Grade Appeal Petition. (See Section III. a.) This petition must be filed no later than the end of the ninth week of the next regular semester.

II. Preliminary Steps

In both the preliminary steps outlined here and in the step involving the Grade Appeal Board, the only issue under consideration will be whether or not the student can present evidence that his or her final grade reflects unsubstantiated academic evaluation by the faculty member. Because one of the major responsibilities of the University Ombudsperson is to help both faculty members and students to clarify information about disagreements, the Ombudsperson should be involved early in any grade change appeal. In pursuing a grade change appeal, the student will proceed as follows:

a. The student shall first discuss the matter with the faculty member directly involved in an attempt to resolve the matter.
b. If there is no resolution with the faculty member, the student shall discuss the matter with the chairperson of the faculty member's department, or, if the department chairperson is the person who gave the grade, with the dean of the respective college, who shall attempt to resolve the matter after consideration of the evidence.
c. If there is no resolution through the department chairperson, the student shall discuss the matter with the dean of the respective college, who shall attempt to resolve the matter after consideration of the evidence.

III. Grade Change Appeal Conditions and Procedures

a. If no resolution has been reached with the faculty member through the mediation of the department chairperson or the college dean, and the student wishes to pursue further a grade change appeal, the student shall complete a Grade Appeal Petition. This petition is to be secured from and then submitted to the Office of the Vice President for Academic Affairs. It will be forwarded from that office to the chairperson of the Grade Appeal Board. The Grade Appeal Board will not consider complaints that it deems unsubstantiated after review of the petition.

The petition shall contain:

1. The names of the student and the faculty member involved in the appeal.
2. A list of the names of those contacted in the student's attempts to resolve the issue (See Section II.), and a statement from the appropriate college dean that the conflict remains unresolved.
3. A clear, concise statement describing the grounds for the appeal.
4. A statement of the resolution requested.

b. At the beginning of each academic year there will be established a Grade Appeal Board. This board will consist of five tenured faculty members — one chosen from each of the five colleges of the University in an election to be conducted by the Senate Office — and two non-voting student members to be chosen by SGB. The board will elect its own chairperson, who must be a faculty member, and set its own operating procedures (within the guidelines stated here and in Section IV). A copy of the procedures adopted will be submitted to the University Senate for information. These procedures will be taken to APSCUF meet and discuss for approval. These procedures will remain in force until revised or replaced by a subsequent GAB.

The chairperson will be a voting member of the board. At least four favorable votes must be received for approval of a grade change appeal. This board should be so constituted that at least two faculty members will continue serving from one year to the next.

c. Possible Grade Change Actions. During the preliminary steps (Part II above), a grade change, if made, can be made through regular University channels. The grade assigned is at the discretion of the faculty member who assigned the original grade.

If the faculty member has not agreed to a grade change during the preliminary steps and the student has appealed to the GAB, the only grades to which the GAB can consider approving changes are P (pass) and W (withdraw).

Even after the appeal has reached the GAB, if the faculty member decides that a grade change is in order, the faculty member may effect said change through the usual University channels. Here, too, the grade assigned is determined by the faculty member. At this point, the student may choose to withdraw, or continue, the appeal.

d. The GAB chairperson shall notify the student and the faculty member of the time and location at which the board will consider the appeal. The hearing shall be held at the next regularly scheduled meeting of the GAB unless circumstances warrant otherwise. The GAB chairperson shall:

1. Provide the student and the faculty member with a copy of the GAB's rules and procedures for the hearing process.
2. Notify the faculty member, department chairperson, and dean that each may submit a written statement outlining issues of the case from his/her perspective. All statements and materials must be submitted by all parties involved to the committee chairperson no later than six (6) class days prior to the hearing.
3. Provide GAB members with copies of submitted statements and materials no later than three (3) class days prior to the hearing.

e. The student may withdraw a grade appeal petition at any time by notifying the chairperson of the GAB in writing. The chairperson of the board would then notify all parties involved.

f. At the conclusion of the hearing, the chairperson of the GAB will forward its decision to the Vice President for Academic Affairs. The decision of the committee is final. The Vice President for Academic Affairs will notify all parties involved (student, faculty member, department chairperson, and dean) of the decision. If the decision includes a change of grade, the Vice President for Academic Affairs will direct the Registrar to make the change and so notify the student and faculty member.

IV. Hearing Process

The following procedures should be followed by the Grade Appeal Board:

a. The student and the faculty member have the right to be present during the information gathering portion of any hearing, and both will be given the opportunity to present their cases. The presence of any witnesses supportive of either party shall be the responsibility of the student and/or the faculty member.

b. Following the presentations of all parties involved, the GAB will meet in closed session to decide on the merits of the petition. Decisions will be forwarded within fifteen (15) class days to the Vice President for Academic Affairs.

c. In its deliberations, the GAB may consult with appropriate sources of information and/or expertise if such consultation is deemed necessary for the decision-making process. All such sources, along with the reasons for consultation, shall be recorded in the GAB's final report on the appeal. The faculty member and the student shall each receive a copy of the final report.

d. If circumstances warrant, the GAB chairperson may alter the timeliness contained in this document.

V. Evaluation of Policy

a. At the end of each of the first two academic years following implementation of this policy, the Grade Appeal Board will submit to the president of the Senate and the president of APSCUF-KU a written report of the year's activities.

b. During the third academic year under this policy, the Senate Academic Standards and Policy Committee will recommend either to continue the policy unchanged, to revise it, or to discontinue it. This recommendation is to be approved by both the University Senate and APSCUF.

Original Version Approved by University Senate – February 2, 1995
Original Version Approved by APSCUF Representative Council – May 11, 1995
Revised Version Approved by APSCUF Representative Council – November 16, 1995
Revised Version Presented to Senate with No Concerns Voiced – December 7, 1995
Approved – Meet and Discuss – December 22, 1995
Approved by President – December 22, 1995

UNDERGRADUATE EXCEPTIONS COMMITTEE

The Undergraduate Exceptions Committee is a committee of faculty members. It considers petitions of individual students wishing to have a specific regulation waived for just cause.

GRADUATION REQUIREMENTS

Check the individual program sections for graduation requirements and number of credits needed (no program has fewer than 120 total credits).

Application for Graduation — Students who plan to complete requirements for the degree at the end of a current semester must complete a diploma data form at registration.

Fees

All fees indicated in this catalog are correct at the time of publication. The fees are subject to change without notice. For a complete list of current fees, contact the Bursar's Office.

UNDERGRADUATE FEES FOR ONE ACADEMIC YEAR

	Pennsylvania Residents	*Out-of-State Residents*
Basic Fee	$ 4,810.00	$ 12,026.00
Activity Fee	176.00	176.00
Student Union Fee	314.00	314.00
Health Center Fee	164.00	164.00
Instructional Service Fee	481.00	481.00
Instructional Technology Fee	100.00	150.00
Recreation Center Fee	198.00	198.00
Transportation Service Fee	42.00	42.00
Books & Supplies (Est.)	1,000.00	1,000.00
TOTAL – Commuting Students	$ 7,285.00	$ 14,551.00
Residence Halls	1,975.00	1,975.00
15 Gold Meal Plan	1,980.00	1,980.00
TOTAL – On-campus Students	$ 11,240.00	$ 18,506.00

Annual fees are payable on a semester basis. The Basic Fee listed above covers 12 – 18 credit hours per semester. An additional $200.00 per credit for Pennsylvania residents and $501.00 per credit for out-of-state residents will be charged for enrolling for greater than 18 credits per semester.

Part-time students are charged the Basic Fee, Student Activity Fee, Health Center Fee, Student Union Fee, Instructional Service Fee, Instructional Technology Fee, Recreation Center Fee, and Transportation Service Fee on a pro-rated per credit basis. (See description of each fee for details of cost per credit.)

GRADUATE FEES FOR ONE ACADEMIC YEAR

Tuition and Fees
PA Residents ..... $321/credit hour
Non-Residents ..... $513/credit hour
Student Union Fee ..... $13.08/credit hour
Health Center Fee ..... $6.83/credit hour
Transportation Services ..... $1.75/credit hour
(Above Miscellaneous fees not applicable to courses taken off campus)

Instructional Service Fee
PA Residents ..... $32.10/credit hour
Non-Residents ..... $51.30/credit hour

Total Tuition and Fees
PA Residents ..... $365.56/credit hour
Non-Residents ..... $576.76/credit hour

SUMMER SESSION FEES — Students attending courses in the Summer Sessions will be subject to all fees on a pro-rated basis. For information concerning the Summer Session Fees, please contact the Bursar's Office.

DESCRIPTION OF FEES

Activity Fee — A fee of $146.00 is charged to first-time freshmen enrolled for more than 11 credits. All other full-time students pay $88.00 each semester. Students taking from four to eleven credits are charged at the rate of seven dollars and thirty-four cents ($7.34) per credit hour, with an additional one-time charge of $58.00 for first-time students. The fees are administered under regulations approved by the President of the University and the Student Government Association. Fees collected are used to cover costs of student activities in athletics, lectures, entertainment, student publications, etc.

Application Fee — A $30.00 application processing fee is charged for individuals applying for admission to the institution. This fee is non-refundable and is not applicable to any university fee under any conditions.

Bad Check Fee — Students issuing bad checks in payment of any university fees will be assessed a $25.00 handling fee.

Basic Fee — Each undergraduate full-time student is charged a flat rate of $2,405.00 for Pennsylvania residents and $6,013.00 for out-of-state residents per semester. Part-time students are assessed the Basic Fee at a rate of $200.00 per credit for Pennsylvania residents and $501.00 per credit for out-of-state residents.

Diploma Fee — A $14.00 fee shall be paid by each candidate for a degree to cover the costs of the degree diploma.

Grade Transcript Fee — A $3.00 fee is charged for transcript of records.

Health Center Fee — A Health Center Fee of $82.00 per person per semester is charged to all full-time students. The fee is pro-rated for part-time undergraduate students.

Late Payment Fee — A $25.00 late payment fee will be assessed if your payment is not received by the due dates indicated on the bill.

Instructional Service Fee — A fee equivalent to 10% of total tuition is charged to all undergraduate and graduate students. This fee is used to replace classroom equipment and to purchase library books and change instructional programs.

Instructional Technology Fee — This fee is mandatory for all students. The proceeds from this fee will be used to increase the University's investment in instructional technology. The fee schedule is as follows:
Full time PA Resident Undergraduate and Graduate – $50 per semester
Part time PA Resident Undergraduate and Graduate – $25 per semester
Full time Non–Resident Undergraduate and Graduate – $75 per semester
Part time Non–Resident Undergraduate and Graduate – $38 per semester

Late Registration Fee — A $25.00 late registration fee is charged for student registration after the established registration day.

Dining Services — See page 34.

Connections (Orientation) Fee — A fee of $95.00 for the two-day program and $50.00 for the one-day program shall be paid by each new student to defray expenses of an orientation program which is designed

to facilitate the social, intellectual and educational adjustment to Kutztown University.

Private Music Instruction Fee — 15 lessons of one-half hour each per week at $150.00 per semester in addition to the current applicable credit hour fees.

Processing Fee — A processing fee of $5.00 will be charged all students crediting their records with credit from the College Level Examination Program, advanced placement, or any other credit by examination program.

Recreation Center Fee — A Recreation Center Fee of $99.00 per person per semester is charged to all full-time students. The fee is pro-rated for part-time students.

Residence Hall Fees — There are several options regarding residence hall occupancy. Please see the Housing Contract or the Housing and Residential Services Office website for fee details. Resident students who arrange for housing services during periods of time when the residence halls are closed pay fees on a pro-rated basis.

Student Union Fee — A fee of $141.50 per person per semester is charged to all full-time students. The fee is pro-rated for part-time undergraduate and graduate students. The fee is used to pay for the operations of the Student Union Building.

Transportation Service Fee — A Transportation Service Fee of $15.00 per person per semester is charged to all full-time students. The fee is pro-rated for part-time undergraduate students.

DEPOSITS

Advance Registration Deposit — An advance Registration Deposit of $100.00 must be paid when an applicant receives notice of approval of application for admission. The $100.00 will be credited to Basic Fees upon registration. This fee is non-refundable under any conditions.

Housing Deposit — A housing deposit of $125.00 must be paid when a student is offered housing. Deposits for fall semester will be credited to spring semester housing fees. The housing deposit is refundable if housing is cancelled prior to May 1 (for the fall semester), or November 1 (for the spring semester). The deposit is non-refundable if a student cancels housing, withdraws, transfers, breaks contract, or cancels his/her acceptance after these dates.

Key Charges — A $40.00 fee will be assessed for lost residence hall room keys. A $25.00 fee will be assessed for lost mail box keys.

DELINQUENT ACCOUNTS

Any student with an account in delinquent status, may be restricted from enrolling, graduating, and may not be permitted to receive a transcript of records 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 Attorney General and/or collection agencies for collection and legal action.

WITHDRAWAL AND REFUNDS

WITHDRAWAL FROM INSTITUTION — Students withdrawing from the institution must inform the Registrar's Office in writing. In the event that all courses are dropped via Online Student Services, 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 his or her financial aid eligibility. If withdrawal will result in a refund, an official request should be made in the same correspondence. The official date of withdrawal for the purpose of a refund will be the date the Registrar's Office receives notification. The basis of refund will be as follows for the Fall and Spring semesters:

All Fees except meals (not amounts paid)

Prior to and through the University's first full class day	100%
After the first full class day and through the first week	90%
The second week	80%
The third week	70%
The fourth week	60%
The fifth week	50%
After the fifth week	0%

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

WITHDRAWAL FROM COURSE(S) — Changes to course schedules (dropping and/or adding courses) may not be completed until the official drop and add period or thereafter. Dropping all courses through Online Student Services during this period will be treated as a withdrawal from the Institution. Students are to notify the Registrar's Office in writing to complete the process. The refund policy will be applied appropriately based on the date the Registrar is officially notified. If the withdrawal from a course(s) results in a change in status from full- (between 12 to 18 credits) to part-time (less than 12 credits) or from above full-time (greater than 18 credits) to full-time, a student may qualify for a refund. If withdrawal from a course(s) will result in a refund, an official request should be made with the Bursar's Office. The official date of withdrawal for the purpose of a refund will be the date the Registrar's Office receives notification of the withdrawal. The basis of refund will be as follows for the Fall and Spring semesters:

All Fees except room & meals (not amounts paid)

During the two days of drop/add	100%
First day after drop/add through the first week	90%
The second week	80%
The third week	70%
The fourth week	60%
The fifth week	50%
After the fifth week	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 according to the policies described in the Housing Contract. Students eligible for a refund will have the refundable balance calculated on a percentage basis, as implemented by the Bursar's Office. The refundable balance 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 — Students who wish to cancel their meal plan must inform the Food Contract Office in writing. Withdrawal from the residence halls does not automatically cancel a meal plan. Any refund will be calculated according to the University refund policy.

The official date of withdrawal from the University, used to deter-mine the percentage of refund, will be the date the Registrar's Office is officially notified in writing of the student's intent to withdraw or the date of last use (if later than the official withdrawal date). Part of a week will be charged as a full week.

Financial Aid

STUDENT FINANCIAL AID

The program of student financial aid is based upon the philosophy that no student who is eligible for enrollment should be denied the opportunity for an education solely because of the lack of financial resources. A basic principle of the Student Financial Aid Program is that the primary responsibility for educational costs must be assumed by the family, including the student. The family's resources, which include the student's savings and other assets and computed expected parental contribution, are supplemented by state and federal government educational grants, private or institutional scholarships, student and parent loans and work study programs.

APPLICATION PROCEDURES

All students who wish to be considered for financial aid must complete the Free Application for Federal Student Aid (FAFSA). The application is required for determination of eligibility from the following sources: Federal Pell Grant; Federal Family Educational Loan Programs; Federal Supplemental Educational Opportunity Grant; Federal Perkins loan; Federal Work Study Program and all Institutional aid. The application also contains data elements required by the Pennsylvania Higher Education Assistance Agency for State Grant consideration for Pennsylvania residents. Students are required to reapply annually for federal, state and institutional aid. A student who wishes to apply for a Stafford Student Loan needs to answer "YES" to the question on the FAFSA "Are you interested in student loans?" Due to limited available resources, the University is unable to meet full financial need. This emphasizes the importance of meeting required financial aid deadline dates.

APPLICATION DEADLINES

Freshmen/Transfer Continuing Students — Priority filing deadline date for Fall enrollment is February 15 for federal and institutional aid.

PHEAA State Grant — Deadline date is May I.

FINANCIAL AID ELIGIBILITY REQUIREMENTS

Students are determined eligible for federal Title IV financial aid (Pell Grant, Supplemental Educational Opportunity Grant, Perkins Loan, Work Study, Stafford and PLUS Loans) and NJ Class Loans when meeting the following eligibility criteria:

1. Demonstrate financial need, as defined by the individual programs;
2. Be enrolled or accepted as a degree-seeking student;
3. Be a United States citizen or eligible non-citizen;
4. Submit all required/requested forms to the appropriate agency or financial aid office by the established deadline dates;
5. Not owe a refund on a grant or be in default on a loan;
6. Be registered with Selective Service (males only who have reached their 18th birthday);
7. Maintain satisfactory academic progress as outlined below.

ACADEMIC PROGRESS REQUIREMENTS

All students who apply for financial aid (including loans) must satisfy the academic progress requirement which has two parts.

1. **EARNED NEW CREDITS REQUIREMENT**
   Progress is measured for the academic year based on the student's prior two semesters of enrollment. The total number of NEW credits you are required to earn is determined by enrollment on the last day of Drop/Add. Withdrawing (W, WP, or WF) from a course after Drop/Add may mean that a student will be short the number of credits needed for satisfactory academic progress.

Undergraduate and Teacher Certification

Enrollment on last day Drop/Add	*Need to complete Enrollment for last 2 semesters*	*Enrolled 1 semester only (Fall or Spring)*
12 or more credits/semester	24 credits	12 credits
9 - 11.5 credits per semester	18 credits	9 credits
6 - 8.5 credits per semester	12 credits	6 credits
Less than 6 credits	All credits	All credits

Graduate Students

Enrollment on last day Drop/Add	*Need to complete Enrollment for last 2 semesters*	*Enrolled 1 semester only (Fall or Spring)*
9 or more credits per semester	18 credits	9 credits
6 - 8.5 credits per semester	12 credits	6 credits
Less than 6 credits	All credits	All credits

NOTE: *If a student repeats a course for which he/she received a passing grade, the repeated course will not count towards the number of new credits needed to satisfy the above progress requirement.*

2. **QUALITY POINT AVERAGE (QPA) REQUIREMENT**
   To be eligible for each semester of federal aid, a student entering their fifth semester of attendance must maintain an overall QPA of at least 2.0 in addition to the 24 credits.

FINANCIAL AID PROGRESS

A student may make up credits during the summer at Kutztown or at another institution. However, courses taken elsewhere will NOT affect the QPA and will count towards the credits needed only if they are accepted by Kutztown University. The student is responsible to submit an official academic transcript to the Registrar's Office.

APPEALS TO ACADEMIC PROGRESS POLICY

A student who has been denied federal financial aid for failure to maintain satisfactory academic progress may appeal the denial in writing to:

Financial Aid Services Appeals Committee
Kutztown University
PO Box 730
Kutztown, PA 19530

By federal regulations, the grounds for an appeal are:

(I) the death of a relative of the student,
(2) an illness or injury of the student, or
(3) other extenuating circumstances.

The student will be notified in writing of the Committee's decision. Appeals, when granted, will be for the Fall and Spring of the academic year for which it was approved. In most circumstances, only one (1) appeal will be granted during the course of the student's academic career at Kutztown.

NOTE: *The appeal process does not apply to the PHEAA State Grant program.*

PHEAA STATE GRANT ACADEMIC PROGRESS POLICY

A full-time PHEAA State Grant recipient must earn a minimum of 24 NEW credits for each two semesters of full-time state grant aid received or 24 NEW credits for every four semesters of part-time state grant aid received.

NOTE: *If a student repeats a course for which he/she received a passing grade, the repeated course will not count towards the number of new credits needed to satisfy the above progress requirement. Developmental courses may not be applicable towards progress and/or full-time enrollment.*

STAFFORD STUDENT LOAN PROGRAM

The Stafford, PLUS and NJ Class loans require a student to be enrolled at least half-time. The aforementioned satisfactory academic progress requirements apply to all of the loan programs. The maximum amount of Stafford loan a student may borrow is based on the NUMBER OF CREDITS EARNED at the time the loan is certified. It is not based on the number of years in school.

Level I — Freshman ..... 0 - 29.5 credits earned
Level 2 — Sophomore ..... 30 - 59.5 credits earned
Level 3 — Junior ..... 60 - 89.5 credits earned
Level 4 — Senior ..... 90 or more credits earned
Level 5 — Post Baccalaureate Certification
Level 6 — Graduate Student ..... 0 - 17.5 credits earned
Level 7 — Graduate Student ..... 18 - 35.5 credits
Level 8 — Graduate Student ..... 36 - 53.5 credits
Level 9 — Graduate Student ..... 54 or more credits

NOTE: *By federal regulations, an undergraduate student's federal financial aid may not exceed 150% of his/her degree program length. This equates to a maximum of 6 years or 12 semesters of full-time enrollment.*

FINANCIAL AID PROGRAMS

FEDERAL AID

Kutztown University participates in the following federal financial aid programs.

Federal Pell Grant — Grant assistance awarded to qualified, eligible undergraduate students.

Federal S.E.O.G. — Grant awarded to eligible undergraduate students based on need and Pell grant eligibility.

Federal Perkins Loan — Perkins is a 5% interest loan awarded to students with exceptional financial need. The principal and interest are deferred while enrolled on at least a half-time basis.

Federal Work Study — Federal work study is need based, and allows students to work part-time to earn money for college expenses. Students may work up to 20 hours per week.

Federal Family Education Loan Programs Stafford Loans — (Subsidized and Unsubsidized) is an annual adjusted variable interest rate loan. Subsidized Stafford eligibility is need based, and principal plus interest are deferred while enrolled at least half-time. Unsubsidized Stafford is awarded on the basis of no need and interest is paid by the student on a quarterly basis. Maximum annual loan limits for undergraduate students are:

1st year – $2625; 2nd year - $3500; 3rd and 4th year – $5500. Graduate students – $8,500.

PLUS Loans (Parent Loan for Undergraduate Students) — Annual adjusted variable interest rate. PLUS loans are not need based. Parents may borrow the difference between the cost of education, minus estimated financial aid. Repayment begins 60 days after disbursement of loan proceeds.

STATE AID

American Education Services/Pennsylvania Higher Education Assistance Agency (AES/PHEAA) Grants — AES/PHEAA Grants are provided by the Commonwealth to residents of Pennsylvania. A maximum of eight undergraduate semester awards (full-time) available and 16 semester awards (part-time) for eligible recipients. The Free Application for Federal Student Aid must be submitted no later than May I each year. Awards are re-evaluated each year on the basis of continued need, academic progress and at least half-time enrollment.

PHEAA State Work Study Program — On and off-campus employment is available to students with a career related, public interest job that is high-tech in nature. For additional information, contact the Financial Aid Office, Kutztown University, Kutztown, PA, 19530, (610) 683-4077.

INSTITUTIONAL AID

The following scholarship programs provide non-repayable gift assistance to students who are academically and/or financially qualified. General conditions and eligibility requirements are set forth by the donors or governing body.

Institutional Scholarships

SSHE Board of Governors Scholarship Program — Kutztown University has been authorized by the State System of Higher Education to offer a limited number of Tuition Waivers to academically talented, artistically talented, minority and leadership students. To be eligible, a student must have a combined SAT score of at least 900 or a predicted Quality Point Average (QPA) of 2.5. Recipient must maintain a minimum QPA based on their grade level.

Kutztown University Honors Program Scholarship — Honors Scholarships are awarded to full-time students enrolled in the Honors Program. For further information, please contact: University Honors Program Office, (610) 683-1391.

Tuition Remission for International Students — The University has a limited number of partial and full-time tuition waivers available for international students. For further information, please contact the Office of Academic Services, Kutztown University, (610) 683-4215.

Presidential Scholarships — The University offers 3 scholarships to students with a high QPA and involved in community service activities who are majoring in Pre-law, Chemistry and Education.

KU Foundation Scholarships — The foundation offers scholarships based on donor guidelines which involve a variety of requirements, such as; major, QPA, financial need and grade level.

Departmental Scholarships — The various departments or colleges have scholarship opportunities for students based on guidelines set by the donors offering the scholarships. For additional information, contact the various colleges.

College of Business	(610) 683-4575
College of Education	(610) 683-4253
College of Liberal Arts & Sciences	(610) 683-4305
College of Visual & Performing Arts	(610) 683-4500

Private Scholarships — These scholarships are funded through donors outside the University but are administered by the Financial Aid Office. Below is a partial list of private scholarships:

The Robert Byrd Scholarship
The Clarence Schock Foundation Scholarship
The American Association of University Women
The Altrusa International Scholarship
The Berks County Community Foundation Scholarship
PHEAA Academic Excellence Scholarship
PHEAA SciTech Scholarship

For additional sources of private scholarships visit the Financial Aid website.

Athletic Scholarships — A variety of athletic scholarships are available to new and continuing student athletes at KU. The majority of scholarships are awarded primarily for athletic ability. There are some academic scholarships available to a student athlete with the sole criteria being their academic performance. See partial list below:

Ken Meyer Scholarship — Track
Roger Cocivera Scholarship — Basketball
Stimmel Scholarship — Athletic performance & academics
Walter Risley Scholarship — Baseball
Jennie C. Schwoyer — Women's Basketball
Honda Field Hockey Scholarship — Field hockey

Institutional Employment — The University's Institutional Employment Program provides jobs to undergraduate and graduate students. A variety of positions are available within the University community. Students average 20 hours per week and are usually paid at the standard minimum wage rate. Off-campus job opportunities are available also. Interested students may visit the Financial Aid website by logging into the Kutztown University website – www.kutztown.edu, click on the employment link and then the student employment link.

A FINANCIAL AID CALENDAR

JANUARY

✓ File parents' and students' federal tax return early. Keep copies of every document sent to IRS (1040, all schedules, W-2's, etc.). Financial Aid Office may require these for verification.

FEBRUARY

✓ File the Free Application for Federal Student Aid (FAFSA) by February 15 priority deadline in order to be considered for university scholarships and campus-based aid (Perkins Loan, SEOG Grant, and Federal Work Study) for high need students. If you want a Stafford loan, answer "Yes" to the FAFSA question, "In addition to grants, are you interested in student loans (which you must pay back)?"

NOTE: Do not wait until you have received acceptance of admission to file your FAFSA. If you will not attend your first-choice school, you can easily have your information released to another school.

✓ Upon receipt of the FAFSA, AES/PHEAA will send first-time PA filers a *form* to collect more information for PA state grant consideration.

MARCH

✓ Receive Student Aid Report (SAR) in mail 4-6 weeks after filing the FAFSA form. If you filed online, you can access the SAR immediately after transmitting the electronic FAFSA. Read the SAR thoroughly and make corrections if necessary.

✓ Financial Aid Office begins processing Stafford student loans for freshmen who indicated interest in a loan on the FAFSA form. AES/PHEAA sends student Master Promissory Note to complete after KU pre-certifies loan. (Parent PLUS loan applications can be filed online at www.aessuccess.org or by contacting the loan division of AES/PHEAA at (800) 692-7392.

APRIL

✓ Freshmen financial aid award letters sent.

✓ Freshmen and transfer students receive statement from guaranty agency or lender confirming amount of Stafford loan processed by university.

MAY

✓ PA State Grant filing deadline — May 1. PHEAA sends award notices for PA state grants mid-month.

JUNE

✓ Complete Entrance Interview on-line as potential first-time Stafford loan borrower.

JULY

✓ KU Fall semester bill arrives mid-month.

AUGUST

✓ Fall semester bill due early in month. Financial aid that is cleared appears as credit on the bill.

✓ Return signed bill to Bursar's Office even if you do not owe anything.

✓ Fall semester classes start late in month.

✓ Perkins Loan recipients complete an online entrance interview.

SEPTEMBER

- ✓ Drop/Add occurs the first two days of the semester. To meet the academic progress requirement, a student must earn the number of credits he/she is enrolled in on the last day of Drop/Add. A typical undergraduate student must earn 12 new credits each semester to meet the progress requirement and have a 2.0 QPA upon entering their fifth semester of attendance.

OCTOBER

- ✓ Mid-semester bills sent to students who still owe balance for Fall semester.

NOVEMBER

- ✓ Register for Spring semester courses. Be sure you will satisfy academic progress requirement for number of credits needed to qualify for next year's financial aid.

DECEMBER

- ✓ Spring semester bill arrives early December. Due Mid December.
- ✓ Gather together information to file your taxes and get ready to file next year's financial aid applications!

STUDENT SERVICES AND CAMPUS LIFE

To support student learning and help students to help themselves are the basic purposes of the Division of Student Services and Campus Life. An extensive array of services, programs and resources is provided to help students get the most out of their college experience.

The leadership, coordination and supervision of these services are the responsibility of the Vice President and Associate Vice President for Student Services and Campus Life departments. This Division includes athletics, housing and residential services, health and wellness services, counseling and psychological services, financial aid services, student conduct standards, career and community services, commuter services, public safety and police services, recreational services, student involvement services, off-campus student life, fraternities and sororities, new student programs, student union operations and student government.

CAMPUS RESIDENCE HALLS

Kutztown University offers a multi-faceted residence hall system with a living-learning environment as its foundation. The Housing and Residential Services Office, 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 each residence hall and house. 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 professional live-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 Housing and Residential Services – trained student desk receptionists. Other residence hall features include a multipurpose/recreation room, fully-equipped kitchens, television rooms, study lounges and coin-operated laundry machines. In addition, resident students have access to game tables, VCRs, word processors, computers, board games, and much more. These amenities are provided by individual hall councils.

RESIDENCE HALL TECHNOLOGY

Kutztown University residence hall system is wired for phone, cable TV, and computer. This amenity provides basic cable television service to each student room, allows each student direct access through his/her 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 10 residence halls, two apartment buildings, townhomes, and one residence house provide a variety of living and lifestyle options. Included in these options are both coed and single gender housing. Resident students have the choice of visitation options which range from no visitation to 24-hour visitation on weekends.

HOUSING POLICIES

The Kutztown University residence hall system provides on-campus housing for over 4,100 students. Freshmen may choose, but are not required, to live on campus.

All resident students, except Golden Bear Village 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 will be available to international and exchange students, and student teachers, at an additional cost, during break periods. Please contact Housing and Residential Services concerning break housing policies.

HOUSING PROCESS

For further information, please contact the Housing and Residential Services Office at (610) 683-4027 or write to the Housing and Residential Services, Kutztown University, P.O. Box 730, Kutztown, PA 19530. Website: www.kutztown.edu/admin/harlo.

HOUSING CONTRACT

All students offered on-campus housing must sign a housing contract for the accommodations provided. Signed contracts must be on file with the Housing and Residential Services Office prior to student occupancy of a room.

OFF-CAMPUS HOUSING

The Dean for Student Services and Campus Life 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, licenses, inspects and regulates all rental properties within its jurisdiction. These off-campus locations are periodically inspected by Housing Code Enforcement Officers. The Dean for Student Services and Campus Life at Kutztown University will review leases and rental agreements with prospective off-campus residents upon request.

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.

THE STUDENT GOVERNMENT ASSOCIATION

All students who pay the Student Activity fee are members of the Student Government Association (SGA). From their membership, the SGA selects representatives who form the Student Government Board (SGB). The Board presents student opinion and provides a forum for discussion in matters affecting campus life. In addition, it allocates appropriations from the activity fund to various organizations and programs, recruits students to become involved in the University governance structure, and collaborates with other constituent groups to develop policies that affect student life. Student Government is also affiliated with KU Student Services, Inc.

KU STUDENT SERVICES, INC.

KU Student Services, Inc., is an independent, non-profit organization that provides free and low-cost services to students and student led organizations at Kutztown University. All services are made possible by careful management of the student activity fees and proceeds from operations. KU Student Services, Inc., receives no subsidies of any kind, and contributes the majority of its proceeds to student organizations, cultural and capital improvement projects, and campus athletics.

BOOKSTORE AND AUXILIARY SERVICES

KU Student Bookstore , a division of KU Student Services, Inc., is a one-stop shopping location for textbooks, supplies, KU logo apparel and other student needs. The bookstore is located in the McFarland Student Union Building and may be contacted at (610) 683-4099 or shop online at www.kutztownubookstore.com.

KU Auxiliary Services, a division of KU Student Services, Inc., provides additional services to students that include: laundry facilities, vending machines, Microfridge units, SGA van rentals, graduation regalia, and much more. KU Auxiliary Services is located in the McFarland Student Union Building and may be contacted at (610) 683-4090.

CO-CURRICULAR LIFE

Recognizing the value of co-curricular experiences as part of the general education of students, Kutztown University promotes and encourages student involvement outside the four walls of 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 Services, 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 the interest and are encouraged to take advantage of these experiential opportunities to prepare for post-graduation employment or education. The Office for Student Involvement Services is located in 153 McFarland Student Union and can be reached at (610) 683-1383.

THE EVENTS PROGRAM

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 the academic program.

The Association of Campus Events (ACE) under the auspices of the Office for Student Involvement, consistently produces a wide array of lectures by prominent personalities, concerts by contemporary musicians, performances by professional artists and actors, movies, art exhibitions, excursions, panel discussions and special activities. Such programs are of a diverse nature to permit a maximum number of students to choose those suited to specific interests and needs.

The Association of Campus Events is located in Room 166E of the Student Union Building and can be reached by dialing (610) 683-4097.

UNIVERSITY COUNSELING SERVICES (UCS)

The Office of University Counseling Services provides psychological services to matriculated undergraduate students including individual and group counseling, assessment and referrals, special programs based on student interest and needs, and emergency services. Counseling is offered for personal and academic problems and is available to matriculated students who are currently enrolled at the University. Consultations are also provided for students, faculty and staff. The philosophy of UCS is to help students enhance their effectiveness as individuals, and to overcome problems that interfere with their personal growth and academic performance.

Concerns of any kind may be discussed confidentially. There are no fees for services, and all services are voluntary.

HEALTH & WELLNESS CENTER

The KU Health & Wellness Center is located behind Old Main in the center of campus. Services are available to all enrolled students whether full or part time, graduate or undergraduate. The department is open seven days a week during the regular academic semesters. Reduced hours are available during the summer and break sessions. The facility is staffed by a director, five permanent registered nurses, a health promotion coordinator, eleven substitute nurses, three clerical staff members, and two student employees. Four family practice physicians provide approximately twenty appointment hours each week. The department is accredited by the Accreditation Association for Ambulatory Health Care.

The goals of the department are to provide illness/injury care in an ambulatory care setting and to promote healthy lifestyle behavior. Health promotion activity is included with discharge teaching sheets and educational handout material. Physician appointments are scheduled as needed or requested.

Students are assessed a Health & Wellness Center fee that covers unlimited visits to the department. Services include allergy vaccines, sick or well exams, injury/medical treatment, a self-care station with over-the-counter medications, and health care counseling. Women's health services are provided for an additional fee by a nurse practitioner. Limited laboratory service is available on-site, but any lab work sent to another facility is not included and students will be responsible for payment. Radiology services are not available on-site, and students will be referred to another facility if needed. Emergency transportation is arranged by the staff members, but the fee for this service is the responsibility of the individual student.

A variety of health promoting activity is available with scheduled educational programming. Many health-related sites are linked to our websites.

CAREER SERVICES

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. Because developing one's career potential is an integral part of this process, Kutztown University provides career planning and job search assistance services for its students.

Career planning can best be described as an educational process through which students (1) identify and develop their abilities, aptitudes, and interests; (2) learn the relationship between their capabilities and interests, their university experiences, and professional opportunities outside the University; and (3) prepare for those opportunities.

Placement is the process of researching specific organizations that provide the types of work desired, interviewing for specific jobs through which career or professional interests can be satisfied, and then selecting from the options available the one that best meets students' needs. This part of the process also requires students to develop skills in such areas as writing effective resumes and cover letters, interviewing techniques, and individual job-search strategies to enhance productive interactions with employers.

The goals of this integrated career planning and placement process are for Kutztown University students to think of themselves as educated people with skills and abilities that have value to employers, and to think in terms of functional responsibilities rather than merely linking their major subjects to jobs, to acquire and develop the skills necessary to become self-reliant and informed decision-makers, to prepare for a competitive job market, and to develop their potential of becoming self-reliant managers of their own careers.

The Office of Community and Career Services offers the following resources and services to help students prepare for professional opportunities after graduation.

Career resources — Among the resources available in the Career Library are books and articles on career planning, current information on career opportunities, graduate school information, job-search directories, Internet access to information about thousands of employers, and career-related subjects.

Career programs and workshops — The staff conducts a variety of seminars and presentations in collaboration with academic departments, professional societies, Residence Hall living groups, and other interested campus organizations. Workshops on resume writing, interviewing techniques, graduate school, internships and job-search strategies are also offered.

Individual consultation — Students may meet with members of the staff to discuss their career options and goals, individual job-search strategies, effective interviewing, and related interests.

On-campus interviewing — Staff members work with business, industrial, government, and educational representatives who interview on campus each year.

Internships and summer jobs — Summer and part-time job listings and internship opportunities are available for all students interested in gaining career-related experience.

Computer-assisted career planning program — This service assists students to identify values, skills, interests, learn about and locate related career opportunities, and effectively plan an academic approach to reach their career goal.

Testing service — As a service to students preparing for teaching opportunities and/or graduate school, the Office of Community and Career Services provides registration and preparation materials for tests such as PRAXIS, GRE, GMAT, and MCAT.

Candidate referral system — To further assist graduating students in their job search, Career Services supports a computerized database for referring candidates for employment opportunities. Students interested in full-time opportunities after graduation and/or internship opportunities are encouraged to participate in the College Central Network.

"Career testing" — Helping students identify their skills, abilities, and interests is key to a successful college experience. To help students in this area, Career Services administers a variety of assessment instruments including: The Major/Minor Finder, The Self-Directed Search (SDS) and the Myers-Briggs Type Indicator (MBTI).

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, soccer, basketball, wrestling, swimming, tennis, indoor and outdoor track and field, and baseball.

Women compete in tennis, field hockey, volleyball, softball, cross-country, swimming, soccer, indoor and outdoor track and field, golf, cheer team, and basketball at the inter-collegiate level. We also sponsor a competitive cheer team.

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.

PUBLIC SAFETY AND POLICE SERVICES

The Department of Public Safety and Police Services has as its overall function the protection of student and university property, traffic and parking control and enforcement, and the maintenance of order and discipline among students, employees, and visitors. In addition to these services, the Department of Public Safety has tools available for persons locked out of vehicles and an engraver to mark personal property for easy identification.

In addition, Public Safety and Police Services conducts many service programs, such as CPR, Rape Aggression Defense System and Crime Prevention Programs.

VETERANS' AFFAIRS

The specific needs of the campus sub-group consisting of students who are veterans of military service are the responsibility of the Office of Veterans' Affairs, a unit of the Registrar's Office. The Veterans' Affairs Office assists veterans with the paperwork required to insure that appropriate benefits are received on time, and provides advisement and referral services for veterans on a variety of special concerns and personal problems.

AFFIRMATIVE ACTION POLICY STATEMENT

Kutztown University is committed to a policy of non-discrimination

in compliance with Executive Order 11246, Title IX of the Education Amendment, Title VI and VII of the 1964 Civil Rights Act, and all other

applicable Federal and State statutes. As stated in the University's Affirmative Action Plan, "Kutztown University is committed to equal employment and educational opportunities through elimination of any discrimination that may exist on the basis of race, religion, color, national origin, ancestry, sex, age, disability, or sexual orientation." In addition to the Affirmative Action Plan, the University has a policy covering sexual harassment.

SOCIAL EQUITY

Kutztown University is committed to non-discrimination in compliance with the Civil Rights Act of 1964, Title VI and VII, Title IX of the Educational Amendment, the Civil Rights Act of 1991, to affirmative action as provided in Executive Order #11246 and other applicable federal and state laws and regulations. The University will not tolerate discrimination in employment or educational opportunities which may exist on the basis of race, religion, color, national origin, ancestry, sex, age, veteran status or disability. Kutztown University recognizes the importance of eliminating discrimination based on sexual orientation and other differences, and is committed to providing an equitable environment for all of its students and employees. The University has a policy and procedure for complaints of discrimination and sexual harassment.

DISCRIMINATION/HARASSMENT COMPLAINT PROCESS

Individuals who feel that they have been discriminated against on the basis of race, religion, color, national origin, ancestry, sex, age, veteran status, disability or sexual orientation or who feel they have been sexually harassed should discuss the matter with the University's Director of Social Equity, 02 Old Main.

DINING SERVICES

Dining Services offers a variety of meal plans that are categorized by meal type. They include Gold, Maroon, and block. In addition to meal plans, off-campus students may select a declining balance Flex Only Plan that can be used at any dining location.

The Gold Meal Plan (19, 15, 10, or 5 meals per week) offers the most flexibility with our dining program because it can be used for all meal periods, one meal per meal period, at all locations on campus. Its features include: cash allowance for every meal at **all** dining locations. Included with this plan is a $150 flex fund. This plan also includes 5 guest meals for use in the South Dining Hall Café only.

The Maroon meal Plan (19, 15, or 10 meals per week) offers access to any meal period Monday through Sunday. These meals may **only** be used in the South Dining Hall at the Café, and two other designated areas in the Food Court which include a take-out bagged meal or at the Pizza Concept. This plan also includes 5 guest meals for use in the South Dining Hall Café only.

The Block Meal Plans (175 or 75 meals per semester) offer flexibility with our dining program because it can be used for all meal periods (one meal per meal period), at all locations on campus. Its features include a cash allowance for every meal at **all** dining locations and a $150 flex fund. This plan also includes 5 guest meals for use in the South Dining Hall Café only.

Students with dietary medical restrictions or any questions should consult with the Food Contract Office at (610) 683-1314.

McFARLAND STUDENT UNION

MISSION STATEMENT:

The McFarland Student Union (MSU) strives to be the cornerstone of the campus community. MSU shall provide the facilities, amenities and services to the University community to encourage an open atmosphere that enhances student life and the academic experience. The staff of MSU shall foster an interactive environment with students, staff, and faculty through formal and informal programs that promote social development and educational exchange.

LOWER LEVEL:
The key features of the lower level are the Bookstore, a 240-seat auditorium, television lounge, game room and a collection of student organizations and student service departments. As always, the Bookstore features the products and services to meet student's daily needs. The auditorium provides an intimate setting for mid-size to large programs and combines comfort with high quality audio-visual support. The space is perfect for lectures, movies, and meetings. The lower level is also accentuated by the presence of Kutztown University Student Services Incorporated (KUSSI), Office for Student Involvement, Student Government Association (SGA), Association of Campus Events (ACE) and a student media center featuring WRKU, Keystone Newspaper, Keystonia Yearbook and Essence Magazine.

MAIN LEVEL:
The main level of MSU offers many recreational and service venues as well as special event rooms and student service offices. Every day is filled with activity and action on this level. The main level features: the Cub Café, the Bear's Den Coffeehouse Lounge and Taylor & Byrne's Café, Cyber Lounge, Fireside Lounge, Pennsylvania State Employees Credit Union (PSECU) "E" Banking Center, Computer Lab, Volunteer Center, Information Center, Multipurpose Ballroom, and two dining/meeting rooms. The main level also features several key student life and service offices such as the office of the Associate Vice President and Dean for Student Services and Campus Life, New Student Programs, and McFarland Student Union and Commuter Services.

UPPER LEVEL:
The upper level of MSU features six meeting rooms and a commuter lounge. Four of these meeting rooms are located directly above the Cub Café and are small to mid-size meeting and breakout rooms. Down the hall from this suite of meeting rooms is a large conference room and a small adjoining conference room. The upper level commuter lounge looks out to a two story open-air lobby and features conveniences for commuter students such as a ride board, mini-kitchen and a phone.

MCFARLAND SUDENT UNION AND COMMUTER SERVICES:
The Student Union and Commuter Services serves as the central operating force for MSU. The Office provides a number of services and programs through the Information Center including a Box Office and general University information services. The Student Union and Commuter Services Office handles the coordination of all events in MSU and offers event planning and support services for campus groups and departments planning important functions. Additionally, the Student Union and Commuter Services Office provides on campus commuter and adult students specialized services. The Office sponsors a variety of programs including Commuter Tuesdays, Commuter Appreciation Day, Commuter

Stress Free Zone, Coffee breaks and much, much more. For more information about the McFarland Student Union and Commuter Services consult our website at **www.kutztown.edu/sub.**

During the fall and spring semesters, open hours are:
Monday - Friday from 7:00 AM - 12:00 AM;
Saturdays from 9:00 AM to 10:00 PM; and
Sundays from 11:00 PM to 12:00 AM.

During the winter and summer academic session, operating hours are:
Monday - Thursday from 7:30 AM to 6:00 PM; and
Fridays from 7:30 AM to 4:00 or 4:30 PM.

IMPORTANT PHONE NUMBERS INCLUDE:
Information Center (610-683-4018)
Operations Office (610-683-4087)

FOR MORE INFORMATION, VISIT: http://www.kutztown.edu/admin/SUB OR CONTACT THE OFFICE AT: msu@kutztown.edu.

MULTICULTURAL SERVICES

The mission of this department is to establish an environment and support system for all students with a focus on students from underrepresented populations. Services provided enhance students' efforts to reach their academic goals. Services include leadership development, academic monitoring, student organization advisement, and the implementation of cultural awareness programs. For more information, call 610-683-4807 or visit the John B. White Multicultural Center located on south campus.

EDUCATIONAL PROGRAMS

Kutztown University offers the following undergraduate curricula to prepare students for careers:

COLLEGE OF BUSINESS

MISSION STATEMENT:
The Kutztown University College of Business is a regional teaching and learning institution. We offer a challenging educational opportunity to undergraduate and graduate students of a wide variety of backgrounds in a supportive environment. We instill in our graduates a commitment to lifelong learning and prepare them for professional success.

Studies in the College of Business are intended to prepare a student for a career upon graduation and/or for admission to graduate school. Five major programs of study lead to the Bachelor of Science in Business Administration degree and are described below:

Accounting — A student in the Accounting major at Kutztown University engages in intensive professional study in financial accounting, cost accounting, tax accounting, and auditing. Students are prepared to pursue careers as certified public accountants, tax accountants, managerial accountants, accounting managers.

Finance — The Bachelor of Science in Business Administration with a major in Finance requires students to complete advanced study in financial management, investments, investment portfolio management, advanced business statistics, and financial markets. Students are prepared to pursue careers as financial managers, chartered financial analysts, certified financial planners and various other financial careers in corporations, financial institutions and the financial services industry.

International Business — The International Business major program provides students with the opportunity and flexibility to study business in an international context. Because the students are required to complete the same Business Core Requirements as all College of Business Majors, they are first and foremost functional business persons. In addition to the core requirements, International Business majors are required to complete study in specified "International" courses. The program allows the students the flexibility of electing courses which will enhance their understanding of various cultures. International Business students are required to complete a minimum of one year's study of a foreign language, and have the opportunity to expand their study by electing a foreign language minor. Electing a foreign language minor will not only enhance the students' ability and employability, but may lead to placements in foreign internships. Students are encouraged to complete at least one semester at an international study site. The College of Business has international exchange programs in many locations including England, Holland, Germany, Italy, Hungary, and Denmark.

Management — Students pursuing a Bachelor of Science degree in Business Administration with a major in Management are required to complete advanced study in Organization Behavior, Business and Social Environment, and Business Strategy and Policy. They have the opportunity to select from a wide offering of management electives, including Small Business Management, Human Resource Management, Management of Labor Relations, Supply Chain, Design, Planning, and Operation, and International Management. The degree program also gives students the opportunity to select other business electives to broaden their professional education. Management graduates are prepared to assume leadership roles in a variety of careers and organizations.

Marketing — Students who select the Bachelor of Science degree in Business Administration with a major in Marketing are required to complete advanced study in Marketing Management and Marketing Research. They have the opportunity to select from a variety of marketing electives, including Personal Selling, Advertising Management, Consumer Behavior, Advertising Campaigns, Sales Management, Retail Management, Service Marketing, and International Marketing. The marketing degree program also allows students the opportunity to elect additional College of Business courses. Marketing students are qualified to pursue careers in retail store management, buying, merchandising, marketing research, selling, advertising, promotions management, international marketing and other marketing-related positions.

COLLEGE OF EDUCATION

Elementary Education — This program leads to a Bachelor of Science in Education Degree and prepares students for teaching in Kindergarten through Grade 6. Dual certification programs of study are available in elementary/early childhood education and library science/elementary education. Dual certifications that include elementary education are found in the majors of special education and library science.

Field experiences begin early in the program and include observing and teaching at different grade levels in a wide range of urban, suburban, and rural educational settings and organizational structures.

Graduates are currently teaching in child care centers, preschool programs, nursery schools, primary schools, elementary schools, and middle schools. Other graduates have continued their preparation at the graduate level to become elementary supervisors, principals, superintendents, college professors, and officials in the state department of education.

Continuous review and revision of the elementary curriculum is made to maintain high standards and prepare graduates to meet the educational challenges of the future.

Secondary Education — General Education, Academic Specialization and Professional Studies are blended to prepare students for careers as secondary education teachers. The program leads to a Bachelor of Science in Education and Pennsylvania teacher certification which qualifies the graduate to teach in a middle, junior high or senior high school. (Students seeking foreign language certification will be certified K-12.) Secondary Education majors may concentrate in one or a combination of the following areas of certification: Biology, Chemistry, Earth and Space Science, General Science, Physics, Mathematics, French, Spanish, Communication (Speech and Theatre), English, Citizenship (Geography, History, Civics and Government), and Social Sciences (Anthropology, Psychology, Sociology).

Special Education — This curriculum leads to the degree of Bachelor of Science in Education and prepares teacher candidates to teach students with mentally and/or physically handicapping conditions or visual impairments - kindergarten through grade 12. A combination of courses in General Education, Professional Education, Elementary Education and Special Education lead to a dual certification in both Elementary and Special Education. **It should be noted that students must be eligible for dual certification in order to graduate.**

Another Bachelor of Science degree within Special Education is Speech-Language Pathology, which prepares students to work with individuals who exhibit communication disorders such as speech, language, voice, or hearing disorders. The program includes courses in General Education, Professional Education and Speech-Language Pathology. Certification is not granted by the Pennsylvania Department of Education at the undergraduate level; therefore students graduating from this program will need to pursue a Master's Degree in order to obtain certification. The Kutztown University Speech-Language Pathology program prepares students to be successful at the graduate level.

Library Science — This curriculum leads to a Bachelor of Science degree in Education (with a major in Library Science) and certification as a school librarian, K through 12. The program prepares teacher candidates for the expanding field of Library Science, including skills ranging from the development, organization, and administration of a multimedia collection to the use of microcomputers in libraries and the retrieval of information from on-line systems.

Library Science is a fairly unique major in that the student is able to obtain a dual certification in Elementary Education.

Additionally, the Department provides a sequence of courses for Liberal Arts students, enabling them to qualify for certification as a provisional public librarian in Pennsylvania.

Instructional Technology — Providing an array of professional courses to the University community, the Department of Instructional Technology is a significant contributor to the professional growth of new and established educators. The department provides undergraduate students with required and elective courses in instructional technology.

Additionally, a graduate program with state certification in instructional technology is available.

Health, Physical Education, and Dance — The Department of Health, Physical Education, and Dance functions in several capacities within the University. The Health and Physical Education course offerings are an integral part of the general education program requirements. In addition, the department offers a Health and Physical Education methods course for the College of Education, a coaching education concentration for Elementary Education majors, sport management courses, as well as graduate courses in Health, Physical Education and Dance.

English as a Second Language (ESL) — Kutztown University has been approved by the Pennsylvania Department of Education to be a provider for the Program Specialist Certificate – English as a Second Language (ESL).

Program requirements include 12 credits of class work in the following courses:

ENG 334: Introduction to English Linguistics – 3 s.h.
EDU/MLS 433: Cultural Awareness/Sensitivity for ESL/ELL Program Specialists – 3 s.h.
EDU/MLS 435: English Language Acquisition and Awareness for ELL/ESL Populations – 3 s.h.

Students must have a valid PA Instructional I or II Certificate to complete the program. All courses must be passed with a grade of C or higher. A 15-hour fieldwork experience must be completed.

COLLEGE OF LIBERAL ARTS AND SCIENCES

Studies in the Liberal Arts and Sciences are designed to enhance a student's knowledge in many fields of learning and to prepare a student for a career upon graduation or for admission to graduate or professional school. Twenty programs lead to the Bachelor of Arts degree and forty plus lead to the Bachelor of Science degree. All programs provide for general education in the Humanities, the Social Sciences, the Natural Sciences and Mathematics, as well as for specialized study in the major discipline.

COLLEGE OF VISUAL AND PERFORMING ARTS

The College of Visual and Performing Arts provides opportunity for study and career preparation in the visual arts, music, speech communication, and theatre. There are three programs leading to a Bachelor of Arts degree (music, speech communication, and theatre), three programs leading to a Bachelor of Fine Arts degree (communication design, crafts, and studio art) and two programs leading to a Bachelor of Science degree (art education, music education) designed for the preparation of art and music teachers.

COLLEGE OF GRADUATE STUDIES

Master of Arts Degree
Counseling Psychology
Agency Counseling
Marital and Family Therapy
English

Master of Science Degree
Computer Science
Electronic Media

Master of Education Degree
Art Education
Elementary Education
Elementary Education with Extension of Certification
Instructional Technology
Reading Specialist
Elementary School Counseling
Secondary School Counseling
Student Affairs in Higher Education
Secondary Education
Biology
Curriculum and Instruction
English
Mathematics
Social Studies

Master of Business Administration

Master of Library Science

Master of Public Administration

Master of Social Work

Inquiries regarding graduate programs and admissions may be addressed to: College of Graduate Studies, Kutztown University, Kutztown, Pennsylvania 19530. e-mail: graduate@kutztown.edu; telephone: (610) 683-4200; fax: (610) 683-1393.

MAJOR PROGRAMS (UNDERGRADUATE)

Bachelor of Arts
Anthropology
English (General, Professional Writing)
French
General Studies
Geography (General, Applied, Environmental)
History (with Paralegal)
Music
PA German Studies
Philosophy
Political Science (with Paralegal)
Sociology
Spanish
Speech Communication
Theatre

Bachelor of Fine Arts
Communication Design (Illustration, Graphic Design, Advertising, Interactive Design)
Crafts (Woodworking, Fine Metals, Fibers, Ceramics)
Studio Art (Drawing, Painting, Photography, Printmaking, Sculpture)

Bachelor of Science
Art Education
Biochemistry
Biology (Cell Bio/Microbiology, Ecology, Organismal, Pre-med & Pre-dental)
Chemistry (Biochemistry)
Computer Science (Information Technology, Software Development, Five-Year Plan for BS/MS)
Criminal Justice
Electronic Media
Environmental Science (Biology, Chemistry, Geology)
General Studies
Geology
Marine Science (Biology, Chemistry, Geology, Physics)
Mathematics
Medical Technology
Nursing (RNs Only)
Physics
Pre-Engineering (with Penn State)
Psychology (General, Industrial/Organizational, Clinical/Counseling, with Paralegal)
Public Administration (with Paralegal)

Bachelor of Science in Business Administration
Accounting
Finance
General Business
International Business
Management
Marketing

Bachelor of Science in Education
Elementary Education (with concentrations in):
- *Coaching Education*
- *English*
- *French*
- *Instructional Technology*
- *Mathematics*
- *Psychology*
- *Reading*
- *Science*
- *Social Studies*
- *Spanish*
- *Urban Education*

Elementary Education/Early Childhood (dual certification concentration)
Secondary Education (with certification in):
- *Biology*
- *Chemistry*
- *Citizenship (Geography, History, Civics, Government)*
- *Communications*
- *Earth Space Science (Astronomy, Geology, Marine Science)*
- *English*
- *French*
- *General Science (Biology, Chemistry, Earth Space, Physics)*
- *German*
- *Mathematics*
- *Physics*
- *Physics & Mathematics*
- *Social Sciences (Anthropology, Psychology, Sociology)*
- *Spanish*

Special Education:
- *Mentally/Physically Handicapped (dual certification)*
- *Visual Impairment (dual certification)*
- *Speech/Language Pathology*

Library Science/Elementary Education

Bachelor of Social Work

MINOR PROGRAMS

Minor programs of study are essentially a "half major" which may or may not complement the student's major discipline. A minor program consists of a minimum of 18 semester hours of study. 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 Q.P.A. of 2.00 in their minor course work. Minor programs of study are available to all undergraduate students in the following disciplines: Advertising, Anthropology, Biochemistry, Biology, Chemistry, Computer & Information Science, Crafts, Criminal Justice, Economics, French, Geography, Geology, History, International Studies, Literature, Marine Science, Mathematics, Multicultural Studies, Music, Musical Theatre, PA German Studies, Philosophy, Physics, Political Science, Psychology, Public Administration, Public Relations, Social Work, Sociology, Spanish, Speech Communication, Electronic Media, Theatre, Women's Studies, and Professional Writing.

College of Business

The **COLLEGE OF BUSINESS** offers five distinct major programs — Accounting, Finance, International Business, Management, and Marketing — leading to the **Bachelor of Science in Business Administration (B.S.B.A.)** degree and minor programs of study in Advertising and Economics.

The distinct major programs in **Accounting, Finance, Marketing,** and **Management** have the following degree requirements:

A.	**General Education**			**57 s.h.**
B.	**Major Program**			**63 s.h.**
	1. Core Courses	(21 s.h.)		
	2. Common Courses	(12 s.h.)		
	3. Major Program	(30 s.h.)	TOTAL	120 s.h.

The distinct major in **International Business** has the following degree requirements:

A.	**General Education**			**60 s.h.**
B.	**Major Program**			**60 s.h.**
	1. Core Courses	(21 s.h.)		
	2. Common Courses	(12 s.h.)		
	3. Major Program	(27 s.h.)	TOTAL	120 s.h.

NOTE: *The International Business program requires a minimum of one year study of a modern language.*

General Graduation Requirements for the College of Business

To graduate with a degree in Business Administration, a student must:

1. Successfully complete at least 120 semester hours as specified by degree;
2. Satisfy all requirements of General Education;
3. Satisfy all course requirements in the major;
4. Attain a cumulative quality point average no lower than 2.00 in all courses completed at Kutztown University;
5. Attain a quality point average no lower than 2.00 in all courses completed in the student's major.

Specific Regulations for the College of Business

1. Freshman course selection: During the freshman year, Business/Core students may only register for ECO 011 Principles of Macroeconomics, ECO 012 Principles of Microeconomics, BUS 171 Business Computer Applications and BUS 001 Freshman Seminar.
2. Selection of the distinct major: Before a student is permitted to select a distinct major in Business Administration or to register for an upper division course in Business Administration (300 level), the student is required to:
   a. Complete the following Business/Core courses with a minimum QPA of 2.00:
      ACC 121: Financial Accounting
      ACC 122: Managerial Accounting
      BUS 120: Principles of Business Statistics
      BUS 131: Business Law I
      ECO 011: Principles of Macroeconomics
      ECO 012: Principles of Microeconomics
      BUS 171: Business Information Systems
   b. Achieve a minimum QPA of 2.00 overall in all courses completed at the University.
3. **Transfer policy:** After admission to Kutztown University, Business Administration students may not complete Business/Core requirements or other Business Administration major program requirements at other educational institutions.

GENERAL EDUCATION REQUIREMENTS

FOR ALL B.S.B.A. DEGREES (57 s.h.)

1. **Basic Requirements: 9 s.h.**
   a. Composition – 3 s.h.
   b. Oral Communication – 3 s.h. *
   c. Health – 2/3 s.h.
   d. Physical Education – 1 s.h.
2. **Humanities: 12 s.h.**
   a. Literature – 3 s.h.
   b. Music, Speech, or Theatre – 3 s.h.
   c. Art History or Philosophy – 3 s.h.
   d. Elective in any discipline listed under Section II – 3 s.h.
3. **Social Sciences: 12 s.h.**
   a. History or Political Science – 3 s.h.
   b. Anthropology, Psychology, or Sociology – 3 s.h.
   c. ECO or GEG (Non-Lab) – 3 s.h. **
   d. Elective in any Social Sciences discipline listed in this group – 3 s.h. **
4. **Natural Sciences and Mathematics: 12 s.h.**
   a. Mathematics – MAT 121 or higher
      MAT – 3 s.h.
      (MAT 122 or higher calculus course for finance majors)
   b. Biological Science with Lab – 3 s.h.
   c. Physical Science with Lab or
      GEG 204/205, 324/325 – 3 s.h.
   d. Elective in any Natural Science **
      or Mathematics (except MAT 021) – 3 s.h.
5. **Free Electives: 12 s.h.**
   For the remainder of the total semester hours required under General Education, courses may be selected from any one of —or any combination of — General Education, Business, or other professional college courses.

* SPE 010 fulfills the Oral Communication requirement.

** In the Geography discipline, GEG 040, 204/205, 322, 324/325, 326 and 328/329 may be taken ONLY as Natural Science courses.

MAJOR PROGRAM REQUIREMENTS FOR ALL B.S.B.A. DEGREES (63 s.h.)

All B.S.B.A. students must complete the FOUR components of the major program as listed below.

1. **BUSINESS "CORE" COURSES: 21 s.h.**
   The following courses are required:
   ECO 011: Principles of Macroeconomics
   ECO 012: Principles of Microeconomics
   ACC 121: Financial Accounting
   ACC 122: Managerial Accounting *
   BUS 120: Business Statistics
   BUS 131: Business Law I
   BUS 171: Business Information Systems

2. **BUSINESS "COMMON" COURSES: 12 s.h.**
The following courses are required:
MKT 310: Principles of Marketing **
MGM 300: Principles of Management **
FIN 350: Financial Management **
XXX 380: Senior Seminar in Distinct Major **

* BUS 171 is a prerequisite for ACC 122.
** Business/Core courses must be completed with a 2.0 QPA and the student must earn a 2.0 QPA in all courses before scheduling 300-level courses.

3. **INFORMATION ON THE DISTINCT MAJORS**

a. **ACCOUNTING: 30 s.h.**
(Effective Spring 2001)

A student in the distinct major of Accounting engages in intensive professional study in financial accounting, cost accounting, tax accounting, and auditing. Students are prepared to pursue careers as certified public accountants, tax accountants, managerial accountants, accounting managers, etc.

Required Courses: 21 s.h.
Take **EACH** of the following courses:
ACC 305: Cost Accounting
ACC 312: Accounting Information Systems
ACC 317: Tax Accounting I
ACC 321: Intermediate Accounting I
ACC 322: Intermediate Accounting II
ACC 323: Advanced Accounting
ACC 330: Auditing Practice & Standards

Restricted Electives: 6 s.h.
Select **TWO** of the following courses:
ACC 306:Advanced Cost Accounting
ACC 318:Tax Accounting II
ACC 325: Not-for-Profit Accounting
BUS 132:Business Law II

Business Electives: 3 s.h.
Select **ONE** course with an ACC, BUS, ECO, FIN, MGM, or MKT prefix.

b. **FINANCE: 30 s.h.**
(Effective Spring 2001)

A student in the distinct Finance major completes rigorous study in investments, financial markets and institutions, financial management, multi-national financial management, and portfolio management. Students may choose from a variety of restricted electives based on their career goals. The curriculum emphasizes use of computers including spreadsheets.

Required Courses: 21 s.h.
Take **EACH** of the following courses:
BUS 320: Advanced Business Statistics **OR**
ECO 345: Econometrics
FIN 340: Investments
FIN 351: Personal Financial Planning
FIN 355: Investment Portfolio Management
FIN 360: Financial Markets and Institutions
FIN 363: Intermediate Financial Management
FIN 365: Multinational Financial Management

Restricted Electives: 6 s.h.
Select any TWO of the following or any course with FIN prefix: ACC 305, 306, 312, 313, 317, 318, 321, 322, 323, 325; BUS 132, 310, 331, 353; ECO 205, 210, 310, 315, 320, 335, 340, 350, 360; MGM 315, 327, 338, 351, 377; MKT 312, 330, 332 and 360.

Business Elective: 3 s.h.
Select ONE course with an ACC, BUS, ECO, FIN, MGM, or MKT prefix.

c. **INTERNATIONAL BUSINESS: 27 s.h.**
(Effective Spring 2001)

The distinct major in International Business provides students with the opportunity and flexibility to study business in an international context. Because International Business students are required to complete the same Core and Common courses as are all College of Business students, they are first and foremost functional business persons. In addition to the Core and Common courses requirements, these students are required to complete study in specified "International" courses. This program allows the students the flexibility of electing courses which will enhance their understanding of various cultures.

International Business students are required to complete a minimum of one year's study of a modern language, and have the opportunity to expand their study by electing a modern language minor. Electing a modern language minor will not only enhance the students' ability and employability, but may lead to placements in foreign internships.

Required Courses: 15 s.h.
Take **EACH** of the following courses:
ECO 360: International Trade & Finance
FIN 365: Multinational Financial Management
INT 010: Introduction to International Studies
MGM 352: International Management
MKT 370: International Marketing

Business Electives: 12 s.h.
Select courses with ACC, BUS, ECO, FIN, MGM, or MKT prefixes.

d. **MANAGEMENT: 30 s.h.**
(Effective Spring 2001)

Students pursuing a distinct major in Management are required to complete advanced study in Organization Behavior, Business and Social Environment, and Business Strategy and Policy. They have the opportunity to select electives from a variety of management areas, including: Small Business Management, Human Resource Management, Logistics and Supply Chain Management, and International Management. The degree program also gives students the opportunity to select other business electives to broaden their professional education. Management graduates are prepared to assume leadership roles in a variety of careers and organizations.

Required: 9 s.h.
Take **EACH** of the following courses:
MGM 350: Organizational Behavior in Management
MGM 360: Business and Social Environment

MGM 377: Business Strategy and Policy

Restricted Electives: 9 s.h.
Select **THREE** courses from the following:
MGM 315: Management Science
MGM 318: Women in Management
MGM 327: Small Business Management
MGM 328: Entrepreneurship: From Concept to Launch
MGM 335: Human Resource Management
MGM 336: Human Resource Management & Organizational Strategy
MGM 337: Management of Labor Relations
MGM 338: Management of Compensation & Benefits
MGM 339: Management of Employee Relations
MGM 340: Management of Staffing, Training & Development
MGM 341: Labor Relations & the Law
MGM 344: Research Methods
MGM 345: Organizational Theory & Design
MGM 351: Operations Management
MGM 352: International Management
MGM 356: Management of Energy
MGM 361: Principles of Business Logistics
MGM 362: Supply Chain Design, Planning and Operation
MGM 371: Selected Topics in Management
MGM 463: Transportation Management
BUS 353: Management Information Systems
BUS 379: Independent Study

Business Electives: 12 s.h.
Select **FOUR** courses with ACC, BUS, ECO, FIN, MGM, or MKT prefixes.

e. **MARKETING: 30 s.h.**
(Effective Spring 2001)

Students who select the distinct major in Marketing are required to complete advanced study in Marketing Management and Marketing Research. They have the opportunity to select from a wide variety of marketing electives, including: Personal Selling, Advertising Management, Consumer Behavior, Advertising Campaigns, Sales Management, Retail Management, Service Marketing, International Marketing, etc. The marketing degree program also allows students the opportunity to elect additional College of Business courses. Marketing students are qualified to pursue careers in retail store management, buying, merchandising, marketing research, selling, advertising, promotions management, international marketing, and other marketing-related positions.

Required Courses: 6 s.h.
Take **EACH** of the following courses:
MKT 320: Marketing Management
MKT 360: Marketing Research

Restricted Electives: 15 s.h.
Select **ONE** of the following courses:
MKT 330: Personal Selling
MKT 350: Advertising Management

Select **FOUR** of the following courses:
MKT 312: Consumer Behavior
MKT 315: Marketing Ethics in Society
MKT 325: Sports Marketing
MKT 330: Personal Selling
MKT 332: Sales Management
MKT 340: Retail Management
MKT 347: New Product Management
MKT 350: Advertising Management
MKT 351: Media Concepts and Planning
MKT 355: Service Marketing
MKT 357: Advertising Campaigns
MKT 370: International Marketing
MKT 371: Selected Topics in Marketing
MKT 375: Export Marketing
MKT 411: Marketing Communications Management
MKT 415: Problem Solving in Marketing
BUS 379: Independent Study

Business Electives: 9 s.h.
Select **THREE** courses with ACC, BUS, ECO, FIN, MGM, or MKT prefixes.

MINOR PROGRAMS

ADVERTISING MINOR: (18 s.h.)
(Effective Fall 1996)

The Department of Marketing also offers a minor in Advertising. Those students who have a career desire to work in advertising or integrated marketing communications can elect the following 18 s.h. minor program of study. Please note that this minor is not available to B.S.B.A. Business Administration/Marketing majors.

Required Courses: 18 s.h.
MKT 310: Principles of Marketing
MKT 312: Consumer Behavior
MKT 350: Advertising Management
MKT 351: Media Concepts & Planning
MKT 357: Advertising Campaigns
MKT 411: Marketing Communications Management

ECONOMICS MINOR: (18 s.h.)
(Effective Fall 2000)

The Department of Economics also offers a minor in Economics. This 18 s.h. program of study is designed for students who wish to study the field of Economics in order to supplement their major programs.

Required Courses: 12 s.h.
ECO 011: Principles of Macroeconomics
ECO 012: Principles of Microeconomics
ECO 205: Intermediate Microeconomics
ECO 210: Intermediate Macroeconomics

Elective Courses: 6 s.h.
Select two additional courses with an ECO prefix.

College of Education

The **COLLEGE OF EDUCATION** at Kutztown University has a long, respectable tradition of teacher preparation. Since 1866, the College has been preparing professional personnel of the highest quality to serve the nation's public schools. The College has achieved the standard of excellence in teacher preparation with national accreditation by the National Council for Accreditation in Teacher Education (NCATE). The College keeps informed about national trends, issues and research through its memberships in the American Association of Colleges for Teacher Education (AACTE) and the Teacher Education Council of State Colleges and Universities (TECSCU). Through membership in the Pennsylvania Association of Colleges for Teacher Education (PACTE) and its partnership with the Pennsylvania Department of Education (PDE), the College of Education helps to shape state policy regarding teacher education in the Commonwealth of Pennsylvania.

COLLEGE OF EDUCATION MISSION

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 a 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 education environment. Our graduates will be committed to professional development throughout their careers, thus supporting the College of Education model of lifelong learning.

COLLEGE OF EDUCATION CONCEPTUAL FRAMEWORK

The College of Education has adopted as its conceptual framework the model of Teacher as Lifelong Learner. The College views the teacher as an active agent in a dynamic and diverse educational setting. The teacher is an educator, intellectual, and artist, who is continually experiencing the pre-active, interactive, and post-active phases of teaching. The teacher is always in the process of learning, continually refining, and extending professional skills. Thus, the teacher as lifelong learner emerges.

In order to become a lifelong learner, teacher candidates develop and demonstrate specific knowledge, skills, and dispositions. Those are:

- General Education
- Content Specialization
- Professional Methodology
- Integration of Discipline
- Communication
- Interpersonal Skills
- Cultural Awareness and Acceptance
- Critical Thinking
- Organization and Classroom Management
- Scholarly Inquiry
- Reflective Wisdom
- Integration of Technology

By completing the teacher education program at Kutztown University, candidates are able to begin the lifelong process moving from a novice teacher to an experienced teacher to a teacher with advanced capabilities. These three levels of learning—novice, experienced, and advanced—allow a candidate to progress in a dynamic, rapidly changing profession.

ADMISSION TO CANDIDACY

Because teaching is a profession, it requires selective admission procedures and rigorous course of study. Being admitted to the major at Kutztown University, does **not** mean that the student will be admitted to teacher candidacy. If a student is not formally admitted to candidacy, he/she will not be able to continue in the major and will not be allowed to take professional education courses.

To be admitted to candidacy the student must meet the following requirements, **prior to applying for admission:**

- Have a 3.0 Q.P.A
- Have a C or better in 3 hours of composition, 3 hours of literature, 3 hours of speech, and 6 hours of mathematics
- Passed the basic skills assessment of Praxis I in reading, writing, mathematics and have official scores on file at Kutztown University

Students should apply for candidacy during the semester they will obtain 48 credits. Applications can be obtained and returned to the major department. Students who have not met **all** requirements will not be admitted to candidacy and cannot continue in the major.

Once admitted to candidacy, the teacher candidate will be able to complete the educational program provided he/she meets the additional requirements of a clear child abuse and criminal background check, satisfactory academic progress, satisfactory field experiences in professional semester and student teaching, and passed PRAXIS II.

OBTAINING TEACHER CERTIFICATION

To serve in a professional position in the public schools of Pennsylvania, a candidate must obtain a professional certificate issued by the Pennsylvania Department of Education. The Instructional I (Provisional) Certificate may be issued to an applicant who is a United States citizen, has completed an approved teacher education curriculum, has been granted the baccalaureate degree by an accredited college or university, and has passed both the Praxis I and Praxis II examinations. Applicants who meet these criteria must submit a PDE 338G application along with a fee. Once obtained, the Instructional I Certificate is valid for six years.

EIGHT SEMESTER PLAN

The following plans have been developed as a guide for COE students and candidates. This is a suggested plan of courses. All students and candidates need to plan their schedules with advisors and consult appropriate major grid sheets.

GENERAL EDUCATION PROGRAM FOR EDUCATION MAJORS: (48 s.h.)

1. **Basic Requirements in General Education: 12 s.h.**
   a. ENG 023, 230, 025: English Composition – 3 s.h.
   b. SPE 010: Fundamentals of Speech – 3 s.h.
   c. PSY 011: General Psychology – 3 s.h.
   d. HPD 110, 115, or 116: Health – 2/3 s.h.
   e. HPD 011 - 095: Physical Education or Dance – 1 s.h.
2. **Humanities: 12 s.h.**
   a. Literature (required) – 3 s.h.
   b. Literature, Modern Language, or Philosophy – 3 s.h.
   c. Art History, Music, Speech, Theatre – 3 s.h.
   d. Elective in any Humanities area above – 3 s.h.
3. **Social Sciences: 12 s.h.**
   a. HIS 025 or 026 – 3 s.h.
   b. PSY 110: Child Psychology – 3 s.h.
   c. Geography or Economics – 3 s.h.
   d. PSY 140: Educational Psychology – 3 s.h.
4. **Natural Sciences and Mathematics: 12 s.h.**
   a. Mathematics – 3 s.h.
   b. Biological Science (Lab.) – 3 s.h.
   c. Physical Science or Earth Sciences * (Lab.) – 3 s.h.
   d. Mathematics – 3 s.h.

ELEMENTARY EDUCATION (120 s.h. min.)

The Elementary Education Curriculum consists of four categories of courses.

CATEGORY I:

General Education Courses – 48 s.h.

1. **Basic Requirements in General Education: 12 s.h.**
   a. ENG 023, 025: English Composition – 3 s.h.
   b. SPE 010: Fundamentals of Speech – 3 s.h.
   c. PSY 011: General Psychology – 3 s.h.
   d. HPD 110, 115, 116: Health – 2/3 s.h.
   e. HPD 011 - 095: Physical Education or Dance – 1 s.h.
2. **Humanities: 12 s.h.**
   a. Literature – 3 s.h.
   b. Literature, Modern Language or Philosophy – 3 s.h.
   c. Art History, Music, Speech or Theatre – 3 s.h.
   d. Elective in any Humanities area above – 3 s.h.
3. **Social Sciences: 12 s.h.**
   a. HIS 025 or 026: American History – 3 s.h.
   b. PSY 110: Child Psychology – 3 s.h.
   c. Geography or Economics – 3 s.h.
   d. PSY 140: Educational Psychology – 3 s.h.
4. **Natural Sciences and Mathematics: 12 s.h.**
   a. MAT 021: Fundamentals of Math – 3 s.h. (Prerequisite for MAT 022 and ELU 308)
   b. Biological Science (Lab.) – 3 s.h. (Prerequisite to ELU 205)
   c. Physical Science or Earth Sciences * (Lab.) – 3 s.h. (Prerequisite to ELU 205)
   d. MAT 022: Fundamentals of Math II – 3 s.h. (Prerequisite to ELU 308)

CATEGORY II:

Professional Education Courses – 26 s.h.

	EDU 100:	Perspectives on American Education	3
#	ELU 390:	Student Teaching/Practicum I	7
#	ELU 391:	Student Teaching/Practicum II	7
#+	ITC 125:	Microcomputers In Ed. – Prereq. ITC 331	3
#+	ITC 331:	Instructional Media & Tech.	3
	SPU 100:	Introduction to Special Education	3

CATEGORY III:

Courses in Elementary Specialization * – 36 s.h.

1. **Required: 15 s.h.**

#+	ELU 201:	Fundamentals of Reading Instruction I	3
#+	ELU 205:	Science for Elementary Schools	3
#+	ELU 207:	Health & Physical Education for Elementary Schools	3
#	ELU 321:	Assessment of Children: Birth through the Middle Years	3
	ELU 366:	Arts and the Curriculum	3
			15

2. **Professional Semester: 18 s.h.**
   These courses must be taken as a block during the junior year so that the teacher candidates can participate in the extended field experience component of the program. The field experience consists of a seven-week supervised assignment working with children in an elementary school. These courses require a grade of "C" or better.

#+	ELU 301:	Fundamentals of Reading Instruction II	3
#+	ELU 302:	Children's Literature	3
#+	ELU 303:	Language Arts	3
#+	ELU 304:	Social Studies for Elementary Schools	3
#+	ELU 306:	Integrating Principles of Learning & Teaching	3
#+	ELU 308:	Mathematics for Elementary Schools	3
			18

\# These courses require a grade of "C" or better.
\+ These courses required prior to student teaching.

CATEGORY IV:

Areas of Concentration – 18 s.h.

The following information records the specific requirements for the eleven different concentrations within the Elementary Education program.

EIGHT SEMESTER PLAN

First Semester	s.h.
EDU 015: COE: First Year Seminar	1
ENG 023: 025 (Honors) College Composition	3
SPE 010: Oral Communication	3
HPD/DANPhysical Education	1
HPD 110, 115, 116 or 120 Health	2/3
MAT 021: Fundamentals of Math I	3
	13/14

Second Semester	
PSY 011: General Psychology	3
ENG LIT Any English Literature Course	3
MAT 022: Fundamentals of Mathematics II	3
BIO 010-011: Biological Science with Laboratory	3
EDU 100: Perspectives on American Education	3
	15

Third Semester	
ENG, SPA, FRE, PHI Literature, Modern Language, Philosophy	3
ARH, MUS, SPE, THE Art, Music, Speech or Theatre	3
PSY 110: Child Psychology	3
HIS 025 or 026 American History	3
___ ___ Concentration Course	3
	15

Fourth Semester (Apply for Candidacy During This Semester)	
ARH, MUS, SPE, THE, ENG, SPA, FRE, PHI Humanities Elective	3
GEG or ECO Geography or Economics	3

AST, CHM, GEL, MAR, PHY Physical Science/Lab	3
ITC 125: Microcomputers in Education	3
SPU 100: Introduction to Special Education	3
	15

Must Be Formally Admitted to Candidacy to Complete the Following:

Fifth Semester	s.h.
PSY 140: Educational Psychology	3
ELU 201: Fundamentals of Reading Instruction I	3
ITC 331: Media & Technology in Education	3
___ ___ Concentration Course	3
___ ___ Concentration Course	3
	15

Sixth Semester	
Professional Semester (Must pass clearance to be admitted.)	
ELU 301: Fund. of Reading Instruction II	3
ELU 302: Children's Literature	3
ELU 303: Language Arts	3
ELU 304: Social Studies for Elementary School	3
ELU 306: Integrating Principles of Learning & Teaching	3
ELU 308: Mathematics for Elementary Schools	3
	18

Seventh Semester	
ELU 205: Science for Elementary/Middle Schools	3
ELU 207: Health & P.E. for Elementary Schools	3
ELU 321: Assessment of Children	3
ELU 366: Arts and Curriculum	3
___ ___ Concentration Course	3
	15

Eighth Semester	
Student Teaching/Practicum (Must pass clearance to be admitted.)	
ELU 390: Student Teaching/Practicum I	7
ELU 391: Student Teaching/Practicum II	7
	14

CONCENTRATIONS OFFERED BY THE ELEMENTARY EDUCATION DEPARTMENT

EARLY CHILDHOOD EDUCATION
Concentration: 18 s.h.

Required: 12 s.h.

ELU 130: Introduction to Early Childhood Education	3
ELU 233: The Integrated Curriculum in Early Childhood Education	3
ELU 236: The Arts in the Early Childhood Education Cuirriculum	3
ELU 334: Instructional Strategies in Early Childhood Education	3
Total	**12**

Electives: 6 s.h.
Select from the following courses:

ELU 338: Internship in Early Childhood Education	1 – 3
ELU 343: Diversity and the Young Child	3
ELU 370: Selected Topics in Elementary Education *	1 – 3
ELU 412: Education and Care of Infants and Toddlers	3
ELU 415: Building Partnerships for Educating Young Children: Families, Schools and Communities	3
ELU 420: Administering of Programs for Young Children	1 – 3
PED 210: Physical Education Activities for Early Childhood Education	3
Total	**6**

*Selected Topics in Elementary Education which may be repeated for up to 6 s.h. provided the same topics are not repeated.

(Courses numbered 400 - 499 are graduate courses open to undergraduate juniors and seniors who have either a grade point average of at least 2.90 or permission of the instructor.)

NOTES: It is recommended that no more than two early childhood education courses be taken at one time because of the extensive field experience requirements in the program.

Students who complete this concentration will receive two certificates: one in Elementary Education and one in Early Childhood Education.

ELU 130 will substitute for PSY 110 in general education and ELU 236 will substitute for ELU 366 in specialization if student completes this concentration. If this concentration is changed, then PSY 110 and ELU 366 must be completed.

READING
Concentration: 18 s.h.

Required: 18 s.h.

ELU 201: Fundamentals of Reading Instruction I	3
ELU 251: Teaching Reading to the Culturally Different Child	3
ELU 301: Fundamentals of Reading Instruction I	3
ELU 302: Children's Literature	3
ELU 351: Diagnostic and Remedial Reading (offered ONLY in Fall)	3
ELU 452: Current Trends in Reading Instruction	3
Total	**18**

NOTE: ELU 201 is a prerequisite for all courses in the concentration, and ELU 301 is a prerequisite for ELU 351.

ADDITIONAL CONCENTRATIONS OFFERED BY OTHER COLLEGES FOR ELEMENTARY EDUCATION MAJORS

COACHING EDUCATION
Concentration: 18 s.h.

Required Courses: 15 s.h. (*6 s.h. cross-listed)

* HPD 115:	Health Maintenance through Nutrition and Exercise, **OR**
HPT 110:	Personal Health Management & HPD 0XX
* ELU 207:	Health and Physical Ed. for Elementary Schools
PED 150:	Meth., Tech. & Problems of Athletic Coaching
PED 219:	Psychological Foundation of Athletic Coaching
PED 340:	Internship - Sports Techniques & Skill Analysis

Electives in Concentration: 3 s.h.
Course(s) in the elective category may be selected from HEA HPD or PED prefixes or with approval from the Health, Physical Education and Dance department Chairpersons approval (for example, SOC 205 Sociology of Sport or MKT 325 Sports Marketing).

ENGLISH
Concentration: 18 s.h.

Required: 9 s.h.

ENG 023, 025:	English Composition	3
ENG 010:	Introduction to Literature	3
ENG 220:	Introduction to English Linguistics	3

Electives: 9 s.h.
Select **THREE** of the following courses:

ENG 101:	World Literature	3
ENG 102:	World Literature II	3

ENG 103:	American Literature I	3
ENG 104:	American Literature II	3
ENG 113:	British Literature I	3
ENG 114:	British Literature II	3
Total		**18**

MODERN LANGUAGES
Concentration: 18 s.h.

The concentration in Modern Languages requires completion of eighteen semester hours of college level credit in one of the following languages: French, Spanish.

INSTRUCTIONAL TECHNOLOGY
Concentration: 18 s.h.

Required: 12 s.h.

ITC 125:	Microcomputers in Education	3
ITC 331:	Media and Technology in Education	3
ITC 340:	Instructional Technology Integration	3
ITC 347:	Telecomputing and the Internet in Education	3

Electives: 6 s.h.
Select **TWO** of the following courses:

ITC 435:	Distance Learning and the K-12 Educator	3
ITC 446:	Development of Multi-Image Productions	3
ITC 370:	Selected Topics	3
ITC 380:	Independent Study	3
Total		**18**

MATHEMATICS
Concentration: 18 s.h.

Required: 12 s.h.

MAT 021:	Fundamentals of Mathematics I	3
MAT 022:	Fundamentals of Mathematics II	3
MAT 040:	Geometry	3
MAT 140:	Applied Statistical Methods	3

Electives: 6 s.h.
Select **ONE** of the following courses (Elective A):

MAT 017:	Introduction to Mathematics	3
MAT 030:	Survey of Mathematics	3
MAT 105:	College Algebra	3
MAT 115:	Precalculus Mathematics*	3

Any Math course above 115 **AND**
Select **ONE** of the following courses (Elective B):

MAT 106:	Trigonometry	3
MAT 121:	Mathematics for Business & Information Science	3
MAT 122:	Calculus for Business & Information Science	3
MAT 171:	Calculus I	3

Any Math course above 171

NOTE 1: If MAT 115 is selected under Elective A, then MAT 106 cannot be selected under Elective B, since there is an overlap in content.

NOTE 2: MAT 122 and MAT 171 cannot both be selected under Elective A and Elective B, since there is an overlap in content.

NOTE 3: A particular math course can only be counted in one of the three categories above.

PSYCHOLOGY
Concentration: 18 s.h.

Required: 9 s.h.

PSY 110:	Child Psychology	3
PSY 140:	Educational Psychology	3
PSY 160:	Human Exceptionalities	3

Electives: 9 s.h.
Select from the following courses:

PSY 120:	Adolescent Psychology	3
PSY 125:	Life Span Development	3
PSY 200:	Statistics for the Social and Behavioral Sciences	3
PSY 202:	Psychology of Personality	3
PSY 215:	Psychology of Prejudice	3
PSY 217:	Psychology and the Law	3
PSY 220:	Industrial/Organizational Psychology	3
PSY 240:	Social Psychology	3
PSY 245:	Conflict and Conflict Resolution	3
PSY 250:	Abnormal Psychology	3
PSY 265:	Human Sexual Behavior	3
PSY/ANT 290:	Culture and Personality	3
PSY 310:	Prin. of Psychological Measurement (PREREQ. PSY 200)	3
PSY 311:	Psychology of Learning, Motivation, and Emotion	3
PSY 312:	Sensation & Perception	3
PSY 325:	Physiological Psychology	3
PSY 333:	Psychology of Leadership in Organizations	3
PSY 340:	Cognitive Processes	3
Total		**18**

* **NOTE:** A maximum of 6 credits from PSY 110, 120, and 125 may be taken toward graduation credit.

SCIENCE
Concentration: 18 s.h.

Required: 9 s.h.

BIO 010/011:	Biological Science (Lab)	3
BIO 130:	Man and the Environment	3

Select **ONE** of the following courses:

GEL 020/021:	Introduction to Geology (Lab) **OR**	3
AST 020/021:	Introduction to Astronomy (Lab) **OR**	3
CHM 020/021:	Introduction to Chemistry (Lab) **OR**	3
PHY 020/021:	Introduction to Physics (Lab)	3

Electives: 9 s.h.

BIO 140:	Biology and Society	3
BIO 150/151:	Natural History	3
BIO 210/211:	Ornithology	3
BIO 222/223:	Environmental Biology **OR**	3
ENV 100/101:	Introduction to Environmental Science	3
BIO 226/227:	Marine Biology **OR**	3
MAR 110/111:	Introduction to Oceanography	3
GEL 020/021:	Introduction to Geology (Lab) **OR**	3
AST 020/021:	Introduction to Astronomy (Lab) **OR**	3
CHM 020/021:	Introduction to Chemistry (Lab) **OR**	3
PHY 020/021:	Introduction to Physics (Lab)	3

SOCIAL STUDIES
Concentration: 18 s.h.

Required: 12 s.h.

1.	a.	HIS 025:	History of the United States **OR**	3
	b.	HIS 026:	History of the United States	

2.	a.	HIS 120:	History of Pennsylvania **OR**	3
	b.	HIS 150:	Minorities in American History	
3.	a.	GEG 010:	Elementary Physical Geography **OR**	3
	b.	GEG 020:	Elements of Cultural Geography	
4.	a.	POL 010:	American Government **OR**	3
	b.	POL 020:	International Relations **OR**	
	c.	POL 050:	State and Local Government	

Electives in Concentration: 6 s.h.

ANT 226:	Anthropology and Education	3
ECO 011:	Principles of Macro-Economics	3
POL 230:	American Political Parties	3
HIS 014:	History of Civilization A **OR**	3
HIS 015:	History of Civilization B	
HIS 120:	History of Pennsylvania	3
HIS 150:	Minorities in American History	3
HIS 241:	History of Women in America	3
Total		**18**

Select any courses with the following prefixes: ANT, ECO, GEG, HIS, POL, and SOC. (These courses must be taken at the 100 level or above.)

URBAN EDUCATION Concentration: 18 s.h.

Required: 12 s.h.

ELU 243:	Teaching in the Urban Elementary and Middle Schools	3
ELU 251:	Teaching the Culturally Different Child to Read	3
ANT 226:	Anthropology and Education	3
SWK 100:	Introduction to Social Work	3

Electives: 6 s.h.

a. Choose One: (**Must** be double counted in Category A 3. c.)

GEG 310:	Urban Geography	3
GEG 311:	Geography of Poverty in the United States	3

b. Choose One: (**Must** be double counted in Category A 2. a. or c.)

ENG 234:	Ethnic American Literature	3
ENG 236:	Black American Literature: Poetry/Drama	3
ENG 237:	Black America Literature: Novel	3
ENG 247:	Modern Latin American Literature in Translation	3
Total		**18**

NOTE: Additional Requirements:

1. One semester of community service in an urban setting.
2. Professional semester in urban setting.
3. At least one student teaching placement in an urban school (Students may choose two placements)

SPECIAL EDUCATION

VISUAL IMPAIRMENT WITH DUAL CERTIFICATION IN ELEMENTARY EDUCATION (120 s.h.)

A. **General Education:** **54 s.h.**

B. **Major Program:** **72 s.h.**

Professional Education: 27 s.h.

1. **Required Courses: 13 s.h.** +
   ITC 321 #, EDU 015, 100 #, PSY 110 *, 140 *
2. **Student Teaching/Practicum: 14 s.h. #**
   ELU 390/391, SPU 390/391
3. **Free Electives**

C. **Specialization: 51 s.h.**

1. **Required Courses: 12 s.h. #**
   ELU 366, 201, 205, 207
2. **Professional Semester: 18 s.h. # +**
   ELU 301, 302, 303, 304, 306, 308
3. **Visually Impaired Specialization: 21 s.h. # +**
   SPU 100*, 110, 200, 202, 204, 300, 302

* Some courses in Professional Education/Specialization can be used to fulfill General Education requirement.
+ Courses required prior to student teaching.
# These courses require a grade of "C" or better.

NOTES: Professional Semester includes a half semester field experience and should be scheduled as a block prior to student teaching.

Because of the scarcity of appropriate vision programs in the Kutztown University's vicinity, students selecting this program should anticipate and plan for the possibility of being assigned to distant locations for the student teaching semester.

EIGHT SEMESTER PLAN

First Semester		s.h.
* # EDU 100:	Perspectives on American Education	3
+ # ENG 023:	English Composition I	3
+ # MAT 021:	Fundamentals of Mathematics I	3
PSY 011:	General Psychology 3	
* # SPU 100:	Introduction to Special Education	3
		15

Second Semester		
EDU 015:	College of Education: First Year Seminar	1
+ # ____ ____	Humanities Elective (Literature)	3
+ # MAT 022:	Fundamentals of Mathematics II	3
+ # SPE 010:	Fundamentals of Speech	3
* # SPU 110:	Early Intervention for Students with Visual Impairments, including Deafblindness	3
		13

Third Semester		
# ____ ____	Biological Science/Lab	3
* # ELU 201:	Fund. of Reading Instruction I	3
* PSY 140:	Educational Psychology	3
* # SPU 200:	Read., Writ., & Teach. Literary Braille	3
* # SPU 202:	Orientation and Mobility for Teachers of Students with Visual Impairment, including Deafblindness	3
		15

Fourth Semester		
(Apply for Candidacy During This Semester)		
____ ____	Physical Science/Earth Space Science/Lab	3
* # ELU 207:	Health and Physical Education for Elementary Schools	3
* PSY 110:	Child Psychology	3
* # SPU 204:	Anatomy of Eye and Related Assess.	3
* # SPU 300:	Reading, Writing, and Teaching Literary Braille, Nemeth Mathematics Code, and Other Braille Codes	3
		15

Must Be Formally Admitted to Candidacy to Complete the Following:

Fifth Semester		
* # ELU 205:	Science for the Elementary and Middle Schools	3
* # ELU 366:	Integrating the Arts in the Elementary Classroom	3
HPD 110:	Personal Health Management	2

HPD 011-095:	Physical Education/Dance	1
* # ITC 321:	Instructional Technology in Education	3
* # SPU 302:	Adapting Materials and Methods of Instruction and Evaluation for Teaching Students with Visual Impairments	3
		15

Sixth Semester

The Professional Semester Must be Scheduled as a Block

* # ELU 301	Fundamentals of Reading Instruction II	3
* # ELU 302	Children's Literature	3
* # ELU 303	Language Arts	3
* # ELU 304	Social Studies for Elementary Schools	3
* # ELU 306	Integrating Principles of Learning and Teaching: Classroom Applications	3
* # ELU 308	Mathematics for Elementary Schools	3
		18

Seventh/Eighth Semester

____ ____	Humanities Elective (Literature, Modern Language, Philosophy)	3
____ ____	Humanities Elective (Art History, Music, Speech, Theatre)	
____ ____	Humanities Elective	
____ ____	Social Science Elective (Geography, Economics)	3
HIS 025/026	History of the United States	3
		15

Seventh/Eighth Semester

#ELU 390:	Student Teaching and Practicum (Elementary I)	7
OR		
# ELU 391:	Student Teaching and Practicum (Elementary II)	
# SPU 390:	Student Teaching and Practicum: Visual	
OR	Impairment I	7
# SPU 391:	Student Teaching and Practicum: Visual Impairment II	
		14

Students whose last name begins with A - K will schedule their student teaching semester during the fall semester of their senior year. Students whose last name begins with L - Z will schedule their student teaching semester during the spring semester of their senior year.

+ Courses must be completed with a "C" grade or better by 48 credits.
# Courses must be completed with a "C" grade or better.
* Courses must be completed prior to student teaching.

MENTALLY AND PHYSICALLY HANDICAPPED WITH DUAL CERTIFICATION IN ELEMENTARY EDUCATION (120 s.h.)

A. **General Education:** **54 s.h.**
B. **Major Program:** **72 s.h.**
   Professional Education: 27 s.h.
   1. **Required Courses: 13 s.h. +**
      ITC 321 #, EDU 015, 100 #, PSY 110 *, 140 *
   2. **Student Teaching/Practicum: 14 s.h. #**
      ELU 390/391, SPU 392/393
   3. **Free Electives**
C. **Specialization: 51 s.h.**
   1. **Required Courses: 12 s.h. #**
      ELU 366, 201, 205, 207
   2. **Professional Semester: 18 s.h. # +**
      ELU 301, 302, 303, 304, 306, 308
   3. **Mentally/Physically Handicapped Specialization: 21 s.h.**
      a. **Required Courses: 12 s.h.**
         SPU 100*, 220, 222, 320
      b. **SPU Electives: 9 s.h.**
         SPU 322, 326, 328, 330

* Some courses in Professional Education/Specialization can be used to fulfill General Education requirement.
+ Courses required prior to student teaching.
# These courses require a grade of "C" or better.

NOTE: Professional Semester includes a half semester field experience and should be scheduled as a block prior to student teaching.

EIGHT SEMESTER PLAN

First Semester		**s.h.**
EDU 015:	College of Education: First Year Seminar	1
+ # ENG 023:	English Composition I	3
____ ____	Humanities Elective (Art History, Music, Speech or Theatre)	3
+ # MAT 021:	Fundamentals of Mathematics I	3
* # SPU 100:	Introduction to Special Education	3
		13

Second Semester

* # EDU 100:	Perspectives on American Education	3
+ # ____ ____	Humanities Elective (Literature)	3
+ # MAT 022:	Fundamentals of Mathematics II	3
PSY 011:	General Psychology	3
+ # SPE 010:	Fundamentals of Speech	3
		15

Third Semester

____ ____	Biological Science/Lab	3
* # ELU 201:	Fundamentals of Reading Instruction I	3
HPD 110:	Personal Health Management	2
HPD 011-095:	Physical Education/Dance	1
* PSY 110:	Child Psychology	3
* # SPU 318:	Special Class Methods	3
		15

Fourth Semester

(Apply for Candidacy During This Semester)

____ ____	Physical Sci./ Earth Space Sci./Lab	3
* # ELU 207:	Health and Physical Education for Elementary Schools	3
HIS 025/HIS 026:	History of the United States	3
* PSY 140:	Educational Psychology	3
* # SPU 316:	Reading and Other Language Arts for Exceptional Children	3
		15

Must Be Formally Admitted to Candidacy to Complete the Following:

Fifth/Sixth Semester

* # ELU 205:	Science for the Elementary and Middle Schools	3
* # ELU 366:	Integrating the Arts into the Elementary Classroom	3
* # ITC 321:	Instructional Technology in Education	3
* # SPU 320:	Curriculum Development for the Mentally and Physically Handicapped	3
* # SPU 322, 326, 328 or 330	Special Education Elective	3
		15

Fifth/Sixth Semester

The Professional Semester must be scheduled as a block

* # ELU 301:	Fundamentals of Reading Instruction II	3
* # ELU 302:	Children's Literature	3
* # ELU 303:	Language Arts	3
* # ELU 304:	Social Studies for Elementary Schools	3

* # ELU 306:	Integrating Principles of Learning and Teaching: Classroom Applications	3
* # ELU 308:	Mathematics for Elementary Schools	3
		18

Students whose last name begins with A - K will schedule their professional semester block during the fall semester of their junior year. Students whose last name begins with L - Z will schedule their professional semester block during the spring semester of their junior year.

Seventh/Eighth Semester

____ ____	Humanities Elective (Literature, Modern Language, Philosophy)	3
____ ____	Humanities Elective	3
____ ____	Social Science Elective (Geography, Economics)	3
# SPU 322, 326, 328 or 330	Special Education Elective	3
# SPU 322, 326, 328 or 330	Special Education Elective	3
		15

Seventh/Eighth Semester

# ELU 390:	Student Teaching and Practicum (Elementary I)	7
OR		
# ELU 391:	Student Teaching and Practicum (Elementary II)	
# SPU 392:	Student Teaching and Practicum: Mentally/	
OR	Physically Handicapped I	7
# SPU 393:	Student Teaching and Practicum: Mentally/ Physically Handicapped II	
		14

Students whose last name begins with A - K will schedule their student teaching semester during the fall semester of their senior year. Students whose last name begins with L - Z will schedule their student teaching semester during the spring semester of their senior year.

+ Courses must be completed with a "C" grade or better by 48 credits.

 # Courses must be completed with a "C" grade or better.

** Courses must be completed prior to student teaching.*

SPEECH-LANGUAGE PATHOLOGY (120 s.h.)

Completion of the Speech-Language Pathology program leads to a B.S. in Education. Certification is issued from the Pennsylvania Department of Education upon completion of a Master's Degree.

A. **General Education:** **51 s.h.**

B. **Major Program:** **72 s.h.**

Professional Education: 30 s.h.

1. **Required Courses: 16 s.h. +**
   EDU 100 #, 015, ELU 201 #, PSY 110 *, 120, SPU 100 #
2. **Student Teaching/Practicum : 14 s.h. #**
   SPU 394/395
3. **Free Electives**

C. **Specialization: 42 s.h.**

1. **Required Courses: 42 s.h. #**
   SPU 040 +, 140 +, 142 +, 144 +, 240 +, 242 +, 244 +, SPU 246 +, 247 +, 248 +, 340, 342 +, 350 +, 352 +

* Some courses in Professional Education/Specialization can be used to fulfill General Education requirement.

+ Courses required prior to student teaching.

These courses require a grade of "C" or better.

NOTE: SLP majors must successfully complete two Professional Semesters (Clinic I and II) before Student Teaching.

EIGHT SEMESTER PLAN

The B.S. degree in Speech-Language Pathology (SLP) does not lead to certification. A master's degree in SLP is required to become certified in Pennsylvania. Kutztown University does not offer the master's degree.

First Semester

		s.h.
* # EDU 100:	Perspectives on American Education	3
+ # ____ ____	Natural Science and Math Elective (Math)	3
+ # ENG 023:	English Composition I	3
PSY 011:	General Psychology	3
* # SPU 040:	Survey of Speech Problems	3
		15

Second Semester

EDU 015:	COE: First Year Seminar	1
+ # ____ ____	Humanities Elective (Literature)	3
+ # ____ ____	Natural Science and Math Elective (Math)	3
+ # SPE 010:	Fundamentals of Speech	3
* # SPU 140:	Phonetics	3
* # SPU 142:	Normal Speech and Language Development	3
		16

Third Semester

____ ____	Biological Science/Lab	3
* PSY 110:	Child Psychology	3
* # SPU 100:	Introduction to Special Education	3
* # SPU 144:	Anatomy and Physiology of the Speech Mechanism	3
* # SPU 240:	Language Disorders	3
		15

Fourth Semester

(Apply for Candidacy During This Semester)

* # ELU 201:	Fundamentals of Reading Instruction	3
* PSY 120:	Adolescent Psychology	3
* # SPU 242:	Hearing Problems and Audiometry	3
* # SPU 246:	Articulation and Stuttering	3
* # SPU 247:	Augmentative and Alternative Communication	3
		15

Must Be Formally Admitted to Candidacy to Complete the Following:

Fifth Semester

		s.h.
HPD 110:	Personal Health Management	2
HPD 011-095:	Physical Education/Dance	1
* # SPU 244:	Aural Rehabilitation	3
* # SPU 248:	Organic Disorders	3
* # SPU 342:	Clinical Methods and Materials	3
* # SPU 350:	Clinic and Practicum I	3
		15

Sixth Semester

____ ____	General Education Elective	3
____ ____	Humanities Elective (Art History, Music, Speech, Theatre)	3
____ ____	Physical Science/ Earth Space Science/Lab	3
# SPU 340:	Psychology of Speech and Hearing	3
* # SPU 352:	Clinic and Advanced Practicum II	3
		15

Seventh/Eighth Semester

____ ____	Humanities Elective (Literature, Modern Language, Philosophy)	3
____ ____	Humanities Elective	3
____ ____	Social Science Elective (Geography, Economics)	3
____ ____	Social Science Elective	3
HIS 025/026:	History of the United States	3
		15

Seventh/Eighth Semester

# SPU 394:	Student Teaching and Practicum: Speech-Language Pathology I	7
# SPU 395:	Student Teaching and Practicum: Speech-Language Pathology II	7
		14

\+ Courses must be completed with a "C" grade or better by 48 credits.
\# Courses must be completed with a "C" grade or better.
* Courses must be completed prior to student teaching.

LIBRARY SCIENCE (120 s.h.)

A. **General Education:** **48 s.h.**
B. **Major Program:** **72 s.h.**
Professional Education: 26 s.h. ◊
1. **Required Courses: 15 s.h. # +**
ITC 331, EDU 100, LIB 330 *, SPU 100
2. **Library Practice, Practicum and Field Work: 3 ** - 14 s.h.**
LIB 375**, LIB 390 * #, LIB 391 * #
C. **Specialization: 46 s.h.**
1. **Required Courses: 24 s.h. * # +**
LIB 011, LIB 121, LIB 313, LIB 315, LIB 320, LIB 322, LIB 326, LIB Elective
2. **Free Electives: 22 s.h.** ◊◊

◊ First-year students only required to take EDU 015 under *Professional Education*, requiring 27 s.h. under *Professional Education*.
◊◊ Free Electives under *C. Specialization* should be 21 s.h. for first-year students only; *Specialization* becomes 45 s.h.
* These courses are required Library Science Courses.
\# These courses require a grade of "C" or better.
\+ Courses required prior to student teaching.
** LIB 375: Field Work (3 s.h.) is not a requirement for this program, but may be taken as a Library Science Elective or as a Free Elective. Students not completing certification requirements should take LIB 375 and 12 additional credits of Free Electives in place of LIB 390 and 391.

EIGHT SEMESTER PLAN

First Semester

		s.h.
EDU 015:	College of Education: First Year Seminar	1
ENG 023:	English Composition	3
SPE 010:	Fundamentals of Speech	3
____ ____	Biological Science with lab	3
____ ____	Social Science Requirement	3
____ ____	Mathematics Requirement	3
		16

Second Semester

EDU 100: Perspectives on American Education		3
HIS 025 or 026	History of the United States 3	
____ ____	Humanities Requirement (Literature)	3
____ ____	Mathematics Requirement	3
PSY 011:	General Psychology	3
		15

Third Semester

		s.h.
HPD 110, 115, 116	Health	2
HPD 011-095	Physical Education	1
____ ____	Humanities Requirement	3
____ ____	Physical Science with Lab	3
PSY 140:	Educational Psychology	3
SPU 100:	Special Education	3
		15

Fourth Semester
(Apply for Candidacy During This Semester)

____ ____	Humanities Requirement	3
____ ____	Social Science Requirement	3
____ ____	Humanities Elective	3
____ ____	Library Science Elective or Free Elective	3
____ ____	Free Elective	3
		15

Must Be Formally Admitted to Candidacy to Complete the Following:

Fifth Semester

		s.h.
LIB 011:	Information Needs & Services	3
LIB 121:	Resources for Children	3
LIB 313:	Cataloging and Classification	3
LIB 320:	Library Administration	3
____ ____	Library Science Elective or Free Elective	3
		15

Sixth Semester
Library Science Professional Semester
(These courses must be taken as a block so the student can participate in the field experience component of the program.)

LIB 315:	Collection Development	3
LIB 322:	Resources for Young Adults	3
LIB 326:	Microcomputer Based Systems for the Library	3
LIB 330:	The Educational Program of the School Media Center	3
ITC 331:	Media and Technology in Education	3
		15

Seventh Semester

____ ____	Free Electives	15
		15

Eighth Semester

LIB 390:	Library Practice & Professional Practicum I	7
LIB 391:	Library Practice & Professional Practicum II	7
		14

NOTE: LIB 375: Field Work (3) is not a requirement for this program, but may be taken as a "LIB Elective" or as a "Free Elective." Students not completing certification requirements should take LIB 375 and 12 additional credits of Free Electives in place of LIB 390 and 391.

LIBRARY SCIENCE WITH DUAL CERTIFICATION IN ELEMENTARY EDUCATION (126 s.h.)

A. **General Education:** **48 s.h.**
B. **Major Program:** **78 s.h.**
Professional Education: 27 s.h. ◊
1. **Required Courses: 13 s.h. #**
ITC 331, EDU 015, EDU 100, LIB 330 +, SPU 100
2. **Student Teaching/Practicum : 14 s.h.**
LIB 375**, LIB 390 * #, LIB 391 * #
3. **Free Electives** (if needed)
C. **Specialization: 51 s.h.**
1. **Required Courses: 18 s.h. #**
ELU 366, ELU 201, ELU 205, ELU 207, ELU 321
2. **Professional Semester/ELU: 15 s.h. #**
ELU 301, ELU 303, ELU 304, ELU 306, ELU 308
3. **Library Science Specialization: 21 s.h. #**
LIB 011, LIB 121, LIB 313, LIB 315 +, LIB 320, LIB 322 +, LIB 326 +

* These courses are required Library Science Courses.
\# These courses require a grade of "C" or better.

+ Courses required prior to student teaching.
** LIB 375: Field Work (3 s.h.) is not a requirement for this program, but may be taken as a Library Science Elective or as a Free Elective. Students not completing certification requirements should take LIB 375 and 12 additional credits of Free Electives in place of LIB 390 and 391.
◊ First-year students only required to take EDU 015 under *Professional Education,* requiring 27 s.h. under *Professional Education.*

EIGHT SEMESTER PLAN

First Semester		s.h.
EDU 015:	College of Education: First Year Seminar	1
ENG 023:	English Composition	3
SPE 010:	Fundamentals of Speech	3
____ ____	Biological Science with lab	3
____ ____	Humanities Requirement	3
LIB 121:	Resources for Children	3
		16

Second Semester		
EDU 100:	Perspectives on American Education	3
HIS 025 or 026	History of the United States	3
____ ____	Humanities Elective (Literature)	3
MAT 021:	Fundamentals of Math I	3
PSY 011:	General Psychology	3
		15

Third Semester		
HPD 110, 115, 116	Health	2
HPD 011-095	Physical Education	1
____ ____	Humanities Requirement	3
____ ____	Physical Science with Lab	3
PSY 140:	Educational Psychology	3
SPU 100:	Special Education	3
LIB 011:	Information Needs and Services	3
		18

Fourth Semester		
(Apply for Candidacy during This Semester)		
____ ____	Humanities Requirement	3
____ ____	Social Science Requirement	3
MAT 022:	Fundamentals of Math II	3
PSY 140:	Child Psychology	3
ELU 205:	Science for Elementary and Middle Schools	3
		15

Must Be Formally Admitted to Candidacy to Complete the Following:

Fifth Semester		s.h.
ELU 366:	Integrated Arts in El. Ed. Class.	3
ELU 201:	Fund. Of Reading I	3
ELU 207:	Health and Physical Education for Elementary Schools	3
LIB 313:	Cataloging and Classification	3
LIB 320:	Library Administration	3
ELU 321:	Assessment of Children	3
		18

Sixth Semester s.h.
Library Science Professional Semester
(These courses must be taken as a block so the student can participate in the field experience component of the program.)

LIB 315:	Collection Development	3
LIB 322:	Resources for Young Adults	3
LIB 326:	Microcomputer Based Systems for the Library	3
LIB 330:	The Educational Program of the School Library Media Center	3
ITC 331:	Media and Technology in Education	3
		15

Seventh Semester
Elementary Education Professional Semester
(These courses must be taken as a block so the student can participate in the field experience component of the program.)

ELU 301:	Fund. Of Reading II	3
ELU 303:	Language Arts	3
ELU 304:	Social Studies for El. Ed.	3
ELU 306:	Integrating Principles of Learning and Teaching: Classroom Applications	3
ELU 308:	Mathematics for Elementary Schools	3
		15

Eighth Semester

LIB 390/391:	Library Practice and Professional Practicum I	7
ELU 390/391:	Student Teaching and Practicum (Elementary II)	7
		14

LIBRARY SCIENCE WITH INSTRUCTIONAL TECHNOLOGY Concentration: 18 s.h.

Required: 12 s.h.

ITC 125:	Microcomputers in Education	3
ITC 331:	Media and Technology in Education	3
ITC 340:	Integrating Instructional Technology	3
ITC 347:	Telecomputing and the Internet in Education	3

Electives: 6 s.h.

ITC 336:	Theories and Processes of Instructional Design	3
ITC 380:	Independent Study	1-3
ITC 425:	Computer Networks for Educators	3
ITC 435:	Distance Learning and the K-12 Educator	3

Other courses with approval of advisor and chair.
The Secondary Education Curriculum consists of courses in three categories:

SECONDARY EDUCATION (120 s.h.)

I. **General education: 48 s.h.**
   A. **Basic Requirements in General Education: 12 s.h.**
      1. Composition – 3 s.h.
      2. SPE 010: Fundamentals of Speech – 3 s.h.
      3. General Psychology – 3 s.h.
      4. HPD 110, 115, 116, 120: Health – 2/3 s.h.
      5. DAN or PED: Physical Education – 1 s.h.
   B. **Humanities: 12 s.h.**
      1. Literature, Modern Language, or Philosophy – 6 s.h.
      2. Art History, Music, Speech, or Theatre – 3 s.h.
      3. Elective in any Humanities area above – 3 s.h.
   C. **Social Sciences: 12 s.h.**
      1. HIS 025 or HIS 026: American History or Political Science – 3 s.h.
      2. PSY 120: Sociology, Anthropology, or Psychology ** – 3 s.h.
      3. Geography* or Economics – 3 s.h.
      4. Elective in any Social Sciences area above (PSY 140)** – 3 s.h.
   D. **Natural Sciences and Mathematics: 12 s.h.**
      1. Mathematics – 3 s.h.
      2. Biological Science (Lab) – 3 s.h.
      3. Physical Science or Earth Sciences * (Lab.) – 3 s.h.
      4. Mathematics Elective – 3 s.h.

* In the Geography discipline GEG 040, GEG 204, GEG 322, & GEG 324 are Natural Science courses.

II. **Professional Education**
Required: 37 s.h.

EDU 015:	College of Education: First Year Seminar	1
EDU 100:	Perspectives on American Education	3
SPU 100:	Introduction to Special Education	3
ITC 300:	Instructional Media and Technology	3
PSY 140:	Educational Psychology	3
SEU 320:	Appraisal and Evaluation in Secondary Schools	3
SEU 310:	Problems of Secondary Education	3
SEU 340:	Teaching Reading in Secondary School Academic Subjects	3
SEU 321-SEU 325:	Methods of Teaching Secondary School Subjects *	3
SEU 390/SEU 391:	Student Teaching and Practicum	12

* Students getting dual certification are required to take methods courses in each area of certification.

III. **Areas of Academic Specialization and Certification: 24 s.h. minimum** **

Appropriate courses in the ACADEMIC SPECIALIZATION may be applied also in the Humanities, Mathematics, Natural Science, Social Studies, and other electives divisions of GENERAL EDUCATION.

EIGHT SEMESTER PLAN

The sequence of courses listed below is suggested only.

Contiguous semesters may be inter-changed, except that the Professional Semester should immediately precede Student Teaching which must be scheduled in EITHER the seventh or eighth semester.

By 48 semester hours, students must complete 6 credits of Mathematics and 3 credits each of English Composition and English Literature with a grade of "C" or better.

First Semester

		s.h.
ENG 023:	English Composition	3
SPE 010:	Fundamentals of Speech	3
MAT ____	Mathematics Elective*	3
____ ____	Social Science Elective*	3
HPD/DAN ____	Physical Education	1
HPD 110, 115, 116, or 120	Health	2/3
		15/16

Second Semester

SPU 100:	Introduction to Special Education	3
ENG ____	English Literature Course*	3
MAT ____	Mathematics Elective*	3
____ ____	Social Science Elective*	3
EDU 100:	Perspectives on American Education*	3
		15

Third Semester

HIS 025 or 026	History of the U.S.	3
BIO 010:	Biological Science / Lab*	3
____ ____	Humanities Elective*	3
____ ____	Course in Specialization	3
____ ____	Course in Specialization	3
		15

Fourth Semester
(Apply for Candidacy During This Semester)

PSY 011:	General Psychology	3
____ ____	Course in Specialization	3
____ ____	Course in Specialization	3
____ ____	English Literature / Modern Language or Philosophy*	3
____ ____	Art History / Music / Speech or Theater	3
____ ____	Physical Science / Lab*	3
		18

Must Be Formally Admitted to Candidacy to Complete the Following:

Fifth Semester

		s.h.
____ ____	Course in Specialization	3
____ ____	Course in Specialization	3
____ ____	Course in Specialization	3
____ ____	Course in Specialization	3
PSY 140:	Educational Psychology	3
		15

Sixth Semester

____ ____	Course in Specialization	3
____ ____	Course in Specialization	3
____ ____	Course in Specialization	3
____ ____	Course in Specialization	3
ITC 300:	Instructional Technology	3
		15

Seventh Semester**
Professional Semester

EDU 411:	Methods of Teaching Modern Languages to Early Second Language Learners ***	3
(For Modern Language Certification Students Only)		
SEU 320:	Appraisal and Evaluation	3
SEU 310:	Problems of Secondary Education	3
SEU 321- 325:	Methods of Teaching Secondary School Subjects (varies by concentration)	3
SEU 340:	Teaching Reading in Secondary School Academic Subjects	3
		12/15

Eighth Semester

SEU 390-391	Student Teaching and Practicum	12
		12

NOTES: Students seeking multiple certifications must take the appropriate SEU methods courses for each certification area.

* Some majors cross list courses in specialization.
** Professional semester courses should be scheduled in a group and will include a two-week field experience.
*** EDU 411 is taught in the Spring Semester Only. Modern Language Methods, SEU 322, is taught in the Fall Semester Only.

BIOLOGICAL SCIENCE
Certification: 57 s.h.

Required: 35 s.h.

BIO 104:	Principles of Biology	4
BIO 106:	Introduction to Zoology	4
BIO 108:	Introduction to Botany	4
Choose **ONE** of the following:		
BIO 210:	Ornithology **OR**	3
BIO 302:	Entomology **OR**	
BIO 312:	Vertebrate Biology **OR**	
BIO 314:	Animal Behavior **OR**	

BIO 316: Invertebrate Biology
BIO 222: Environmental Biology 3
BIO 224: Applied Environmental Microbiology 3
Choose **ONE** of the following:
BIO 230: Taxonomy of Vascular Plants **OR** 3
BIO 232: Plant Physiology **OR**
BIO 324: Plant Ecology
BIO 234: Animal Physiology 3
BIO 310: Genetics 3
BIO 346: Molecular Biology 3
BIO 380: Senior Seminar in Biology 2

Physical Science Requirements: 16 s.h.
CHM 100: General Chemistry I 4
CHM 102: General Chemistry II 4
CHM 214/215: Organic Chemistry I 4
PHY 040/041: General Physics I 4

Mathematics Requirements: 6 s.h.
Select **ONE** of the following courses:
MAT 106: Trigonometry **OR** 3
MAT 115: Precalculus **OR**
MAT 171: Calculus I
Select **ONE** of the following courses:
MAT 140: Applied Statistical Methods **OR** 3
PSY 200: Statistics for the Social and Behavioral Sciences **OR**
MAT 171: Calculus I **OR**
MAT 172: Calculus II

CHEMISTRY
Certification: 66 s.h.

Required: 60 s.h.
BIO 104: Principles of Biology 4
CHM 100: General Chemistry I 4
CHM 102: General Chemistry II 4
CHM 214: Organic Chemistry I 4
CHM 216: Organic Chemistry II 4
CHM 230: Analytical Chemistry I 4
CHM 310: Biochemistry I 4
CHM 314: Physical Chemistry I 4
CHM 316: Physical Chemistry II 4
CHM 320: Advanced Inorganic Chemistry I 4
CHM 340: Analytical Chemistry II 4
CHM 380: Senior Seminar in Chemistry 2
MAT 171: Calculus I 3
MAT 172: Calculus II 3
PHY 100: Physics I 4
PHY 102: Physics II 4

Earth Science: 3 - 4 s.h.
Select **ONE** of the following courses:
AST 140: Astronomy I 3
AST 142: Astronomy II 3
GEG 204: Meteorology 3
GEL 100: Physical Geology 3
MAR 110: Introduction to Oceanography 3

Electives: 3 s.h.
Select a minimum of 3 s.h. from the following courses:
CHM 312: Biochemistry II 3
CHM 322: Advanced Inorganic Chemistry II 4

CHM 326: Advanced Inorganic Chemistry — Mechanisms 3
CHM 336: Advanced Physical Chemistry
CHM 351: Selected Topics 1-6
CHM 370: Research in Chemistry I * 1-3
CHM 371: Research in Chemistry II * 1-3
CHM 390: Internship in Chemistry 1-4

* The combined credit total toward the BSED SEU Chemistry degree for CHM 370 and CHM 371 MAY NOT exceed 4 s.h.

COMMUNICATION
Certification: 45 s.h.

Required: 27 s.h.
THE 015: Introduction to Theatre **OR** 3
THE 140: Play Production
SPE 120: Oral Interpretation I 3
SPE 205: Argumentation and Debate **OR** 3
SPE 210: Persuasive Speaking: Theory and Practice
SPE/WRI 212: Introduction to Mass Communication 3
ENG ____ Literature Survey 1* 3
ENG ____ Literature Survey 2* 3
ENG 230: Advanced Composition 3
ENG 300: History of the English Language 3
ENG 334: Introduction to English Linguistics 3

Speech/Theatre Electives: 6 s.h. 3

Language/Writing Electives: 6 s.h. 3

Literature Electives 6 s.h.** 3

* Two sequential courses in American or British literatures are required.
** At least one literature course must be at or above 300 level.

NOTE: ENG 023 & 024 may not be used in this specialization.

EARTH-SPACE SCIENCE
Certification: 55 s.h.

The student is to select one of the following three concentrations. This program also carries a certification in General Science with an Earth-Science Concentration.

NOTE: Specialization courses in Science and Mathematics may be applied to Categories D and E of General Education.

ESS-ASTRONOMY
Certification: 55 s.h.

Required: 49 s.h.
AST 140: Astronomy I 3
AST 142: Astronomy II 3
AST 240: The Planetarium 3
BIO 104: Principles of Biology 4
CHM 100: General Chemistry I 4
CHM 102: General Chemistry II 4
GEG 204: Meteorology 3
GEL 100: Physical Geology 4
GEL 102: Historical Geology 4
GEL/MAR 110: Oceanography 3
MAT 171, 172: Calculus I & II 6
PHY 100: Physics I 4
PHY 102: Physics II 4

Electives: 6 s.h.
Select at least 6 s.h. in two different disciplines from the following list of astronomy, mathematics, and physics courses: AST 340, AST 350, AST 370, MAT 135, MAT 260, MAT 273, MAT 274, PHY 210, PHY 220, PHY 230, PHY 310, PHY 312, PHY 316.

ESS-GEOLOGY
Certification: 55 s.h.

Required: 40 s.h.

GEL 100:	Physical Geology	4
GEL 102:	Historical Geology	4
GEL/MAR 110:	Oceanography	3
AST 140, 142:	Astronomy I & II	6
CHM 100, 102:	General Chemistry I & II	8
PHY 040, 042:	General Physics I & II	8
BIO 104:	Principles of Biology	4
GEG 204:	Meteorology	3

Geology Electives: 9 s.h.
Select three GEL courses 9

Mathematics Electives: 6 s.h.
Select two MAT courses at the 105 level or above. 6

ESS-MARINE SCIENCE
Certification: 55 s.h.

Required: 40 s.h.

AST 140, 142:	Astronomy I & II	6
BIO 104:	Principles of Biology	4
CHM 100, 102:	General Chemistry I & II	8
GEL100:	Physical Geology	4
GEL102:	Historical Geology	4
GEL/MAR 110:	Introduction to Oceanography	3
PHY 040, 042:	General Physics I & II	8
GEG 204:	Meteorology	3

Marine Science Electives: 9 s.h.
Select three MAR courses 9
(At least two courses taken during summer sessions at the Marine Science Center)

Mathematics Electives: 6 s.h.
Select two MAT courses at the 105 level or above. 6
(The mathematics electives should be at the student's maximum level of competence, beginning with MAT 105 or more advanced.)

ENGLISH
Certification: 51 s.h.

Required: 33 s.h.

ENG 100:	Principles of Literary Analysis	3
ENG 101:	World Literature I **OR**	3
ENG 102:	World Literature II	
ENG 103:	American Literature I **OR**	3
ENG 104:	American Literature II	
ENG 113:	British Literature I **OR**	3
ENG 114:	British Literature II	
ENG 225:	Teaching of Adolescent Literature	3
ENG 230:	Advanced Composition	3
ENG 300:	History of the English Language	3
ENG 334:	Linguistics	3
ENG 379:	Literary Criticism	3
ENG 380:	Senior Seminar	3
THE ___:	A course in Theatre	3

Writing Electives: 6 s.h.
Select **ONE** of the following courses:
WRI 207: Writing for the Workplace 3
WRI 208: Creative Writing: Exploring Forms
WRI 211: Journalism I
Select **ONE** of the following courses:
ENG 119: American Genre Film 3
WRI212: Introduction to Mass Communications
ENG 242: International Cinema
ENG 219: Culture and Media

Literature Electives: 12 s.h.
Select **ONE** of the following courses:
ENG 135: Contemporary African Novel 3
ENG 136: Contemporary African Poetry and Drama
ENG 234: Ethnic American Literature
ENG 236: Black American Literature: Poetry/Drama
ENG 237: Black American Literature: Novel
ENG 275: Archetypal Women in Myth & Literature
ENG 276: Nineteenth Century Women's Literature
ENG 277: American Women in Literature
ENG 278: Women Writers Around the World
Select **ONE** of the following courses:
ENG 330: Shakespeare on the Stage **OR** 3
ENG 331: Shakespeare's Earlier Plays **OR**
ENG 332: Shakespeare's Later Plays
ENG ___: Literature Elective at the 300 or 400 level 3
ENG ___: Literature Elective at the 300 or 400 level 3

MODERN LANGUAGES STUDIES

The student must select one of the following languages:

FRENCH
Certification: 39 s.h.

Required: 27 s.h.

FRE 103:	Intermediate French III	3
FRE 104:	Intermediate French IV	3
FRE 211:	French Composition & Conversation I	3
FRE 212:	French Composition & Conversation II	3
FRE 225:	French Phonetics and Applied Linguistics	3
FRE 301 or 302:	Survey of French Literature	3
FRE 305:	French Literature of 18th Century **OR**	3
FRE 310:	French Literature of 19th Century	
FRE 340:	French Culture and Civilization **OR**	3
FRE 341:	Contemporary French Culture	
FLA 380:	Senior Seminar in Modern Language	3

Electives: 12 s.h. (Select from below)

FRE 138:	French Culture through Film	3
FRE 224:	Business French	3
FRE 226:	Women/Québécois Novel	3
FRE 301:	Survey of French Literature I	3
FRE 302:	Survey of French Literature II	3
FRE 305:	French Literature of the 18th Century	3
FRE 310:	French Literature of the 19th Century	3
FRE 317:	French in the Global Village	3
FRE 320:	Development of French Novel	3

FRE 327:	Professional Skills in Translation	3
FRE 330:	French Literature of the 20th Century	3
FRE 340:	French Culture and Civilization	3
FRE 341:	Contemporary French Culture	3
FRE 345:	Modern French Drama & Theatre	3
FRE 370:	Selected Topics in French	3
FRE 390:	International Internship in French	3

SPANISH
Certification: 42 s.h.

Required: 21 s.h.

SPA 103:	Intensive Spanish III	3
SPA 104:	Intensive Spanish IV	3
SPA 212:	Spanish Composition	3
SPA 213:	Spanish Conversation *	
SPA 220:	Applied Linguistics in Spanish	3
SPA 325:	Advanced Syntax & Stylistics	
SPA 380:	Senior Seminar	3

Electives: 21 s.h.

SPA 290:	Commercial Spanish	3
SPA 301:	Survey of Spanish Literature I	3
SPA 302:	Survey of Spanish Literature II	3
SPA 311:	Spanish American Literature to 1910	3
SPA 312:	Spanish American Literature of 20th Century	3
SPA 320:	Contemporary Spanish Novel	3
SPA 330:	Contemporary Spanish Drama	3
SPA 340:	Spanish Culture and Civilization	3
SPA 341:	Modern Spain 1898 - Present	3
SPA 345:	Latin American Culture & Civilization to the 19th century	3
SPA 346:	Latin American Culture & Civilization 19th century - Present	3
SPA 350:	Spanish Drama of Golden Age	3
SPA 355:	Spanish Literature of Golden Age	3
SPA 360:	Study Abroad Experience	1-6
SPA 370:	Selected Topics in Spanish	3
SPA 390:	International Internship in Spanish	1-9
SPA 413:	Major Spanish American Novelists of the "New Narrative Period"	3
SPA 414:	Major Spanish American Short Story Writers of the "New Narrative Period"	3
SPA 415:	Mexican Literature: Voices of a Nation	3
SPA 425:	Advanced Spanish Grammar & Com.	3
SPA 431:	Modern Spanish through Literature & Film	3
SPA 435:	Modern Latin American Drama	3
SPA 447:	Mexican Culture and Civilization	3
SPA 460:	Hispanic Literature in the USA	3
SPA 461:	Spanish for Urban Educators	3
SPA 495:	Independent Study in Spanish	1-3

* Native speakers may substitute any course from electives above with advisor's approval.

GENERAL SCIENCE
Certification: 50/58 s.h.

The student is to select one of the following areas of General Science.

NOTE: Specialization courses in science and mathematics courses may be applied to Categories D and E of General Education.

GS/BIOLOGY
Certification: 55/58 s.h.

Required: 24 s.h.

BIO 104:	Principles of Biology	4
BIO 106:	Introduction to Zoology	4
BIO 108:	Introduction to Botany	4
BIO 226:	Marine Biology	3
BIO 242:	Ecosystems Ecology	3
BIO 310:	Genetics	3
ENV 100:	Introduction to Environmental Science **OR**	3
ENV 222:	Environmental Biology	

Field Electives: 3 s.h.

Select **ONE** of the following courses:

BIO 150:	Natural History	3
BIO 210:	Ornithology	3
BIO 230:	Tax of Vascular Plants	3
BIO 302:	Entomology	3
BIO 332:	Limnology	3

Biology Electives: 3 s.h.

BIO		3

Physical Science and Math Electives: 25 - 28 s.h.

Earth Science: 7 s.h.

GEL 100:	Physical Geology	4
AST 140:	Astronomy I **OR**	3
AST 142:	Astronomy II	

Chemistry: 8 s.h.

CHM 100:	General Chemistry I	4
CHM 102:	General Chemistry II	4

Mathematics: 6/9 s.h.

Select **ONE** of the following course blocks.

MAT 105:	College Algebra **AND**	3
MAT 106:	Trigonometry **AND**	3
MAT 140:	Applied Statistical Methods **OR**	3
MAT 115:	Precalculus Math **AND**	3
MAT 140:	Applied Statistical Methods	3

Physics: 4 s.h.

PHY 040:	General Physics I	4

GS/CHEMISTRY
Certification: 51 s.h.

Required: 21 s.h.

GEL 100:	Physical Geology	4
PHY 040, 042:	General Physics I & II	8
AST 140:	Astronomy I **OR**	3
AST 142:	Astronomy II	3
MAT 105:	College Algebra	3
MAT 106:	Trigonometry	3

Biology Electives: 6 s.h.

Chemistry Electives: 24 s.h.

GS/EARTH–SPACE
Certification: 50 s.h.

Required: 22 s.h.

CHM 100, 102:	General Chemistry I & II	8

PHY 040, 042: General Physics I & II 8
MAT 105: College Algebra 3
MAT 106: Trigonometry 3

Astronomy Elective: 3 s.h.
AST 140: Astronomy I **OR** 3
AST 142: Astronomy II 3

Biology Elective: 4 s.h.
Select a Biology course beyond BIO 010 (with Lab) 4

Earth Space Elective: 21 s.h.
Select at least 21 semester hours in Earth/Space courses, including all of the following areas: Geology, Astronomy, Meteorology and Oceanography.

GS/PHYSICS Certification: 51 s.h.

Required: 21 s.h.
AST 140: Astronomy I **OR** 3
AST 142: Astronomy II 3
GEL 100: Physical Geology 4
CHM 100/102: General Chemistry I & II 8
MAT 171: Calculus I 3
MAT 172: Calculus II 3

Biology Electives: 6 s.h.

Physics Electives: 24 s.h.

MATHEMATICS Certification: 39 s.h.

Required: 33 s.h.
CIS 135: Computer and Information Science I 3
MAT 171: Calculus I 3
MAT 172: Calculus II 3
MAT 220: History of Mathematics 3
MAT 224: Foundations of Higher Mathematics 3
MAT 240: Synthetic Geometry 3
MAT 260: Linear Algebra 3
MAT 273: Calculus III 3
MAT 274: Calculus IV 3
MAT 301: Probability and Statistics 3
MAT 311: Abstract Algebra I 3

Electives: 3 s.h. (Selected from below)
MAT 302: Probability and Statistics II 3
MAT 312: Abstract Algebra II 3
MAT 351: Advanced Calculus I 3

Electives: 3 s.h. (Selected from below)
MAT 205: Mathematics of Finance 3
MAT 302: Probability and Statistics II 3
MAT 312: Abstract Algebra II 3
MAT 332: Numerical Analysis 3
MAT 340: Differential Equations 3
MAT 351: Advanced Calculus 3
MAT 352: Advanced Calculus II 3
MAT 361: Math Methods in Operations Research 3
MAT 370: Select Topics in Mathematics 3
MAT 431: Topology 3

PHYSICS Certification: 70/72 s.h.

Required: 61 - 62 s.h.
BIO 104: Principles of Biology 4
CHM 100: General Chemistry I 4
CHM 102: General Chemistry II 4
MAT 171: Calculus I 3
MAT 172: Calculus II 3
MAT 273: Calculus III 3
MAT 340: Differential Equations 3
PHY 100: Physics I 4
PHY 102: Physics II 4
PHY 110: Modern Physics 3
PHY 210: Heat & Thermodynamics **OR** 3
CHM 314: Physical Chemistry I
PHY 220: Electronics 3
PHY 230: Optics 3
PHY 312: Mechanics 4
PHY 315: Advanced Physics Laboratory I **OR** 2
PHY 319/465: Advanced Laboratory II
PHY 316: Electricity & Magnetism 3
PHY 360/470: Quantum Mechanics 3
PHY 362/472: Solid State Physics **OR** 3
PHY 364/474: Nuclear Physics 3
PHY 380: Senior Seminar 3

Electives: 6 - 7 s.h. (Selected from below)
AST 140: Astronomy I 3
AST 142: Astronomy II 3
AST numbered above 142 3
CHM 316: Physical Chemistry II 3
EGR 121: Engineering Drawing & Lettering 3
GEL 358: General Geophysics 3
MAT 260: Linear Algebra 3
MAT 301: Probability and Statistics I 3
PHY 310: Physics of Sound 3
PHY 315: Advanced Lab I **OR** 3
PHY 319/465: Advanced Lab II 2
PHY 362/472: Solid State Physics **OR** 3
PHY 364/474: Nuclear Physics 3
PHY 370: Research in Physics 1-4
PHY 372-375: Special Topics 1-5

Mathematics Electives: 3 s.h.
Select at least 3 s.h. from the following courses:
MAT 135: Computer and Information Science I 3
MAT 136: Computer and Information Science II 3
MAT 260: Linear Algebra 3
MAT 274: Calculus IV 3

PHYSICS AND MATHEMATICS Certification: 64–65 s.h.

Required: 62 s.h.
BIO 104: Principles of Biology 4
CHM 100: General Chemistry I 4
CHM 102: General Chemistry II 4
MAT 171: Calculus I 3
MAT 172: Calculus II 3
MAT 224: Foundations of Higher Mathematics 3
MAT 273: Calculus III 3
MAT 301: Probability & Statistics I 3

MAT 240: Synthetic Geometry **OR** 3
MAT 320: Geometry and The Real Numbers 3
Select **ONE** of the following courses:
MAT 260: Linear Algebra 3
MAT 274: Calculus IV 3
MAT 340: Differential Equations 3
MAT 311: Abstract Algebra I 3
MAT ___: Elective @ 200 level or above 3
Select **ONE** of the following courses:
CIS 112: Basic Programming **OR** 3
CIS 135: Computer and Information Science I
PHY 100: Physics I 4
PHY 102: Physics II 4
PHY 110: Modern Physics 3
PHY 312: Mechanics 4
PHY 315: Advanced Physics Laboratory I 2
PHY 316: Electricity and Magnetism 3
MAT 124: Introduction to Fortran 3

Electives: 2/3 s.h.
Select **ONE** of the following:
PHY 210: Heat and Thermodynamics 3
PHY 220: Electronics 3
PHY 230: Optics 3
PHY 319: Advanced Physics Laboratory II 2
PHY 360: Quantum Mechanics 3

NOTE: Up to 21 s.h. of Specialization courses need to be applied to categories IV and V of General Education. The Mathematics elective may include any of the alternate courses in Mathematics listed above, but it is not necessarily restricted to these courses.

CITIZENSHIP AND SOCIAL SCIENCES Certification: 51 s.h.

This specialization is divided into three components plus two additional requirements i.,e., the Social Science Core courses (18 s.h.), the non-Emphasis electives (12 s.h.), the courses in Emphasis (21 s.h.), a minority course requirement, and a requirement of two courses dealing with a single region or function.

The minority course requirement is a 3 s.h. course which is taken as part of General Education, the Social Science Core, or Emphasis courses. This course requirement focuses on minority groups or a minority group.

The single region or function requirement is 6 s.h. of course work which is taken as part of the Social Science Core, or Emphasis courses. These region or function courses must be from different disciplines but dealing with the same region (e.g., Africa or Latin America) or the same function (e.g., urban, ethnic, environmental).

1. **Social Science Core: 18 s.h.**
   Select the following courses:
   ANT 010: Cultural Anthropology 3
   ECO 011: Principles of Macroeconomics 3
   GEG 020: Elements of Cultural Geography 3
   HIS 014 or 015: Western Civilization/Global Context I or II 3
   POL: any course below 100 level 3
   (Students in the Political Science Emphasis must take POL 130)
   SOC 010: Principles of Sociology 3

2. **Non-Emphasis Electives: 12 s.h.**
   Select 12 semester hours from Social Science disciplines other than the chosen area of emphasis. (Students in the History Emphasis must take ECO 012, a second POL course, a second SOC course, and a GEG or ANT course.)

3. **Area of Emphasis: 21 s.h.**
   The following areas of Emphasis may be selected by the students: Anthropology, Economics, Geography, History, Political Science, Psychology, and Sociology.

SOCIAL SCIENCES/ANTHROPOLOGY Certification: 44 s.h.

Required: 26 s.h.
ANT 010: Cultural Anthropology 3
ANT 020: Physical Anthropology 3
ANT 021: Lab in Physical Anthropology 3
ANT 030: Prehistoric Archaeology 3
ANT 031: Prehistoric Archaeology: Fieldwork 3
ANT 320: Archaeology: Field Methods **OR** 3
ANT 335: Ethno. Research Methods in Anthropology
ANT 360: History & Theory/Anthropology 3
ANT 380: Senior Seminar in Anthropology 3
GEG 020: Elements of Cultural Geography 3
SOC 010: Principles of Sociology 3

Electives: 18 s.h. (select from below)
ANT 101: North American Indian 3
ANT 102: South American Indian 3
ANT 115: Communitarian Societies 3
ANT 125: Anthropology of Death and Dying 3
ANT/SOC 130: Marriage and Family Cross-Cultural Perspectives 3
ANT 135: Pennsylvania German Cultural Traditions 3
ANT 150: Sub-Saharan Africa 3
ANT 171: Indian & South Asia 3
ANT 180: Pacific & Australia 3
ANT 190: Human Cultural Diversity and Adaptations in PA 3
ANT 212: Anthropology of Religion 3
ANT 215: Female & Male in Anthropological Perspectives 3
ANT 220: Economic Anthropology 3
ANT 226: Anthropology and Education 3
ANT 230: New World Archaeology 3
ANT 240: World Prehistory 3
ANT/SOC 246: Third World Development 3
ANT 250: Linguistic Anthropology 3
ANT 254: Medical Anthropology 3
ANT 258: Forensic Anthropology 3
ANT 272: Seminar: Human Genetics 3
ANT 273: Seminar: Primate Studies 3
ANT 274: Seminar: Human Evolution 3
ANT 285: Millenarian Movements 3
ANT/PSY 290: Culture & Personality 3
ANT 320: Archaeological Field Methods 3
ANT 335: Ethnographic Research Methods in Anthropology 3
ANT 370: Readings in Anthropology 3
ANT 379: Independent Study 3
ANT 390: Internship in Anthropology I 3
ANT 391: Internship in Anthropology II 3

Minorities: 3 s.h.
Select 3 s.h. from General Education or Specialization.

CITIZENSHIP EDUCATION/ECONOMICS
Certification: 36 s.h.

Required: 27 s.h.

ANT 010:	Cultural Anthropology	3
ECO 011:	Principles of Macroeconomics	3
ECO 012:	Principles of Microeconomics	3
ECO 205:	Intermediate Microeconomics	3
ECO 210:	Intermediate Macroeconomics	3
GEG 020:	Elements of Cultural Geography	3
HIS 014:	History of Civilization A **OR**	3
HIS 015:	History of Civilization B	3
POL ____:	Any course below 100	3
SOC 010:	Principles of Sociology	3

Electives: 6 s.h.

Select **ONE** of the following blocks:

ECO 335:	Mathematical Economics	3
ECO 345:	Economics **OR**	
ECO 150:	Economic History of the United States	3
ECO 320:	History of Economic Thought	3

Minorities course: 3 s.h.

CITIZENSHIP EDUCATION/GEOGRAPHY
Certification: 48 s.h.

Required: 30 s.h.

ECO 011:	Principles of Economics I	3
GEG 010:	Elements of Physical Geography	3
GEG 020:	Elements of Cultural Geography	3
GEG 274:	Introduction to GIS	3
GEG 330:	Cartography	3
GEG 375:	Research Methods in Geography	3
GEG 380:	Senior Seminar in Geography	3
HIS 014:	History of Civilization A **OR**	3
HIS 015:	History of Civilization B	
HIS 025:	History of the US: Formative Years & Federal Republic	3
HIS 026:	History of the US: Emergence of Modern America	3
POL ____:	Any course below 100	3

Category Requirements: 9 s.h.

GEG (Cultural or Regional)
GEG (Economic)
GEG (Physical)
GEG (Geography Elective)

Required Electives: 9 s.h.

GEG (Cultural)
GEG (Economic)
GEG (Physical)
GEG (Regional)

Minorities (from Specialization): 3 s.h.

CITIZENSHIP EDUCATION/HISTORY
Certification: 48 s.h.

Required: 24 s.h.

ECO 011:	Principles of Economics I	3
GEG 020:	Elements of Cultural Geography	3
HIS 014:	History of Civilization A	3
HIS 015:	History of Civilization B	3
HIS 025:	History of the US: Formative Years & Federal Republic	3
HIS 026:	HIS of the US: Emergence of Modern America	3
HIS 378:	Junior Seminar in Historical Methodology	3
POL 010:	American Government	3

Electives: 24 s.h.

(At least 15 credits must be at the 200 level or above.)
History of the United States: 6 s.h.
History of Europe: 6 s.h.
History of Asia/Middle East/Africa/Latin America: 6 s.h.
Other History Electives: 6 s.h.

Minorities (from Specialization): 3 s.h.

CITIZENSHIP EDUCATION/CIVICS AND GOVERNMENT
Certification: 42 s.h.

Required: 33 s.h.

ECO 011:	Principles of Economics I	3
GEG 020:	Elements of Cultural Geography	3
HIS 014:	History of Civilization A **OR**	3
HIS 015:	History of Civilization B	
HIS 025:	History of the US: Formative Years & Federal Republic	3
HIS 026:	HIS of the US: Emergence of Modern America	3
POL 010:	American Government	3
POL 020:	International Government	3
POL 121:	Introduction to Political Theory	3
POL 125:	Introduction to Comparative Politics	3
POL 150:	Law and Society **OR**	3
POL 223:	Modern Western Political Theory **OR**	
POL 323:	American Political Thought	
POL 226:	Empirical Political Analysis	3

Restricted Electives: 9 s.h.

Select **ONE** of the following courses in American Politics and Government: 3 s.h.

POL 050: State and Local Government
POL 220: Public Opinion and Propaganda
POL 230: American Political Parties
POL 258: Admin. of U.S. Environmental Law
POL 260: Judicial Process
POL 311: Constitutional Law I
POL 312: Constitutional Law II
POL 320: American Presidency
POL 325: American Legislative Process
POL 340: Municipal Government

Select **ONE** of the following courses in International Relations: 3 s.h.

POL 240: American Foreign Policy
POL 250: International Law and Organization
POL 255: Global Issues in International Relations
POL 361: Russian Foreign Policy

Select **ONE** of the following courses in Comparative Government: 3 s.h.

POL 131: Politics in Latin America
POL 253: Politics of Middle East
POL 305 Western European Government
POL 360: Russia and C.I.S.

Minorities (from Specialization): 3 s.h.

SOCIAL SCIENCES/PSYCHOLOGY
Certification: 42 s.h.

Required: 30 s.h.

ANT 010:	Cultural Anthropology	3
HIS 014:	History of Civilization A **OR**	3

HIS 015: History of Civilization B
PSY 200: Statistics for Social & Behavioral Sciences 3
PSY 202: Psychology of Personality **OR** 3
PSY 240: Social Psychology **OR**
PSY 250: Abnormal Psychology
PSY 270: Experimental Psychology 3
PSY 379: History and Systems of Psychology 3
PSY 311: Learning, Motivation & Emotion **OR** 3
PSY 340: Cognitive Processes 3
PSY 312: Sensation & Perception **OR** 3
PSY 325: Physiological Psychology
PSY 380: Senior Seminar in Psychology 3
SOC 010: Principles of Sociology 3

Psychology Electives: 12 s.h.
ONE elective must be at 300 or 400 level. 3

Minorities (from Specialization): 3 s.h.

NOTE: MAT 105 or higher is required for this major.

SOCIAL SCIENCES/SOCIOLOGY Certification: 45 s.h.

Required: 30 s.h.
ANT 010: Cultural Anthropology 3
ECO 011: Principles of Economics I 3
GEG 020: Elements of Cultural Geography 3
HIS 014: History of Civilization A **OR** 3
HIS 015: History of Civilization B
POL ____: Any course below 100 3
SOC 010: Principles of Sociology 3
SOC 200: Statistics for the Social & Behavioral Sciences 3
SOC 310: Foundations of Sociological Theory 3
SOC 350: Methods of Social Research 3

ONE of the following:
SOC 260: Social Stratification 3
SOC 270: Complex Organizations
SOC 275: Social Foundation of Human Behavior

Major Emphasis Electives: 15 s.h. (select from below)
SOC 110: Contemporary Social Problems 3
SOC 120: Marriage and the Family 3
SOC 122: Intimate Relations 3
SOC 128: Domestic Conflicts 3
SOC/ANT 130: Marriage and the Family in Cross-Cultural Perspective 3
SOC 140: Racial & Ethnic Minorities 3
SOC 150: Law and Society 3
SOC 180: Sociology of Leisure 3
SOC 205: Sociology of Sport 3
SOC 210: Religion & Contemporary Society 3
SOC 220: Juvenile Delinquency 3
SOC 230: Urban Sociology 3
SOC 235: Sociology of Sex Roles 3
SOC 240: Population Problems 3
SOC 245: Sociology of Deviance 3
SOC/ANT 246: Third World Development 3
SOC 250: Criminology 3
SOC 255: Treatment of Offenders 3
SOC 280: Collective Behavior 3
SOC 290: Social Gerontology & Social Welfare 3
SOC 370-378: Selected Topics in Sociology 3
SOC 379: Independent Study 3
SOC 390: Internship in Sociology 3
SOC 450: Sociology of Education 3

Minorities (from Specialization): 3 s.h.

ONE of the courses taken in General Education, the Social Studies Core, or the Emphasis area must focus on minority groups.

ENGLISH AS A SECOND LANGUAGE Program Specialist Certification: 12 s.h.

1. **Required: 12 s.h.**
   Select the following courses:
   ENG 334: Introduction to English Linguistics 3
   EDU/MLS 433: Cultural Awareness/Sensitivity for ESL/ELL Program Specialists 3
   EDU/MLS 434: Instructional Methods, Materials, and Assessments for ELL/ESL Populations 3
   EDU/MLS 435: English Language Acquisition and Awareness for ELL/ESL Populations 3
2. Students must have a valid PA Instructional I or II Certificate to complete the program.
3. All courses must be passed with a grade of "C" or higher.
4. A fifteen-hour fieldwork experience must be completed.

For additional information, contact the College of Graduate Studies, Kutztown University, 110 Old Main, Kutztown, PA 19530; phone: 610-683-4000 or e-mail: graduate@kutztown.edu.

College of Liberal Arts and Sciences

The **COLLEGE OF LIBERAL ARTS AND SCIENCES** offers fifteen programs leading to the Bachelor of Arts degree and thirty leading to the Bachelor of Science degree.

Specific requirements vary from one program to another, but all programs include the same four divisions: (1) General Education, (2) Major, (3) Concomitant Courses, and (4) Free Electives. In each division a minimum number of semester hours is required.

To earn a **BACHELOR OF ARTS, BACHELOR OF SCIENCE or BACHELOR OF SOCIAL WORK** degree, students must satisfy all specified course requirements, successfully complete at least 120 semester hours (with a cumulative quality point average no lower than 2.00 and with a quality point average in the major no lower than 2.00) and pass a comprehensive examination. The ultimate responsibility for scheduling necessary courses and satisfying all other requirements for graduation in a degree program rests with the student.

INDEPENDENT STUDY

Some programs of study provide students the opportunity of completing an Independent Study and/or Internship. Requirements for these opportunities are listed below:

1. The student must have a minimum of 12 s.h. in the discipline of the independent study.
2. The student must have a minimum Q.P.A. of 2.5 overall and in the major.
3. The student, in conjunction with the faculty member who is supervising the independent study, must prepare a project outline describing:
   a. the topic of the independent study;
   b. methodology/plan of action;
   c. equipment/resources needed;
   d. products expected of the student (e.g., paper, video, oral presentation);
   e. methods of evaluation.

   This outline must be submitted to the department chair and Dean of Liberal Arts and Sciences along with the current registration form.
4. Individual departments may set requirements beyond these standards.

INTERNSHIP

The minimum Q.P.A. for a required or elective internship shall be good academic standing and either 2.0 overall or 2.5 in the major; however, departments may establish a higher Q.P.A. requirement for either required or elective internships. Junior/Senior level status is required.

MINOR PROGRAMS

Students in the College of Liberal Arts and Sciences may pursue a minor or minors in addition to their declared major. Minor programs require the completion of a specific sequence of courses as prescribed by the academic department offering the minor and usually require 18-21 credit hours of course work. At least three courses of study in the minor must be upper division. In order to have a minor or minors officially recorded, students must complete the following requirements:

1. officially declare the minor(s) in the office of the department chairperson administering the minor program;
2. successfully complete all the course requirements prescribed for the minor;
3. maintain a quality point average of at least a 2.0 in the minor.

The minors listed below are acceptable for students graduating with a Liberal Arts and Sciences degree. All these minors are administered by the College of Liberal Arts and Sciences with the following exceptions: Music, Speech Communication and Theatre are administered by the College of Visual and Performing Arts; Advertising and Economics are administered by the College of Business.

Advertising
Anthropology
Biochemistry
Biology
Chemistry
Computer Science
Software Development
Information Technology
Criminal Justice
Economics
Electronic Media
French
Geography
Geology
History
International Studies
Literature
Marine Science
Mathematics
Multicultural Studies
Music
Musical Theatre
PA German Studies
Philosophy
Physics
Political Science
Psychology
Psychology — Industrial/Organizational
Public Administration
Public Relations
Social Work
Sociology
Spanish
Speech Communication
Theatre
Women's Studies
Writing

BACHELOR OF ARTS

General Education Requirements: **51 – 60 s.h.**

1. **Basic Requirements: 15 s.h.**
   A. Composition – 3 s.h.
   B. Oral Communication – 3 s.h. *
   C. Modern Language – 6 s.h. **

D. Health – 2/3 s.h.
E. Physical Education – 1 s.h.

2. **Humanities: 12 s.h.**
   A. Literature – 3 s.h.
   B. Music *** or Speech or Theatre – 3 s.h.
   C. Art History ***, or ART 010 or ART 105; Philosophy; or Related Arts 105 – 3 s.h.
   D. Elective in any Humanities (including Modern Language) discipline listed in this group – 3 s.h.
3. **Social Sciences: 12 s.h.**
   A. History or Political Science – 3 s.h.
   B. Sociology, Anthropology or Psychology – 3 s.h.
   C. Geography or Economics – 3 s.h.
   D. Elective in any Social Science discipline listed in this group and courses designated International Studies – 3 s.h.
4. **Natural Sciences and Mathematics: 12 s.h.**
   A. Mathematics – 3 s.h..
   B. Biological Science (Laboratory) – 3 s.h.
   C. Physical Science (Laboratory) – 3 s.h.
   D. Elective in any Natural Sciences discipline or in Mathematics – 3 s.h.
5. **Unrestricted Electives: 0 -9 s.h.**
   Any credit course offered or accepted by the University that counts toward graduation.
6. **Comprehensive examination**

* SPE 010 fulfills the oral communication requirement.
** The Modern Language requirement under Section 1 must be satisfied by two courses in the same language at the intermediate level or above. Modern Language courses at the elementary level (011, 012) may be taken under Section 5 of General Education.
*** Non-Studio Art course or Non-Performance Music course only.

PROGRAM OFFERINGS

Twenty programs lead to the Bachelor of Arts degree. Students enrolled in these programs must satisfy the General Education requirement for this degree and must complete at least 120 semester hours in accordance with all specifications. No more than 44 semester hours in any discipline may be counted towards degree requirements. A detailed description of each program may be obtained from the department offering the degree.

MAJOR PROGRAMS

Major programs leading to the Bachelor of Arts Degree are offered in the following disciplines:

Anthropology
English
French
General Studies
Geography
Applied
Environmental
General
Globalization
History
History w/Paralegal Studies
PA German Studies
Communication and Culture
Interdisciplinary
PA German Culture in America
Philosophy
Political Science
Political Science w/Paralegal Studies
Sociology
Sociology w/Paralegal Studies
Spanish
Writing

DEGREE REQUIREMENTS

1. **General Education** — Fifty-one (51) to sixty (60) semester hours distributed in accordance with the General Education Program in the Liberal Arts and Sciences.
2. **Major Program** — Each department in the College, through its respective faculty and the University's academic approval procedures, determines the courses and number of credit hours required for its programs in the major, minor and the related concomitant area. At least six courses besides the Senior Seminar must be in upper division courses.
3. **Concomitant Courses** — Courses which supplement the Major Program and contribute to its scholarly comprehension.
4. **Free Electives** — Courses in any discipline under Liberal Arts and Sciences or in the four Library Science courses required for certification as "Provisional Librarian" in the public libraries of Pennsylvania.

Besides fulfilling the requirements for the particular program listed in this category, students are urged to consult with their department advisor.

ANTHROPOLOGY

A.	**General Education:**		**60 s.h.**
B.	**Major Program:**		**38 s.h.**
	1. **Required Courses: 20 s.h.**		
	ANT 010:	Cultural Anthropology	3 sh
	ANT 020:	Physical Anthropology	3 sh
	ANT 021:	Laboratory in Physical Anthropology	2 ch – 1 sh
	ANT 030:	Intro to Prehistoric Archaeology	3 sh
	ANT 031:	Intro to Prehistoric Archaeology: Fieldwork	1 sh
	ANT 320:	Archaeological Field Methods **OR**	3 sh
	ANT 335:	Ethnographic Research Methods in Anthropology	
	ANT 360:	History and Theory of Anthropology	3 sh
	ANT 380:	Senior Seminar in Anthropology	3 sh
	2. **Elective Courses: 18 s.h.**		
	ANT 101:	North American Indian	3 sh
	ANT 102:	The South American Indian	3 sh
	ANT 115:	Communitarian Societies	3 sh
	ANT 125:	The Anthropology of Death and Dying	3 sh
	ANT/SOC 130:	Marriage and the Family in Cross-Cultural Perspective	3 sh
	ANT 135:	Pennsylvania German Cultural Traditions	3 sh
	ANT 138:	Caribbean Cultures	3 sh
	ANT 150:	Subsaharan Africa	3 sh
	ANT 171:	Peoples and Cultures of India and South Asia	3 sh
	ANT 180:	The Pacific and Australia	3 sh
	ANT 190:	Human Cultural Diversity and Adaptations in Pennsylvania	3 sh
	ANT 215:	Female and Male in Anthropological Perspective	3 sh
	ANT 212:	Anthropology of Religion	3 sh
	ANT 220:	Economic Anthropology	3 sh
	ANT 226:	Anthropology and Education	3 sh

ANT 230:	New World Archaeology	3 sh
ANT 240:	World Prehistory	3 sh
ANT 246:	Third World Development	3 sh
ANT 250:	Linguistic Anthropology	3 sh
ANT 254:	Medical Anthropology	3 sh
ANT 258:	Forensic Anthropology	3 sh
ANT 272:	Human Genetics	3 sh
ANT 273:	Primate Studies	3 sh
ANT 274:	Human Evolution	3 sh
ANT 285:	Millenarian Movements	3 sh
ANT 290:	Culture and Personality	3 sh
ANT 320:	Archaeological Field Methods	3 sh
ANT 321:	Advanced Archaeological Field Methods	3 sh
ANT 335:	Ethnographic Research Methods	3 sh
ANT 370:	Readings in Anthropology	1 – 3 sh
ANT 371:	Selected Topics in Anthropology	3 sh
ANT 379:	Independent Study	1 – 3 sh
ANT 390/391:	Internship in Anthropology	1 – 6 sh
ANT 437:	Indian-White Relations in North America, from the Earliest Contacts to Wounded Knee	3 sh

C. **Concomitant Courses:** **9 s.h.**
Concomitant Courses will vary depending upon the anthropological area of concentration selected by the student. * The student is expected to meet with his/her advisor by the Junior year to work out a program of concentration and concomitant courses.

D. **Free Electives:** **15 s.h.**
To be chosen with departmental advisement, subject to regulations contained in the Advisory Guide and in this Undergraduate Catalog.

E. All students are required to complete successfully a comprehensive examination in the major.

* Areas of concentration include but are not limited to Applied Anthropology, Archaeology, Area Studies, Cultural Anthropology, General Anthropology and Physical Anthropology.

ENGLISH

A. **General Education:** **60 s.h.**

B. **Major Program:** **42 s.h.**

1. **Required Courses: 15 s.h.**
ENG 100 should be taken first; 103 or 104, 113 or 114, 379, 380.

2. **Elective courses: 27 s.h.**
to be chosen with advisement from the following: Five of the courses must be at the 300 level or higher. ENG 101, 102, 103, 104, 111, 113, 114, 120, 121, 122, 123, 124, 125, 126, 131, 135, 136, 141; ENG 225, 230, 234, 235, 236, 237, 238, 251, 252, 270, 273, 275, 276, 277, 278; ENG 300, 321, 325, 327, 328, 330, 331, 332, 334; ENG/SPE 335; ENG 337, 338, 340, 343, 344, 350, 351, 352, 353, 355, 357, 360, 363, 364, 365, 367, 370, 371, 398, 438, 455, 457, 460, 470, 493.
Only **ONE** literature in translation course is acceptable from the following list: ENG/SPA 247, ENG/GER 253, ENG/GER 254, ENG/RUS 255, ENG/RUS 256, ENG/FRE 257, ENG/FRE 258.

C. **Concomitant Courses:** **9 s.h.**
Any course at the 100 level or above in any of the following disciplines qualifies as a concomitant: Anthropology, Art History, French, German, History, Music History, Philosophy, Professional Writing, Psychology, Related Arts, Sociology, Spanish, Speech, Theatre.

D. **Electives:** **9 s.h.**
Electives may be taken in any discipline whose courses are acceptable as electives in the College of Liberal Arts and Sciences or Business. Courses must be at the 100 level or above.

E. Successful completion of a written comprehensive examination is required.

ENGLISH: Professional Writing Program

A. **General Education:** **60 s.h.**

B. **Major Program:** **42 s.h.**

1. **Prerequisites**
Students must have a "C" or better in ENG 023 College Composition I or ENG 025 Honors Composition before taking any course in Professional Writing.

2. **Core: 18 s.h.**
WRI 100, 207, 208, 211, 212, 213.

3. **Major Electives: 12-18 s.h.**
Students must consult the course catalog to determine whether they have met possible prerequisites for a course.
The decisions students make about the number of semester hours their internship(s) will require will determine whether they can take additional WRI courses as part of the minimum 120 credits required for graduation. The total number of WRI semester hours in the Major electives and Professional semester must equal 24.

4. **Professional Semester: 6-12 s.h.**
Students must have a 2.5 or better in the 18-credit Core, at least two WRI courses at the 300 level or above in the Major electives, and a "C" or better in ENG 230 Advanced Composition (see Concomitant below), to register for their Professional semester.
Students may take one or two internships; the internships may not total more than 9 s.h., the first 3 s.h. of which *must* be taken concurrently with WRI 380 Professional Seminar.

C. **Concomitant:** **6 s.h.**
ENG 230 and any ENG course at the 100 level or higher.

D. **LAS Electives:** **12 s.h.**
All courses at the 100 level or above in the College of Liberal Arts and Sciences and in the College of Business count. Students should use this section and General Education electives to complete a minor, if one is desired. Students may not use a course below the 100 level unless it is required in the completion of a minor or they have received permission from the LAS Dean.

FRENCH

See Modern Language Placement Policy under Academic Policy Information.

A. **General Education:** **60 s.h.**

B. **Major Programs:** **39 s.h.**

1. **Core Courses: 12 s.h.**
FRE 103,104, 211, 212

2. **Advanced Courses: 15 s.h.**
FRE 225, 301 or 302, 305 or 310, 340 or 341, FLA 380

3. **Major Electives: 12 s.h.**
FRE 138, 224, 226, 301, 302, 305, 310, 317, 320, 327, 330, 340, 341, 342, 345, 370, 390.

C. **Concomitant Courses:** **12 s.h.**
Select FOUR courses from the following and/or from courses in a modern language other than French: ARH 024-025; ENG 103-104, 363, 365; MUS 220; HIS 111-112, 235.

D. **Arts and Science Electives:** **9 s.h.**
Courses may be selected from any discipline under Liberal Arts and Sciences.

E. Successful completion of a comprehensive examination is required.

GENERAL STUDIES

Admission to this program is by approval of the General Studies Committee.

A. **General Education:** **51 – 52 s.h.**
B. **Major Program:** **50 - 51 s.h.**
Courses are to be chosen with advisement from the General Studies Committee. Twenty semester hours must be in a single discipline chosen from Humanities, Social Sciences, Natural Sciences or Mathematics.
C. **Free Electives:** **18 - 19 s.h.**
To be chosen with advisement from the General Studies Committee subject to regulations contained in the Advisory Guide and in this Undergraduate Catalog.
D. Successful completion of a comprehensive examination.

GEOGRAPHY

A. **General Education** **60 s.h.**
B. **Major Program** **60 s.h.**
1. **Core Requirements: 18 s.h.**
GEG 010, 020, 274/275, 330, 375, 380
2. **Category Requirements: 9 s.h.**
Select one course in each of the following:
a. GEG (Cultural or Regional) 3 s.h.
b. GEG (Economic) 3 s.h.
c. GEG (Physical) 3 s.h.
3. **Geography Tracks**
General Track: 18 s.h.
Minimum of one course in categories a. through d. required
a. GEG (Cultural) – 3 s.h.
b/ GEG (Economic) – 3 s.h.
c. GEG (Physical) – 3 s.h.
d. GEG (Regional) – 3 s.h.
e. GEG (Geography Elective: 2 courses) – 6 s.h.
Applied Track: 18 s.h.
Select 5 of the following and GEG 394
a. GEG 170: Field Methods
b. GEG 230: Map Reading & Interpretation
c. GEG 332: Computer Cartography
d. GEG 333: Advanced GIS
e. GEG 341: Environmental Planning
f. GEG 343: Land Use Planning
g. GEG 347: Remote Sensing of Environment
h. GEG 394: Internship in Geography
Environmental Track: 18 s.h.
Select 5 of the following and GEG 394
a. GEG 170: Field Methods in Geography
b. GEG 210: Environmental Conservation
c. GEG 204/205: Meteorology/Lab or GEG 322 Climatology
d. GEG 324/325: Geomorphology Lab
e. GEG 341: Environmental Planning
f. GEG 347: Remote Sensing of the Environment
g. GEG 394: Internship in Geography
Globalization Track: 18 s.h.
Select the following and **TWO** regional courses
a. GEG 225: Spaces of Globalization
b. GEG 330: Cartography
c. GEG 335: World Problems in Geography
d. GEG 338: Geography of Population
4. **Liberal Arts and Science Electives or Minor: 15 s.h.**
a. MAT 140 or SOC/PSY/POL 200 *
b. Four Liberal Arts and Science courses (excluding Geography courses) at the 100-level or higher. **OR**
c. Minor
C. **Comprehensive Examination**
Successful completion of a comprehensive examination is accomplished through successful completion of GEG 380 Senior Seminar in Geography.

* Every Geography major **MUST** take MAT 140 **OR** SOC/PSY/POL 200 as part of their geography major unless this requirement has been met through General Education courses or their minor.

HISTORY (120 s.h.)

A. **General Education:** **60 s.h.**
B. **Major Program:** **39 s.h.**
1. **Survey Courses: 12 s.h.**
HIS 014, 015, 025, 026
2. **Electives: 21 s.h.**
A. History of the U.S.: 6 s.h.
B. History of Europe: 6 s.h.
C. History of Asia/Middle East/Africa/Latin America: 6 s.h.
D. Other History Electives: 3 s.h.
3. HIS 378: 3 s.h.
4. HIS 380: 3 s.h.
C. **Concomitant Courses:** **12 s.h.**
History majors must complete 12 s.h. of concomitant course work in the Liberal Arts and Sciences at the 100 level or above. Courses selected should relate to the major program and must have the approval of the advisor.
D. **Arts and Sciences Electives:** **9 s.h.**

NOTES: At least six courses besides the Senior Seminar must be at the 200 or above level.
A maximum of 40 s.h. in History may be counted toward graduation.

POLICY: Eligibility requirements for B.A. History requires 2.0 for internal transfers.

HISTORY/CO-OP PROGRAM IN PARALEGAL STUDIES*

A. **General Education:** **57 s.h.**
B. **Major Program:** **42 s.h.**
1. **Survey Courses: 12 s.h.**
HIS 014, 015, 025, 026
2. **Electives: 24 s.h.**
a. History of the U.S.: 6 s.h.
b. History of Europe: 6 s.h.
c. History of Asia/Middle East/Africa/Latin America: 6 s.h.
d. Other History Electives: 6 s.h.
3. HIS 378: 3 s.h.
4. HIS 380: 3 s.h.
C. **Paralegal Studies Courses:** **21 s.h.**
Take the following courses: PLG 120, 150, 200, 215, 220, 245.
Select **ONE** of the following courses:
PLG 230, 235, 240, 250, 255, or
Select as one unit: PLG 125, 130 and 135.

NOTES: At least six History courses besides the Senior Seminar must be at the 200 or above level.

A maximum of 40 s.h. in History may be counted toward graduation.

* This major is a special program designed in cooperation with Lehigh-Carbon Community College. All Paralegal Studies courses are taken through LCCC as part of a special cooperative program. Paralegal Studies courses (PLG prefix) may only be used by students who are enrolled in and complete this special KU-LCCC program.

PA GERMAN STUDIES — INTERDISCIPLINARY TRACK

A. **General Education:** **60 s.h.**

B. **Major Program:** **39 s.h.**

1. **Pre-Major Courses: 0 s.h.**
   GER 011: Elementary German I
   GER 012: Elementary German II
2. **Core Courses: 18 s.h.**
   GER 021: Intermediate German III
   GER 022: Intermediate German IV
   GER 211: German Composition and Conversation I
   GER 212: German Composition and Conversation II
   GER 340: German Culture and Civilization
   GER 380: Senior Seminar
3. **Electives: 21 s.h.+**
   ANT 135, ARH 306, 338, ECO 270, GEG 140, GER 213, 220, 251, 301, 302, 311, 312, 320, 325, 326, 360, 370, 390, 410, 420, 470, 495, HIS 112, 227, 235, 462, PHI 136, 355, POL 305, INT 101, 111, 210*, 310, MUS 212.

C. **Concomitant Courses:** **12 s.h.**
German majors must complete 12 s.h. of concomitant course work in the Liberal Arts and Sciences at the 100 level or above or any level language course not in German. Courses selected should relate to the major program and must have the approval of the advisor.

D. **Arts and Sciences Electives:** **9 s.h.**
Courses may be selected from any discipline under Liberal Arts and Sciences.

E. **Graduation Clearance**
1. Check the individual program sections for graduation requirements and number of credits needed (no program has fewer than 120 total credits).
2. The cumulative quality point average necessary for graduation clearance is 2.0 overall and 2.0 in the major.
3. Successful completion of a comprehensive examination is required.
4. Clearance for graduation must be approved by the department advisor and the department chairperson.

* With approval of major advisor.
+ Other courses including Selected Topics, Internships, Individualized and Independent Studies may be considered for inclusion with the approval of the major advisor.

The following courses are in development and will be added to the Interdisciplinary Track:

PA German Language
PA German Culture and Literature
German Culture through Film (taught in English)

PA GERMAN STUDIES — PENNSYLVANIA GERMAN CULTURE IN AMERICA

A. **General Education:** **60 s.h.**

B. **Major Program:** **39 s.h.**

1. **Pre-Major Courses: 0 s.h.**
   GER 011: Elementary German I
   GER 012: Elementary German II
2. **Core Courses: 18 s.h.**
   GER 021: Intermediate German III
   GER 022: Intermediate German IV
   GER 211: German Composition and Conversation I
   GER 212: German Composition and Conversation II
   GER 340: German Culture and Civilization
   GER 380: Senior Seminar
3. **Required Courses: 9 or 12 * s.h.**
   PAG 010: Introduction to Pennsylvania German Studies
   PAG 390: Internship in Pennsylvania German Studies
4. **Electives: 12 s.h.**
   ANT 135, 190, 320, ARH 306, 339, 385, CFT 377, 378, 379, 380, ENG 124, 234, GEG 240, ENG/GER 253, 254, GER 301, 302, 360*, 370, 390**, 495, HIS 120, 257, 330, INT 101, SPE 213, PAG 011, 012, 251, 301, 360, 370.

C. **Concomitant Courses:** **12 s.h.**
German majors must complete 12 s.h. of concomitant course work in the Liberal Arts and Sciences at the 100 level or above or any level language course not in German. Courses selected should relate to the major program and must have the approval of the advisor.

D. **Arts and Sciences Electives:** **9 s.h.**
Courses may be selected from any discipline under Liberal Arts and Sciences.

E. **Graduation Clearance**
1. Check the individual program sections for graduation requirements and number of credits needed (no program has fewer than 120 total credits).
2. The cumulative quality point average necessary for graduation clearance is 2.0 overall and 2.0 in the major.
3. Successful completion of a comprehensive examination is required.
4. Clearance for graduation must be approved by the department advisor and the department chairperson.

* Repeatable up to 3 credit hours.
** Repeatable up to 6 credit hours.

PA GERMAN STUDIES — COMMUNICATION AND CULTURE

A. **General Education:** **60 s.h.**

B. **Major Program:** **39 s.h.**

1. **Pre-Major Courses: 0 s.h.**
   GER 011: Elementary German I
   GER 012: Elementary German II
2. **Core Courses: 18 s.h.**
   GER 021: Intermediate German III
   GER 022: Intermediate German IV
   GER 211: German Composition and Conversation I
   GER 212: German Composition and Conversation II
   GER 340: German Culture and Civilization
   GER 380: Senior Seminar
3. **Electives: 21 s.h.**
   GER 213, 220, 301, 302, 311, 312, 320, 325, 326, 360, 370, 390, 410, 420, 470, 495.

C. **Concomitant Courses:** **12 s.h.**
German majors must complete 12 s.h. of concomitant course work in the Liberal Arts and Sciences at the 100 level or above or any level language course not in German. Courses selected should relate to the major program and must have the approval of the advisor.

D. **Arts and Sciences Electives:** **9 s.h.**
Courses may be selected from any discipline under Liberal Arts and Sciences.

E. **Graduation Clearance**
1. Check the individual program sections for graduation requirements and number of credits needed (no program has fewer than 120 total credits).
2. The cumulative quality point average necessary for graduation clearance is 2.0 overall and 2.0 in the major.
3. Successful completion of a comprehensive examination is required.
4. Clearance for graduation must be approved by the department advisor and the department chairperson.

PHILOSOPHY

A. **General Education:** **60 s.h.**

B. **Major Program:** **33 s.h.**
1. **Required Courses: 6 s.h.**
a. PHI 140, 380
2. **Restricted Electives: 9 s.h.**
Select THREE of the following: PHI 105, 116, 121, 136
3. **Open Electives: 18 s.h.**
At least 12 s.h. of PHI courses at the 100 to 300 level of which at least 6 s.h. must be at the 300 level or above. PHI 015, 020, 030, 040, 080, 105, 110, 116, 121, 125, 130, 136, 150, 170, 202, 210, 230, 240, 241, 245, 260, 265, 280, 310, 330, 345, 350-354, 355, 375, 379, 470.

C. **Concomitant Courses:** **15 s.h.**
To be chosen with departmental advisement from courses within the College of Liberal Arts and Sciences.

D. **Free Electives:** **12 s.h.**
To be chosen with departmental advisement, subject to regulations contained in the Advisory Guide and in this Undergraduate Catalog.

E. Successful completion of a comprehensive examination is required.

POLITICAL SCIENCE

A. **General Education:** **60 s.h.**

B. **Major Program:** **42 s.h.**
1. **Required Courses: 18 s.h.**
POL 010, 020, 030, 121, 226, 380.
2. **Restricted Electives: 12 s.h.**
Select **ONE** of the following courses:
POL 050, 220, 230, 258, 260, 311, 312, 320, 325, 340.
Select **ONE** of the following courses:
POL 240, 250, 255, 361.
Select **ONE** of the following courses:
POL 131, 253, 305, 360.
Select **ONE** of the following courses:
POL 150, 221, 223, 323.
3. **Open Electives from POL Courses: 12 s.h.**

C. **Concomitant Courses (100 level or above):** **6 s.h.**
1. U.S. History
2. Non-U.S. History

D. **Arts and Sciences Electives:** **12 s.h.**
Select courses in Arts and Sciences disciplines except POL courses.

E. Successful completion of a comprehensive examination is required.

POLITICAL SCIENCE/CO-OP PROGRAM IN PARALEGAL STUDIES*

A. **General Education:** **60 s.h.**

B. **Major Program:** **42 s.h.**
1. **Required Courses: 18 s.h.**
POL 010, 020, 030, 121, 226, 380.
2. **Restricted Electives: 12 s.h.**
Select **ONE** of the following courses:
POL 050, 220, 230, 258, 260, 311, 312, 320, 325, 340
Select **ONE** of the following courses:
POL 240, 250, 255, 361.
Select **ONE** of the following courses:
POL 131, 253, 305, 360.
Select **ONE** of the following courses:
POL 150, 121, 223, 323.
3. **Open Electives from POL courses: 12 s.h.**

C. **Concomitant Courses (100 level or above):** **6 s.h.**
1. U.S. History
2. Non-U.S. History

D. **Paralegal Studies:** **21 s.h.**
Take the following courses:
PLG 120, 150, 200, 215, 220, 245.
Select **ONE** of the following courses :
PLG 230, 235, 240, 250, 255, or
Select as one unit: PLG 125, 130 and 135.

E. Successful completion of a comprehensive examination is required.

* This major is a special program designed in cooperation with Lehigh-Carbon Community College. All Paralegal Studies courses are taken through LCCC as part of a special cooperative program. Paralegal Studies courses (PLG prefix) may only be used by students who are enrolled in and complete this special KU-LCCC program.

SOCIOLOGY

A. **General Education:** **60 s.h.**

B. **Major Program:** **39 s.h.**
All Sociology majors must take a minimum of 39 semester hours of course work in Sociology. However, a maximum of 40 semester hours in sociology could be counted toward overall degree requirements.
1. **Areas 1 & 2: Theory and Methods: 18 - 24 s.h.**

SOC 010:	Principles of Sociology	3
SOC 200:	Statistics	3
SOC 310:	Foundation of Sociology Theory	3
SOC 350:	Methods of Social Research	3
SOC 380:	Senior Seminar in Sociology	3

Select at least **ONE** additional course from the following:

SOC 260:	Social Stratification	3
SOC 270:	Complex Organization	3
SOC 275:	Social Foundation of Behavior	3

2. **Restricted Electives: 15 - 21 s.h.**
(At least 9 semester hours must be at 200 level or above.)

SOC 110:	Contemporary Social Problems	3
SOC 120:	Marriage & The Family	3
SOC 122:	Intimate Relations	3
SOC 128:	Domestic Conflicts	3

SOC/ANT 130: Marriage and the Family in Cross-Cultural Perspective 3
SOC 140: Racial & Ethnic Minorities 3
SOC 150: Law and Society 3
SOC 180: Sociology of Leisure 3
SOC 205: The Sociology of Sport 3
SOC 210: Religion & Contemporary Society 3
SOC 220: Juvenile Delinquency 3
SOC 230: Urban Sociology 3
SOC 235: Sociology of Sex Roles 3
SOC 240: Population Problems 3
SOC 245: Sociology of Deviance 3
SOC 246: Third World Development 3
SOC 250: Criminology 3
SOC 255: Treatment of Offenders 3
SOC 271: White Collar Crime 3
SOC 280: Collective Behavior 3
SOC 290: Social Gerontology & Social Welfare 3
SOC 370 - 378: Selected Topics (this area) 3
SOC 379: Independent Study 3
SOC 390: Internship in Sociology 3
SOC 450: Sociology of Education 3

C. **Concomitant Courses:** **21 s.h.**
Concomitant courses may be used to minor in another field, concentrate in one or two different academic fields according to the student's career interests, or pursue some other general plan of study. All above options must be worked out in consultation with the advisor. At least 6 s.h. must be at 100-level or above from any discipline under Liberal Arts and Sciences.

D. Successful completion of a comprehensive examination is required.

SOCIOLOGY/CO-OP PROGRAM IN PARALEGAL STUDIES*

A. **General Education:** **60 s.h.**

B. **Major Program:** **39 s.h.**

1. **Required Courses: 18-24 s.h.**
SOC 010, 200, 310, 350, 380.
Select at least **ONE** course from the following:
SOC 260, 270, 275.

2. **Restricted Electives: 15 - 21 s.h.** ◊
SOC 110, 120, 122, 128, SOC/ANT 130, SOC 140, SOC 150, 180, 205, 210, 220, 230, SOC 235, 240, SOC 245, SOC/ANT 246, SOC 250, 255, 265, 280, SOC 290, 370-378, 379, 390, 450.

C. **Paralegal Studies:** **21 s.h.**

1. **Required: 18 s.h.**
PLG 120, 150, 200, 215, 220 or 245
Select **ONE** of the following:
PLG 230, 235, 240, 250, 255, or
Select as one unit: PLG 125, 130 and 135.

D. Successful completion of a comprehensive examination is required.

SPANISH

See Modern Language Placement Policy under Academic Policy Information, page 24. The rationale for these placements is that the policy, as stated, only affects the Spanish program and courses.

A. **General Education:** **60 s.h.**

B. **Major Program:** **39 - 42 s.h.**

1. **Required Courses: 18 s.h.**
SPA 103, 104, 212, 213, 325, 380.

2. **Elective Courses: 21 - 24 s.h.**
To be chosen with departmental advisement from the following: SPA 220 or 290, 301, 302, 311, 312, 320, 330, 340, 341, 345, 346, 348, 350, 355, 370, 390.

C. **Concomitant Courses:** **12 s.h.**
Humanities and Social Sciences and/or from courses in a Modern Language other than Spanish: ENG 103, 104; ANT 102; HIS 111, 131, 232

D. **Free Electives:** **6 - 9 s.h.**
To be chosen with departmental advisement subject to regulations contained in the Advisory Guide and in this Undergraduate Catalog.

E. Successful completion of a comprehensive examination is required.

BACHELOR OF SCIENCE

General Education Program

1. **Basic Requirements:** **9 or 10 s.h.**
   a. Composition – 3 s.h.
   b. Oral Communication – 3 s.h.*
   c. Health** – 2 or 3 s.h.
   d. Physical Education – 1 s.h.
2. **Humanities: 12 s.h.**
   a. Literature – 3 s.h.
   b. Music*** Speech or Theatre – 3 s.h.
   c. Art History*** or Philosophy or Related Arts 105 – 3 s.h.
   d. Elective in any Humanities discipline in this group and courses designated International Studies – 3 s.h. (including modern language)
3. **Social Sciences:** **12 s.h.**
   a. History or Political Science – 3 s.h.
   b. Sociology, Anthropology or Psychology – 3 s.h.
   c. Geography or Economics – 3 s.h.
   d. Elective in any Social Sciences discipline listed in this group and courses designated International Studies – 3 s.h.
4. **Natural Sciences and Mathematics:** **12 s.h.**
   a. Mathematics – 3 s.h.
   b. Biological Science with a laboratory – 3 s.h.
   c. Physical Science with a laboratory – 3 s.h.
   d. Elective in any Natural Sciences discipline or in Mathematics – 3 s.h.
5. **Unrestricted Electives:** **15 s.h.**
   Any credit course offered or accepted by the University that counts toward graduation.
6. **Comprehensive Examination**

* SPE 010 fulfills the oral communication requirement.
** Health is not required for the B.S.N. degree.
*** Non-Studio Art course or Non-Performance Music course only.

PROGRAM OFFERINGS

Forty plus programs lead to the Bachelor of Science degree. Students enrolled in these programs must satisfy the General Education requirement for this degree and must complete 120 semester hours in accordance with all specifications. No more than 44 semester hours in any one discipline may be counted towards graduation requirements.

MAJOR PROGRAMS

Major programs leading to the Bachelor of Science Degree are offered in the following disciplines:

Biochemistry
Biology/Micro/Cell/Molecular
Biology/Organismal/Ecology
Biology/Pre-Professional
Chemistry
Chemistry: Biochemistry Option
Computer Science
Five-Year Plan for BS/MS
Software Development
Information Technology
Criminal Justice
Criminal Justice w/Paralegal Studies
Electronic Media
Business
Computer & Information Science
Journalism & Public Relations
Meteorology
Multi-Discipline
Music
Psychology
Public Administration
Sociology
Speech and Theatre
Environmental Science
Biology
Chemistry
Core
Geology
General Studies
Geology
Marine Sciences
Biology
Chemistry
Geology
Physics
Mathematics
Medical Technology
Nursing (Upper Division for RN's)
Physics
Pre-Engineering
Psychology
General
Industrial/Organizational
Clinical/Counseling
Psychology w/Paralegal Studies
Public Administration
Public Administration w/Paralegal Studies
Social Work
Telecommunications/Production

BIOCHEMISTRY

A. **General Education:** **59 – 60 s.h.**
B. **Major Program:** **58 s.h.**
1. **Required CHM: 34 s.h.**

CHM 100:	General Chemistry I	4
CHM 102:	General Chemistry II	4
CHM 214:	Organic Chemistry I	4
CHM 216:	Organic Chemistry II	4
CHM 310:	Biochemistry I	4
CHM 312:	Biochemistry II	4
CHM 314:	Physical Chemistry I	4
CHM 340:	Instrumental Analysis	4
CHM 380:	Senior Seminar in Chemistry	2

2. **Required BIO: 17 s.h.**

BIO 104:	Principles of Biology	4
BIO 106:	Introduction to Zoology **OR**	4
BIO 108:	Introduction to Botany	
BIO 310:	Genetics	3
BIO 346:	Molecular Biology	3
BIO 350:	Cell Biology	3

3. **Electives: 7 s.h. ****

CHM Electives: 4/7 s.h.

CHM 316:	Physical Chemistry II	4
CHM 318:	Advanced Biochemistry	3
CHM 320:	Advanced Inorganic Chemistry	4
CHM 326:	Advanced Organic Chemistry	3
CHM 336:	Advanced Physical Chemistry	3
CHM 351:	Selected Topics	1 – 6
CHM 370:	Research in Chemistry I	1 – 3 *
CHM 371:	Research in Chemistry II	1 – 3 *
CHM 390:	Internship in Chemistry	1 – 4

BIO Elective: 0/3 s.h.

BIO 224:	Applied Environmental Microbiology	3
BIO 232:	Plant Physiology	3
BIO 234:	Animal Physiology	3
BIO 336:	Medical Microbiology	3
BIO 370:	Research in Biology	1 – 3 *
BIO 390:	Internship in Biology	3 – 6

C. **Concomitant Courses:** **14 s.h.**
1. **Physics: 8 s.h.**

PHY 100:	Physics I	4
PHY 102:	Physics II	4

2. **Mathematics: 6 s.h.**

MAT 171:	Calculus I	4
MAT 172:	Calculus II	4

D. **Graduation Clearance**
1. The cumulative quality point average necessary for graduation clearance is 2.0 overall and 2.0 in the major.
2. Check the individual program sections for graduation requirements and number of credits needed (no program has fewer than 120 total credits).
3. Successful completion of a comprehensive examination is required.

* The combined credit total toward the BS Biochemistry degree for CHM 370, CHM 371, and BIO 370 may not exceed 4 s.h.
** A maximum of 3 s.h. of BIO electives may be used toward the 7 s.h. elective requirement.

BIOLOGY

A. **General Education:** **42 - 46 s.h.**
B. **Major Program:** **23 s.h.**
Required Biology

BIO 104:	Principles of Biology	4
BIO 106:	Introduction to Zoology	4
BIO 108:	Introduction to Botany	4
BIO 224:	Applied Environmental Microbiology	3
BIO 310:	Genetics	3
BIO 346:	Molecular Biology **OR**	3
BIO 350:	Cell Biology	
BIO 380:	Senior Seminar	3

C. **Discrete Track Courses:** **21 s.h.**
Organismal/Ecology

BIO 222:	Environmental Biology **OR**	3

BIO 226: Marine Biology **OR**
BIO 242: Ecosystem Ecology **OR**
BIO 326: Marine Ecology
BIO 232: Plant Physiology **OR** 3
BIO 234: Animal Physiology **OR**
BIO 320: Physiological Ecology of Animals
BIO 302 Entomology **OR** 3
BIO 312: Vertebrate Biology **OR**
BIO 314: Animal Behavior **OR**
BIO 316: Invertebrate Biology **OR**
BIO 230: Taxonomy of Vascular Plants **OR**
BIO 232: Plant Physiology **OR**
BIO 324: Plant Ecology
Biology Electives (3) 9

Pre-Professional

BIO 234: Animal Physiology 3
BIO 264: Comparative Anatomy of the Vertebrates 3
BIO 318: Embryology **OR** 3
BIO 330: Histology **OR**
BIO 336: Medical Microbiology
BIO 390: Internship in Biology **OR** 3
BIO 370: Research in Biology
Biology Field Elective 3
Biology Electives (2) 6

Molecular/Micro/Cell

BIO 222: Environmental Biology **OR** 3
BIO 226: Marine Biology **OR**
BIO 242: Ecosystem Ecology **OR**
BIO 326: Marine Ecology
BIO 232: Plant Physiology **OR** 3
BIO 234: Animal Physiology **OR**
BIO 320: Physiological Ecology of Animals
BIO 234: Animal Physiology **OR** 3
BIO 264: Comparative Anatomy **OR**
BIO 318: Embryology **OR**
BIO 330: Histology **OR**
BIO 336: Medical Microbiology
BIO 346: Molecular Biology **OR** 3
BIO 350: Cell Biology
Biology electives (3) 9

D. **Concomitant Courses** **33 - 34 s.h.**

1. **Chemistry: 16 s.h.**
   CHM 100: General Chemistry I 4
   CHM 102: General Chemistry II 4
   CHM 214: Organic Chemistry I 4
   CHM 216: Organic Chemistry II 4
2. **Physics: 8 s.h.**
   PHY 040: General Physics I & 4
   PHY 042: General Physics II **OR** 4
   PHY 100: Physics I &
   PHY 102: Physics II
3. **Restricted Elective: 3/4 s.h.**
   ANT 258: Forensic Anthropology **OR** 3/4
   CHM 230: Analytical Chemistry I **OR**
   CHM 220: Environmental Analysis **OR**
   CHM 310: Biochemistry **OR**
   CIS 112: Visual Basic **OR**
   CIS 243: Java Programming **OR**
   GEG 264: Medical Geography **OR**
   GEG 274/275: Introduction to GIS **OR**
   GEL 100: Physical Geology **OR**
   GEL/MAR 110: Introduction to Oceanography **OR**
   WRI 220: Technical Writing
4. **Mathematics: 6 s.h.**
   MAT 106: Trigonometry **OR** 3
   MAT 115: Precalculus **OR**
   MAT 171: Calculus I
   MAT 140: Applied Statistical Methods **OR** 3
   PSY 200: Statistics **OR**
   MAT 171: Calculus I **OR**
   MAT 172: Calculus II

E. Successful completion of a comprehensive examination is required.

CHEMISTRY

A. **General Education** **51 – 54 s.h.***
B. **Major Program** **44 - 46 s.h.****

1. **Required Courses: 38 s.h.**
   CHM 100-101, 102-103, 214-215, 216-217, 230-231, 314-315, 316-317, 320-321, 340-341, 380.
2. **Elective Courses: 6 - 8 .h.**
   Choose from the following courses:
   CHM 310-311, 312-313, 326, 336, 351, 370***, 371***, 390.

C. **Concomitant Courses:** **24 s.h.****
PHY 100-101, 102-103; MAT 171, 172, 273, 274 and BIO 104.

D. **Arts and Sciences Electives:** **8 s.h. ****
Courses may be elected in any discipline under Liberal Arts and Sciences. No CHM courses.

E. Successful completion of a comprehensive examination is required.

* Chemistry majors must complete a total of 6 s.h. of either a modern language at the intermediate level (Modern Language 103 or higher) or CIS courses at the 100 level or above. CIS 128 does not fulfill this requirement.

** Appropriate courses in mathematics, physics, chemistry and biology apply toward the requirements under Section 4 and/or Category 5 of General Education.

*** The combined credit total toward the BS Chemistry degree for CHM 370 and CHM 371 may not exceed 4 s.h.

CHEMISTRY/BIOCHEMISTRY OPTION

A. **General Education:** **48 – 50 s.h.***
B. **Major Program:** **57 s.h.**

1. **Required CHM Courses: 33 s.h.**
   CHM 100: General Chemistry I
   CHM 102: General Chemistry II
   CHM 214: Organic Chemistry I
   CHM 216: Organic Chemistry II
   CHM 230: Analytical Chemistry I
   CHM 310: Biochemistry I
   CHM 312: Biochemistry II
   CHM 314: Physical Chemistry I
   CHM 380: Senior Seminar in Chemistry
2. **Required BIO Courses: 17 s.h.**
   BIO 104: Principles of Biology
   BIO 106: Introduction to Zoology **OR**
   BIO 108: Introduction to Botany
   BIO 310: Genetics
   BIO 346: Molecular Biology
   BIO 350: Cell Biology
3. **CHM Electives: 4/7 s.h.**

CHM 316: Physical Chemistry II
CHM 318: Advanced Biochemistry
CHM 320: Advanced Inorganic Chemistry
CHM 326: Advanced Organic Chemistry
CHM 336: Advanced Physical Chemistry
CHM 340: Analytical Chemistry II
CHM 351: Selected Topics
*CHM 370: Research in Chemistry I
*CHM 371: Research in Chemistry II
CHM 390: Internship in Chemistry

4. **BIO Electives: 0/3 s.h.**
BIO 224: Applied Environmental Microbiology
BIO 232: Plant Physiology
BIO 234: Animal Physiology
BIO 336: Medical Microbiology
* BIO 370: Research in Biology
BIO 390: Internship in Biology

C. **Concomitant Courses:** **14 s.h.****
1. **Physics: 8 s.h.**
PHY 100: Physics I
PHY 102: Physics II
2. **Mathematics: 6 s.h.**
MAT 171: Calculus I
MAT 172: Calculus II

* The combined credit total toward the BS Chemistry degree for CHM 370, CHM 371, and BIO 370 may not exceed 4 s.h.

COMPUTER & INFORMATION SCIENCE

A. **General Education:** **60 s.h.**
B. **Major Programs:** **45 s.h.**
a choice of Information Technology OR Software Development
1. Required Courses: 24 s.h.
2. Electives: 21 s.h.
C. **Concomitant Courses:** **15 s.h.**
1. MAT 121, 125, 126
2. Two additional math courses
D. **CIS Internships (optional)**
CIS internships, CIS 280 (3 - 6 s.h.) and CIS 380 (3 - 6 s.h.), may be available to qualified students, but these are not required for completion of the CIS major program. Information about internships can be obtained in the Mathematics and Computer & Information Science Department.

FIVE YEAR PLAN FOR BS/MS IN CIS

A. **General Education:** **60 s.h.**
Where 12 s.h. of 400-level CIS courses for master's degree count in Category V.
B. **Major Program in CIS:** **45 s.h.**
C. **Concomitant Courses:** **15 s.h.**
D. The B.S. is awarded after 120 s.h. are completed.
E. Admission to Graduate School is based on having a "B" average or higher in one's undergraduate CIS courses.
F. **Graduate Degree: MS:** **18 s.h.**
Six 500-level CIS courses counted here plus the four 400-level courses counted under General Education complete the 30 s.h. for the master's. Passage of graduate comprehensive exam required.
G. The five year plan requires students to complete a total of 138 s.h. of which 75 s.h. are CIS courses.

CRIMINAL JUSTICE
(No internship or one six-credit internship)

A. **General Education:** **60 s.h.***
B. **Major Program:** **42 s.h.**
At least half of the 42 s.h. must be in 100-level courses or higher.
1. **Required Courses: 24 s.h.**
CRJ 010, 101, 181, 182, 250, 270, 362, 380.
2. **Electives: 18 s.h.**
Choose from the following:
CRJ 201, 210, 220, 221, 260, 271, 301, 312, 363, 370, 379, 390.
Students who want to have a six credit internship experience may only take four of the above courses plus CRJ 390.
C. **Concomitant Courses:** **12 s.h.**
Consult with major advisor before selecting from courses carrying the following prefixes: ACC, ANT, BIO, BUS, CHM, CIS, ECO, ENG, GEG, HIS, MAT, PHI, PHY, PLG, POL, PSY, SWK, SOC & WRI.
D. **Arts & Sciences Electives:** **6 s.h.**
Electives must be Liberal Arts and Sciences at the 100-level and above.
E. **Comprehensive Examination**
All criminal justice majors, irrespective of internship and paralegal option, must successfully complete a written comprehensive examination as a condition of graduation. This examination is given in the Fall and Spring.
F. **Modern Languages**
All criminal justice majors must have a reading knowledge of a modern language equivalent to the intermediate level for all program options.

CRIMINAL JUSTICE
(With an extended 12-credit internship or two six-credit internships)

A. **General Education:** **60 s.h.***
B. **Major Program:** **48 s.h.**
1. **Required Courses: 36 s.h.**
CRJ 010, 101, 181, 182, 250, 270, 362, 380, CRJ 390 and 392 or CRJ 394.
2. **Electives: 12 s.h.**
CRJ 201, 210, 220, 221, 260, 271, 301, 312, 363, 370, 379.
Students who want to have an extended internship experience may only take four of the above with either CRJ 390 and CRJ 392; or CRJ 394.
C. **Concomitant Courses:** **9 s.h.**
Consult with advisor before selecting from: ACC, ANT, BIO, BUS, CHM, CIS, ECO, ENG, GEG, HIS, MAT, PHI, PHY, POL, PSY, SWK, SOC & WRI.
D. **Arts & Sciences Electives:** **12 s.h.**
Courses in Liberal Arts and Sciences at the 100 level and above.

CRIMINAL JUSTICE/CO-OP PROGRAM IN PARALEGAL STUDIES* (No internship or one six-credit internship)

A. **General Education:** **60 s.h.**
B. **Major Program:** **39 s.h.**
1. **Required Courses: 24 s.h.**
CRJ 010, 101, 181, 182, 250, 270, 362, 380.
2. **Electives: 15 s.h.**
Choose from the following:
CRJ 201, 210, 220, 221, 260, 271, 301, 312, 363, 370, 379, 390.
Students who want to have a six credit internship experience may only take four of the above elective courses plus CRJ 390.

C. **Concomitant Courses** **6 s.h.**

D. **Paralegal Studies Courses:** **21 s.h.**
Take the following courses:
PLG 120, 150, 200, 215, 220, 245.
Select **ONE** of the following courses:
PLG 230, 235, 240, 250, 255, or
Select as one unit: PLG 125, 130 and 135.

ELECTRONIC MEDIA

A. **General Education:** **48 - 57 s.h.**

B. **Major Program:** **42 - 45 s.h.**
1. **Core Requirements: 12 s.h.**
TVR 010, 050, 055, 070
2. **Advanced Requirements: 30 - 33 s.h.**
TVR 220, 250, 255, 355, 365, 380, 390,
TVR Workshops and 3-6 TVR Electives.

C. **Concomitant Areas:** **21 - 27 s.h.**
Before selecting a concomitant area of study, an electronic media student needs to confer with a faculty advisor regarding specific required courses. Students may choose from the following areas: Business Administration, Computer and Information Science, Journalism/Public Relations, Meteorology, Multi-Discipline, Music, Psychology, Public Administration, Sociology, and Speech/Theatre.

D. Successful completion of a comprehensive examination is required.

NOTE: Before being cleared for graduation, all Electronic Media majors must earn a grade of "C" or higher in all major (TVR) courses. This requirement must be met for all prerequisites prior to taking advanced courses.

ENVIRONMENTAL SCIENCE

A. **General Education:** **60 – 62 s.h.**

B. **Core Courses: 15 s.h.**
BIO 104-105; CHM 100-101; ENV 100-101, GEL 100-101
(Students must complete all four Core courses with at least a 2.00 average in the core courses prior to declaration of a discrete track.)

Biology Track

A. **Common Courses: 44 s.h.**
ENV 210-211, 220-221, 222-223, 380; GEG 274; MAT 106 or 115 or 171, MAT 140 or PSY 200; PHY 040-041 or 100-101, PHY 042-043 or 102-103.

B. **Environmental Biology Track: 18 s.h.**
BIO 230-231 or 232-233; ENV 224-225; BIO 322-323 or 324-325 or 326-327; BIO 332-333; BIO 302-303 or 316-317;
BIO Elective (200 or 300 level) — 3 s.h.
BIO Elective (300 level or above) — 3 s.h.

C. **Restricted Social Science & Humanities Electives: 6 s.h.**
(These two courses will be elected from a list maintained by the Environmental Science Committee.)

D. Successful completion of a comprehensive examination is required.

Chemistry Track

A. **Common Courses: 40 s.h.**
BIO 106-107 or 108-109; CHM 102-103, 214-215; ENV 210-211, 220-221, 222-223, 380; GEG 274; MAT 140 or PSY 200; MAT 171; PHY 100-101, 102-103.

B. **Environmental Chemistry Track: 21 s.h.**
CHM 216-217; CHM 230-231; CHM Electives (300 level) — 10 s.h.; MAT 172.

C. **Restricted Social Science & Humanities Electives: 6 s.h.**
These two courses will be elected from a list maintained by the Environmental Science Committee.

D. Successful completion of a comprehensive examination is required.

Geology Track

A. **Common Courses: 40 s.h.**
BIO 106-107 or 108-109; CHM 102-103, 214-215; GEG 274; ENV 210-211, 220-221, 222-223, 380; GEG 274; MAT 106 or 115 or 171; MAT 140 or PSY 200; PHY 040-041 or 100-101; PHY 042-043 or 102-103.

B. **Environmental Geology Track: 22 s.h.**
GEL 102-103; 200-201; 304-305; 358-359; 362-363; GEL Electives (200 level or above) — 6 s.h.

C. **Restricted Social Science & Humanities Electives: 6 s.h.**
(These two courses will be elected from a list maintained by the Environmental Science Committee.)

D. Successful completion of a comprehensive examination is required.

GENERAL STUDIES

A. **General Education:** **51 - 52 s.h.**

B. **Major Program:** **50 - 51 s.h.**
Courses are to be chosen with advisement from the General Studies Committee and the Dean of Liberal Arts and Sciences. Twenty of the semester hours must be in a single discipline chosen from the Humanities, Social Sciences, Natural Sciences, or Mathematics.

C. **Free Electives:** **18 - 19 s.h.**
To be chosen with advisement from the General Studies Committee and the Dean of Liberal Arts and Sciences subject to regulations contained in the Advisory Guide and in this Undergraduate Catalog.

D. Successful completion of comprehensive examination.

GENERAL STUDIES/TECHNICAL STUDIES

A. **General Education:** **51 – 52 s.h.**

B. **Technical/Professional Studies** **35 - 45 s.h.**

C. **Concentration** **18 s.h.**

D. **Electives** **6 - 16 s.h.**

GEOLOGY

A. **General Education:** **46 – 51 s.h.***

B. **Major Program:** **44 s.h.**
1. **Required Courses: 41 s.h.**
GEL 100-101, 102-103, 200-201, 220-221, 230-231, 304-305, 314-315, 320-321 340-341, 350-351, 358-359, 362-363, 380
2. **Elective Courses: 3 s.h.**
GEL 210-211, 302, 324-325, 366-367, 370, 390, 398

C. **Concomitant Courses:** **26 - 29 s.h.**
1. **Chemistry: 8 s.h.**
CHM 100: General Chemistry I
CHM 102: General Chemistry II
2. **Physics: 8 s.h.**
PHY 040 **OR** PHY 100
PHY 042 **OR** PHY 102
3. **Mathematics: 6 - 9 s.h.**
OPTION I:
MAT 105: College Algebra
MAT 106: Trigonometry
MAT 171: Calculus I

OPTION II:
MAT 115: Precalculus
MAT 171: Calculus I
OPTION III:
MAT 171: Calculus I
MAT 172: Calculus II

4. **Biology: 4 s.h.**
   BIO 104: Principles of Biology

D. Successful completion of a comprehensive examination is required.

* Appropriate courses in mathematics, physics, chemistry and biology apply toward the requirements under Section IV and/or section V of General Education.

MARINE SCIENCE

A. **General Education:** **36 – 40 s.h.**

Biology

A. **Major Program: 50 s.h.**

1. **Required MAR: 26 s.h. (Notes 1, 2)**
   MAR 110: Introduction to Oceanography 3
   BIO/MAR 226: Marine Biology 3
   MAR 237: Field Methods * **OR**
   MAR 331: Chemical Oceanography * **OR**
   MAR 348: Biological Oceanography * 3
   MAR 364: Physical Oceanography 3
   MAR 366: Marine Geology 3
   MAR 370: Research in Marine Science **OR** 3
   MAR 390: Internship in Marine Science
   MAR 380: Senior Seminar 2
   MAR or BIO Elective (Note 3) 3
   MAR or BIO Elective (Note 3) 3
2. **Required BIO: 24 s.h. (Notes 1, 2)**
   BIO 104: Principles of Biology 4
   BIO 106: Introduction to Zoology 4
   BIO 108: Introduction to Botany 4
   BIO 224: Applied Environmental Microbiology 3
   BIO/MAR 260: Marine Invertebrate * **OR** 3
   BIO 264: Comparative Anatomy **OR**
   BIO 316: Invertebrate Biology **OR**
   MAR 343: Ichthyology *
   BIO/MAR 326: Marine Ecology **OR** 3
   BIO/MAR 320: Physiology Ecology **OR**
   BIO 322: Population & Community Ecology
   BIO 310: Genetics **OR** 3
   BIO 346: Molecular Biology **OR**
   BIO 350: Cell Biology

B. **Concomitant Courses: 36 - 37 s.h.**

1. **Chemistry: 15 - 16 s.h.**
   CHM 100: General Chemistry I 4
   CHM 102: General Chemistry II 4
   CHM 214: Organic Chemistry I 4
   CHM 216: Organic Chemistry II **OR** 4
   CHM 220: Environmental Analysis 3
2. **Geography: 3 s.h.**
   GEG 204: Meteorology **OR** 3
   GEG 274: Geographic Information Systems I **OR**
   GEG 347: Remote Sensing
3. **Geology: 4 s.h.**
   GEL 100: Physical Geology 4
4. **Mathematics: 6 s.h.**
   MAT 140: Applied Statistical Methods **OR** 3
   PSY 200: Statistics for the Social and Behavioral Sciences (Note 4)
   MAT 106: Trigonometry **OR** 3
   MAT 115: Precalculus **OR**
   MAT 171: Calculus I 3
5. **Physics: 8 s.h.**
   PHY 040: General Physics I **OR** 4
   PHY 100: Physics I
   PHY 042: General Physics II **OR** 4
   PHY 102: Physics II

* Only offered at the Marine Science Consortium.
[1] Required courses may be used to satisfy General Education Category IV – A, B, C, D and/or Category V.
[2] Courses in this category may be used to satisfy the minimum of 9 s.h. that must be taken at the Marine Science Consortium, Wallops Island, Virginia. However, students are encouraged to take more courses at the MSC to fulfill the electives.
[3] MAR or BIO elective at 200 level or above.
[4] PSY 011 is a prerequisite for PSY 200.

Chemistry

A. **Major Program: 50 s.h.**

1. **Required MAR: 26 s.h. (Notes 1, 2)**
   MAR 110: Introduction to Oceanography 3
   MAR 226: Marine Biology 3
   MAR 237: Field Methods * **OR**
   MAR 331: Chemical Oceanography *
   MAR 364: Physical Oceanography 3
   MAR 366: Marine Geology 3
   MAR 370: Research in Marine Science **OR** 3
   MAR 390: Internship in Marine Science
   MAR 380: Senior Seminar 2
   MAR or CHM Elective (Note 3) 3
   MAR or CHM Elective (Note 3) 3
2. **Chemistry: 24 s.h. (Note 1)**
   CHM 100: General Chemistry I 4
   CHM 102: General Chemistry II 4
   CHM 214: Organic Chemistry I 4
   CHM 216: Organic Chemistry II 4
   CHM 230: Analytical Chemistry I 4
   CHM 340: Analytical Chemistry II 4

B. **Concomitant Courses: 32 s.h.**

1. **Biology: 8 s.h.**
   BIO 104: Principles of Biology 4
   BIO 106: Introduction to Zoology **OR** 4
   BIO 108: Introduction to Botany (Note 4)
2. **Geography: 3 s.h.**
   GEG 204: Meteorology **OR** 3
   GEG 274: Geographic Information Systems I **OR**
   GEG 347: Remote Sensing
3. **Geology: 4 s.h.**
   GEL 100: Physical Geology 4
4. **Mathematics: 6 s.h.**
   MAT 140: Applied Statistical Methods **OR** 3
   PSY 200: Statistics for the Social and Behavioral Sciences (Note 5)
   MAT 171: Calculus I 3
   MAT 172: Calculus II 3
5. **Physics: 8 s.h.**
   PHY 100: Physics I 4
   PHY 102: Physics II 4

* Only offered at the Marine Science Consortium.
[1] Required courses may be used to satisfy General Education Category IV – A, B, C, D and/or Category V.
[2] Courses in this category may be used to satisfy the minimum of 9 s.h. that must be taken at the Marine Science Consortium, Wallops Island, Virginia. However, students are encouraged to take more courses at the MSC to fulfill the electives.
[3] MAR or CHM elective at 200 level or above.
[4] Zoology recommended.
[5] PSY 011 is a prerequisite for PSY 200.

Geology

A. **Major Program: 43 s.h.**

1. **Required MAR: 26 s.h. (Notes 1, 2)**

GEL/MAR 110:	Introduction to Oceanography	3
MAR 226:	Marine Biology	3
MAR 237:	Field Methods * **OR**	3
MAR 331:	Chemical Oceanography * **OR**	
MAR 348:	Biological Oceanography*	
MAR 364:	Physical Oceanography	3
GEL/MAR 366:	Marine Geology	3
MAR 370:	Research in Marine Science **OR**	3
MAR 390:	Internship in Marine Science	
MAR 380:	Senior Seminar	2
MAR or GEL Elective **(Note 3)**		3

2. **Geology: 20 s.h.**

GEL 100:	Physical Geology	4
GEL 102:	Historical Geology	4
GEL 230:	Paleontology	3
GEL/MAR 350:	Sedimentation	3
GEL/MAR 358:	Geophysics	3
MAR or GEL Elective (Note 3)		3

B. **Concomitant Courses: 40 - 44 s.h.**

1. **Biology: 8 s.h.**

BIO 104:	Principles of Biology	4
BIO 106:	Introduction to Zoology **OR**	4
BIO 108:	Introduction to Botany **(Note 4)**	

2. **Chemistry: 15 - 16 s.h.**

CHM 100:	General Chemistry I	4
CHM 102:	General Chemistry II	4
CHM 214:	Organic Chemistry I	4
CHM 216:	Organic Chemistry II **OR**	4
CHM 220:	Environmental Analysis	3

3. **Geography: 3 s.h.**

GEG 204:	Meteorology **OR**	3
GEG 274:	Geographic Information Systems I **OR**	
GEG 347:	Remote Sensing	

4. **Mathematics: 6 s.h.**

MAT 140:	Applied Statistical Methods **OR**	3
PSY 200:	Statistics for the Social and Behavioral Sciences (Note 5)	
MAT 106:	Trigonometry **OR**	3
MAT 115:	Precalculus **OR**	
MAT 171:	Calculus I	

5. **Physics: 8 s.h.**

PHY 040:	General Physics I **OR**	4
PHY 100:	Physics I	
PHY 042:	General Physics II **OR**	4
PHY 102:	Physics II	

* Only offered at the Marine Science Consortium.
[1] Required courses may be used to satisfy General Education Category IV – A, B, C, D and/or Category V.
[2] Courses in this category may be used to satisfy the minimum of 9 s.h. that must be taken at the Marine Science Consortium, Wallops Island, Virginia. However, students are encouraged to take more courses at the MSC to fulfill the electives.
[3] MAR or GEL elective at 200 level or above.
[4] Zoology recommended.
[5] PSY 011 is a prerequisite for PSY 200.

Physics

A. **Major Program: 45 - 47 s.h.**

1. **Required MAR: 23 s.h. (Notes 1, 2)**

MAR 110:	Introduction to Oceanography	3
MAR 226:	Marine Biology	3
MAR 237:	Field Methods * **OR**	3
MAR 331:	Chemical Oceanography * **OR**	
MAR 348:	Biological Oceanography *	
MAR 364:	Physical Oceanography	3
MAR 366:	Marine Geology	3
MAR 370:	Research in Marine Science **OR**	3
MAR 390:	Internship in Marine Science	
MAR 380:	Senior Seminar	2
MAR or PHY Elective **(Note 3)**		3

2. **Physics: 22 - 24 s.h. (Note 1)**

PHY 100:	Physics I	4
PHY 102:	Physics II	4
PHY 210:	Heat & Thermodynamics	3
PHY 220:	Electronics **OR**	3
PHY 230:	Optics	
PHY 312:	Mechanics **OR**	3-4
MAR/GEL 358:	General Geophysics	
PHY Elective		2-3
MAR or PHY Elective **(Note 3)**		3

B. **Concomitant Courses: 38 s.h.**

1. **Biology: 8 s.h.**

BIO 104:	Principles of Biology	4
BIO 106:	Introduction to Zoology **OR**	4
BIO 108:	Introduction to Botany **(Note 4)**	

2. **Chemistry: 8 s.h.**

CHM 100:	General Chemistry I	4
CHM 102:	General Chemistry II	4

3. **Geography: 3 s.h.**

GEG 204:	Meteorology **OR**	3
GEG 274:	Geographic Information Systems I **OR**	
GEG 347:	Remote Sensing	

4. **Geology: 4 s.h.**

GEL 100:	Physical Geology	4

5. **Mathematics: 15 s.h.**

MAT 140:	Applied Statistical Methods **OR**	3
PSY 200:	Statistics for the Social and Behavioral Sciences **(Note 5)**	
MAT 171:	Calculus I	3
MAT 172:	Calculus II	3
MAT 273:	Calculus III	3
MAT 340:	Differential Equations	3

* Only offered at the Marine Science Consortium.
[1] Required courses may be used to satisfy General Education Category IV – A, B, C, D and/or Category V.
[2] Courses in this category may be used to satisfy the minimum of 9 s.h. that must be taken at the Marine Science Consortium, Wallops Island, Virginia. However, students are encouraged to take more courses at the MSC to fulfill the electives.

[3] MAR elective at 200 level or above. PHY elective 110, 220, or 230, 312 or 358, 315 & 316.
[4] Zoology recommended.
[5] PSY 011 is a prerequisite for PSY 200.

MATHEMATICS

A. **General Education:** **69 s.h.**
B. **Major Program:** **36 s.h.**
1. **Required Courses: 24 s.h.**
MAT 171, 172, 224, 260, 273, 274, 301, 311, 340, 361, 380
2. **Elective: 3 s.h.**
MAT 302, 312, 351
3. **Electives: 6 s.h.**
MAT 220, 240, 302, 312, 332, 351, 352, 370, 431
C. **Concomitant Courses:** **20 s.h.**
1. **Required Courses: 6 s.h.**
PHI 140, WRI 207
2. **Physics Courses: 6 s.h.**
PHY
PHY
D. **Math Internship (optional): 3 to 6 s.h.**
MAT 280, taken on a pass/fail basis, may be available to qualified students, but this is not required for completion of the BS in Math degree. Information about internships may be obtained in the Department of Mathematics and Computer Science.

NOTES: BS Mathematics majors may take at most 15 courses (45 credits) with a MAT prefix.

MAT-prefix courses below the 170-level and MAT 280 do not count against the upper limit of 45 credits of MAT courses.

Courses taken in Part 2 of Section B are excluded from Part 3 of Section B.

MAT 280 may be counted under Gen. Ed. V.

Courses may satisfy more than one requirement, but only count once toward 120 s.h. to graduate.

MEDICAL TECHNOLOGY

A. **Six semesters at Kutztown University**
1. **General Education: 54 – 55 hrs.**
(Twelve credits are filled as part of the major program requirements.)
2. **Biology: 23 s.h.**
Required:

BIO 104:	Principles of Biology	4
BIO 106:	Introduction to Zoology	4
BIO 224:	Applied Environmental Microbiology	3
BIO 234:	Animal Physiology	3
BIO 310:	Genetics	3
BIO 336:	Medical Microbiology	3

Biology Elective
3. **Concomitant Courses: 26 s.h.**

CHM 100:	General Chemistry I	4
CHM 102:	General Chemistry II	4
CHM 310:	Biochemistry **OR**	4
PHY 040:	General Physics I	
CHM 214:	Organic Chemistry I	4
CHM 216:	Organic Chemistry II	4
MAT 105:	College Algebra	3
MAT 140:	Applied Statistical Methods	3

B. **Clinical Education:** **30 s.h.**
(One calendar year at an affiliated hospital)
1. It is the student's responsibility to apply for admission to the hospital program. Admission is on a competitive basis. Details of application procedures are available from the Coordinator of the Medical Technology Program.
2.

MED 320:	Clinical Microbiology	6-10
MED 330:	Clinical Chemistry	6-10
MED 340:	Clinical Hematology/Coagulation	5-10
MED 350:	Clinical Immunohematology	3-6
MED 360:	Clinical Immunology/Serology	2-4
MED 370:	Clinical Seminar	1-6

NURSING
(Accredited by the National League for Nursing Accrediting Commission, Inc.)

A. **General Education:** **60 - 62 s.h.**
B. **Major Program:** **58 - 59 s.h.**
1. **Lower Division Nursing: 23 s.h.**
a. Credits awarded based on lower division transfer policy – 20 s.h.
b. Nursing Clinical Challenge or PA Articulation Agreement – 3 s.h.
2. **Upper Division Nursing: *29 s.h.**
a. NUR 299; 308-309; 311; 312; 314; 316; 322; 332-333; 342; 370 or 371; 375; 400.
b. Elective Nursing Courses: 9 s.h.
C. **Concomitant Courses:** **6 - 7 s.h.**
BIO 160-161 or BIO 224-225;
MAT 140 or PSY 200 or Equivalent Course or higher numbered statistics course.
D. A grade of "C" or better is necessary in order to progress from one nursing course to another.
E. Successful completion of a comprehensive examination is required.

PHYSICS

A. **General Education:** **46 - 49 s.h.*****
B. **Major Program:** **45 - 46 s.h.****
1. **Required Courses: 37 s.h.**
PHY 100: Physics I
PHY 102: Physics II
PHY 110: Modern Physics
PHY 210: Heat & Thermodynamics **
PHY 220: Electronics
PHY 230: Optics
PHY 312: Mechanics
PHY 315: Advanced Lab I **OR**
PHY 319/465: Advanced Lab II
PHY 316: Electricity and Magnetism
PHY 360/470: Quantum Mechanics
PHY 362/472: Solid State Physics **OR**
PHY 364/474: Nuclear Physics
PHY 380: Senior Seminar
2. **Elective Courses: 8/9 s.h.**
EGR 121: Drawing and Lettering
AST 140: Astronomy I
AST 142: Astronomy II
AST numbered above 142
MAT 260: Linear Algebra
MAT 301: Probability & Statistics I

CHM 316: Physical Chemistry II
GEL 358: General Geophysics
PHY 315: Advanced Lab I **OR**
PHY 319/465: Advanced Lab II
PHY 362/472: Solid State Physics **OR**
PHY 364/474: Nuclear Physics
PHY 370: Research in Physics
PHY 372-375: Special Topics

C. **Concomitant Courses:** **26 s.h.**
   1. **Chemistry: 8 s.h.**
      CHM 100: General Chemistry I
      CHM 102: General Chemistry II
   2. **Mathematics: 15 s.h.**
      MAT 171: Calculus I
      MAT 172: Calculus II
      MAT 273: Calculus III
      MAT 274: Calculus IV
      MAT 340: Differential Equations
   3. **Biology: 4 s.h.**
      BIO 104: Principles of Biology
D. Successful completion of a Comprehensive Examination is required.

NOTE: Physics majors must have a reading knowledge of a modern language equivalent to the intermediate level or a minimum of 6 s.h. in CIS courses above 100 level.
** CHM 314 Physical Chemistry I may be substituted for PHY 210 Heat and Thermodynamics.
*** Appropriate courses in mathematics, physics and chemistry apply toward the requirements under Section 4 and/or Section 5 of General Education.

PSYCHOLOGY — GENERAL TRACK

All Psychology programs require a 2.0 QPA for Internal Transfers and a grade of "C" or higher in PSY 011, General Psychology, to enter any B.S. Psychology degree or minor program.

A. **General Education:** **60 s.h.**
B. **Major Program:** **39 - 45 s.h.**
   1. **Required Courses: 15 s.h.**
      PSY 011, 200, 270, 379, 380
      (PSY 011, 200, and 270 require a grade of "C" or better to graduate.)
   2. **A minimum of one course from each area: 12 s.h.**
      Area 1: PSY 202, 240, 250
      Area 2: PSY 110, 120, 125 *
      Area 3: PSY 311, 340
      Area 4: PSY 312, 325
   3. **Advanced Electives: 3 s.h.**
      Any 300 or 400 level course.
   4. **Psychology Electives: 9 - 15 s.h.**
      If more than 9 hours, the other 3 or 6 to go under General Education Sections III or V.
C. **Concomitant Courses:** **9 s.h.**
   100 level and above in Arts and Sciences courses.
D. **Free Electives (except PSY):** **12 s.h.**
E. Successful completion of a comprehensive examination is required.

* A maximum of 6 credits from PSY 110, 120, and 125 may be taken toward graduation.

PSYCHOLOGY /with PARALEGAL STUDIES*

A. **General Education:** **60 s.h.**
B. **Major Program:** **39 s.h.**
   1. **Required Courses: 18 s.h.**
      PSY 011, 200, 217, 270, 379, 380
      (PSY 011, 200, and 270 require a grade of "C" or better to graduate.)
   2. **A minimum of ONE course from each area: 12 s.h.**
      Area 1: PSY 202, 240, 250
      Area 2: PSY 110, 120, 125 **
      Area 3: PSY 311, 340
      Area 4: PSY 312, 325
   3. **Psychology Electives: 9 - 12 s.h.**
      If more than 9 hours, the other 3 or 6 to go under General Education Sections III or V.
C. **Paralegal Studies:** **21 s.h.**
   1. **Required: 18 s.h.**
      PLG 120, 150, 200, 215, 220 or 245
   2. **Select ONE of the following: 3 s.h.**
      PLG 230, 235, 240, 250, 255, or
      Select as one unit: PLG 125, 130 and 135.
D. Successful completion of a comprehensive examination is required.

* This major is a special program designed in cooperation with Lehigh-Carbon Community College. All Paralegal Studies courses are taken through LCCC as part of a special cooperative program. Paralegal Studies courses (PLG prefix) may only be used by students who are enrolled in and complete this special KU-LCCC program.
** A maximum of 6 credits from PSY 110, 120, and 125 may be taken toward graduation.

PSYCHOLOGY — CLINICAL/COUNSELING

A. **General Education:** **60 s.h.**
B. **Major Program:** **39 - 45 s.h.**
   1. **Required Courses: 21 s.h.**
      PSY 011, 200, 202, 250, 270, 379, 380
      (PSY 011, 200, and 270 require a grade of "C" or better to graduate.)
   2. **A minimum of ONE course from each area: 9 s.h.**
      Area 1: PSY 110, 120, 125 *
      Area 2: PSY 311, 340
      Area 3: PSY 312, 325
   3. **Advanced Electives: 6 s.h.**
      Choose from: PSY 310, 331, 360, 363 and 364, 370, 375, 429, 432
   4. **Free Psychology Electives: 3 - 9 s.h.**
      If more than 3 hours, the other 3 s.h. or 6 s.h. to go under General Education, Sections III or V.
C. **Concomitant Courses:** **9 s.h.**
   Select from the following prefixes: ANT, CRJ, SOC, SPA (Intermediate level or higher), SWK (100 level and above)
D. **Free Electives (except PSY):** **12 s.h.**
E. Successful completion of a comprehensive examination is required.

* A maximum of 6 credits from PSY 110, 120, and 125 may be taken toward graduation.

PSYCHOLOGY — INDUSTRIAL/ORGANIZATIONAL

A. **General Education:** **60 s.h.**
B. **Major Program:** **39 - 45 s.h.**
   1. **Required Courses: 21 s.h.**
      PSY 011, 200, 220, 240, 270, 379, 380
      (PSY 011, 200, and 270 require a grade of "C" or better to graduate.)
   2. **A minimum of ONE course from each area: 9 s.h.**
      Area 1: PSY 110, 120, 125 *
      Area 2: PSY 311, 340
      Area 3: PSY 312, 325
   3. **Advanced Electives: 6 s.h.**
      Choose from: PSY 202, 310, 245, 255, 333, 350, 355, 362, 370.
   4. **Free Psychology Electives: ** 3 - 9 s.h.**
      If more than 3 hours, the other 3 or 6 to go under General Education, Sections III or V.
C. **Concomitant Courses:** **9 s.h.**
   Select from the following prefixes:
   ACC, BUS, MGM, MKT, POL 347, SOC 270
   (100 level and above)
D. **Free Electives (except PSY): 12 s.h.**
E. Successful completion of a comprehensive examination is required.

* A maximum of 6 credits from PSY 110, 120, and 125 may be taken toward graduation.

PUBLIC ADMINISTRATION

A. **General Education:** **60 s.h.**
B. **Major Program:** **42 s.h.**
   1. **Required Courses: 33 s.h.**
      POL 215, 225, 226, 346, 347, 381, 390, 425
   2. **Electives in Political Science:**
      POL 010 or 050: 3 s.h. plus 6 s.h. electives
C. **Concomitant Courses:** **6 s.h.**
   Statistics and Computer Literacy Component (at 100 or above)
D. **Free Electives:** **12 s.h.**
   Select courses in the Arts and Sciences disciplines, except POL courses.
E. Successful completion of a comprehensive examination is required.

PUBLIC ADMINISTRATION/CO-OP PROGRAM IN PARALEGAL STUDIES*

A. **General Education:** **51 s.h. ****
B. **Major Program:** **42 s.h.**
   (of which 33 are in required courses and 9 of which are in POL electives.)
   1. **Required Courses: 33 s.h.**
      POL 215, 225, 226, 346, 347, 381, 390, 425.
   2. **Major Electives: 9 s.h.**
      POL 010 or 050, an elective in POL and an additional elective in POL or PLG
C. **Concomitant Courses:** **6 s.h.**
   Statistics course and CIS 112 or above.
D. **Paralegal Studies Courses:** **21 s.h.**
   Take the following courses: PLG 120, 150, 200, 215, 220, 245.
   Select one of the following:
   PLG 230, 235, 240, 250, 255,
   Or Select as one unit:
   PLG 125,130 and 135.
E. Successful completion of a comprehensive examination is required.

* This major is a special program designed in cooperation with Lehigh-Carbon Community College. All Paralegal Studies courses are taken through LCCC as part of a special cooperative program. Paralegal Studies courses (PLG prefix) may only be used by students who are enrolled in and complete this special KU-LCCC program.

BACHELOR OF SOCIAL WORK

The principal educational objective of this program is the preparation of students for beginning social work practice. The program is accredited by the Council in Social Work Education.

A. **General Education:** **60 s.h.**
B. **Major Program:** **48 s.h.**
   1. **Required Courses: 39 s.h.**
      SWK 100, 130, 160, 200, 250, 255, 265, 280, 360, 381, 382, 383, 384
   2. **Elective Courses: 9 s.h.**
      SWK 290, 315, 320, 328, 370, 371, 372, 373, 374, 375, 376, 377, 378, NUR/SWK 320, 379
C. **Concomitant Courses:** **12 s.h.**
   The following subject areas and specific courses are highly recommended because of their relevancy to the theory and practice of social work. However, other courses in the subject areas which are of special interest to the student may be selected with the approval of the advisor: ANT 010, 125, 130, 254, ANT/PSY 290; BIO 130, 140; 181; ECO 301; GEG 310, 311, 338; HIS 145, 150, 229, 240, 244; CIS 112, 135; MIC 010; PHI 020, 030, 040, 240; POL 010, 050, 215, 225; PSY 110, 120, 200, 240, 250; SOC 110, 120, 128, 140, 245, 250, 255.
D. **Comprehensive examination**
   Social Work majors must successfully complete a written comprehensive examination as a condition for graduation. This examination is given in two parts — the first in Fall, the second in Spring.

SPECIAL PROGRAMS FOR LIBERAL ARTS STUDENTS

LIBRARY SCIENCE

A concentration for liberal arts students in Library Science qualifies them for certification as a provisional librarian in public libraries in Pennsylvania. These core Library Science courses may also be used as prerequisites for further study on the graduate level in Library Science. The block of courses will enable the student to develop skills and methods required to work in Reference and Reader's Advisory Services, the Children's or Young Adult Collection, and in the technical service components of a public library.

Required Courses:

LIB 011:	Information Needs & Service I	3
LIB 121:	Resources for Children OR	3
LIB 313:	Cataloging & Classification I	3
LIB 322:	Resources for Young Adults	3
LIB 375:	Field Work	3

3+2 ENGINEERING PROGRAM

The faculties of Kutztown University and the Colleges of Engineering and Earth and Mineral Sciences of the Pennsylvania State University have agreed to establish an educational program in liberal arts and engineering. Three years, or the equivalent, will be spent by an enrolling student at Kutztown University, where the student will study liberal arts subjects along with pre-engineering courses in the basic sciences. Upon satisfactory completion of the first three years and the recommendation of the Kutztown engineering program advisor, the student will enter the Pennsylvania State University. Successful completion of this five-year program results in awarding of an appropriate engineering degree from PSU and, in special cases, a bachelor's degree in General Studies from Kutztown University.

A. **General Education:** **60 - 62 s.h.**

B. **Required Courses at Kutztown University**
   1. MAT 260, 171, 172, 273, 274, 340
   2. CHM 100-101, 102-103
   3. PHY 100-101, 102-103, 110, 312, 315
   4. ENG 023, 024 or WRI 220
   5. SPE 010 or 130
   6. CIS 135
   7. EGR 121

C. **Social Science — Arts — Humanities**
   1. A minimum of 6 credits must be in social sciences. One course must be in economics.
   2. A minimum of 6 credits must be in humanities.
   3. A minimum of 6 credits must be in the arts area.
   4. A minimum of one, 6-credit sequence is required. A sequence is defined as a set of sequential courses in one discipline in which the first course is introductory and succeeding courses are more advanced.
   5. Courses in freshman English, writing, language skills, the performing arts, studio arts and art practicum, business, finance and management are not considered arts, humanities or social sciences for the purpose of this program.

D. **Additional Requirements**
   1. Chemical Engineering:
      CHM 214-215, 216-217
   2. Aerospace, Electrical Engineering:
      MAT 473
   3. Mining Engineering:
      GEL 100-101, 220-221
   4. Petroleum and Natural Gas Engineering:
      GEL 100-101, 102-103

SUMMARY OF REQUIREMENTS FOR GRADUATION IN THE COLLEGE OF LIBERAL ARTS AND SCIENCES

1. Completion of at least 120 semester hours of college work in accordance with all requirements (1) General Education; (2) Major Field; (3) Concomitant Courses; and (4) Arts and Sciences Electives as set forth for each program.
2. Attainment of passing grades in all courses specifically required under Section 1 of General Education and under the Major Program.
3. Attainment of specified levels in modern language.
4. Attainment of at least a 2.00 cumulative quality point average for all courses taken at the college level.
5. Attainment of at least a 2.00 quality point average for all courses taken in the Major Field.
6. Successful completion of a comprehensive examination in the Major Field.

College of Visual and Performing Arts

The College Mission:
The Mission of the College of Visual and Performing Arts at Kutztown University is to engage its students in the development of arts, skills, critical thinking, historical perspectives, problem-solving, individual growth and academic excellence to prepare them to contribute to the diverse global environment. The College of Visual and Performing Arts will educate the students in a wide variety of visual and performing art forms, while maintaining a commitment to academic excellence. The college will also help students develop specialized visual and verbal communication skills, critical thinking and problem-solving skills.

Art/Design Unit Mission and Goals:
Within the College of Visual and Performing Arts, the programs in Art Education and Crafts, Fine Arts, and Communication Design function as the Art/Design Unit. These programs have developed the following Mission and Goals appropriate to their common purposes:

Mission:
The Visual Arts Unit of the College of Visual and Performing Arts is dedicated to providing a diverse community of post-secondary students with excellent opportunities for learning in and through the arts. The unit prepares students by developing their technical skills, aesthetic sensibilities, creative insight, critical faculties, and historical perspectives, and by providing cultural opportunities and community and professional experiences needed to integrate the arts throughout their lives. The unit is committed to leadership in the arts through its degree and certification programs, general education coursework, outreach programs, cross-cultural exchanges, and community partnerships.

Goals:
- To provide excellent programming that is commensurate with and responsive to contemporary practices in the visual arts.
- To provide students with the knowledge, concepts, skills, and dispositions to continue professional, personal and artistic growth.
- To develop a community that values scholarship, artistic production, and other professional practices.
- To provide an environment that promotes excellence in the study of the visual arts and related fields.
- To position the university within the community as a leader in visual arts related initiatives.
- To provide students and faculty with experiences with diverse cultures, with an emphasis on their visual imagery.
- To foster an environment that values human diversity.
- To promote the use of existing and emerging technologies to achieve the unit's mission.

BACHELOR OF SCIENCE IN ART EDUCATION (120 s.h.)

(Effective Fall 2004)

Goals:
1. To provide programming that is commensurate with contemporary standards for art education at the baccalaureate level.
2. To provide teacher candidates with the knowledge, concepts, skills and dispositions to continue their professional and personal growth in art education and its related fields.
3. To foster the professional development of the faculty as they pursue their scholarly, artistic and professional practices in art education and its related fields.
4. To foster the understanding of research by art education practitioners.
5. To provide opportunities for personal, professional and community development through the study and construction of art, design, and visual culture.
6. To foster the development of a community of art educators that functions on the local, regional, and national levels.
7. To foster art education related initiatives that encourage international exchanges of students and faculty.
8. To provide educational opportunities for teacher candidates to learn about art education and its related fields in relationship to traditional and contemporary cultures.
9. To foster an environment that values and promotes art, design, and visual culture as an influence in the promotion of diversity and individual growth.
10. To foster an understanding of technology's role in the production of visual culture and educational experiences.

Objectives:
1. Meet or exceed initial certification requirements in compliance with NCATE, NASAD, PDE, and national standards.
2. Provide mechanisms for the self-assessment of data related to students, faculty, and other sources.
3. Facilitate and assess student understanding of professional ethics, deportment, requirements, and opportunities.
4. Establish and assess the curriculum, including scope and sequence.
5. Establish and assess the admission and exit requirements for the degree.
6. Provide coursework related to schooling, communication, and human development.
7. Provide methods, courses, and clinical experiences which integrate knowledge, skills, and dispositions.
8. Provide opportunities for introductory and advanced instruction in the processes, procedures, and products associated with artistic production.
9. Provide opportunities for understanding the images, histories, theories, and critical approaches associated with visual studies.
10. Provide support for the artistic, scholarly, and professional development of faculty.
11. Integrate writing intensive tasks and critical thinking tasks throughout the program.
12. Utilize the expertise found in other programs to strengthen student competencies.
13. Provide opportunities to apply scholarship in art education and related fields to pre-professional clinical settings.
14. Provide opportunities through field trips, campus exhibitions and visiting artists and scholars as a complement to the regular campus academic and studio offerings.
15. Establish and assess off-campus field experiences, student teaching experiences and internships as opportunities to produce comprehensive enriching programs.
16. Provide opportunities for the promotion and development of involvement with local, regional, and national organizations.
17. Provide access to study abroad programs, visiting artists and scholars, and student exchanges.
18. Provide access to visual culture coursework that includes a broad

range of images and perspectives on their use and value.

19. Provide opportunities for clinical experiences in a broad range of school settings.
20. Integrate understanding of cultural diversity in visual studies, art studio, art education methods, and clinical coursework.
21. Provide access to coursework in special education and human development.
22. Provide opportunities for understanding the implication of human technologies for teaching and learning in and through the arts.

This program is designed to prepare students to become teachers of art for the public schools and to be able to communicate effectively about art in a variety of social settings. Upon successful completion of the program the student is certified to teach art from kindergarten through twelfth grade if the student meets all other Pennsylvania requirements and completes the necessary application for Certification. The program is made up of two components: (1) General Education which consists of 48 s.h. in Basic Requirements, Humanities, Social Science and Natural Science; and (2) Major Program which consists of 72 s.h. in educational methodology, student teaching, art studio, art history and related coursework.

STUDENTS ENROLLED IN ART EDUCATION ARE SUBJECT TO ALL COLLEGE OF EDUCATION REQUIREMENTS AS LISTED IN THE CATALOG. HOWEVER, ART EDUCATION STUDENTS MUST ACHIEVE AND MAINTAIN A QPA OF 3.0 ONCE THEY HAVE REACHED 48 CREDIT HOURS: PRIOR TO REACHING 48 CREDITS, ALL STUDENTS MUST HAVE PASSED WITH A C OR BETTER SPE 110, ENG 023, ANY ENGLISH LITERATURE COURSE, AND TWO MATH COURSES.

GENERAL EDUCATION REQUIREMENTS (48 s.h.)

1. **Basic Requirements: 6/7 s.h.**
   a. English Composition
      (ENG 023, 024, 025 or 230 – 3 s.h.)
   b. Health (HPD 110, 115, 116 – 2/3 s.h.)
   c. Dance or Physical Education (DAN, HPD – 1 s.h.)
2. **Humanities: 24 s.h.**
   a. ARH 024: Art History A (3 s.h.)
   b. ARH 025: Art History B (3 s.h.)
   c. English Literature (3 s.h.)
   d. Humanities Elective (Mod. Lang., PHI, MUS, THE, WST – 3 s.h.)
   e. SPE 010: Fundamentals of Speech (3 s.h.)
   f. RAR 200: Visual Culture: Theory (3 s.h.)
   g. RAR 300: Visual Culture: Practice (3 s.h.)
   h. Global Perspectives (3 s.h.)
      (any ART/ARH/RAR identified as satisfying a non-western perspective)
3. **Social Sciences: 9 s.h.**
   a. PSY 011: General Psychology (3 s.h.)
   b. PSY 140: Educational Psychology (3 s.h.)
   c. Social Science Electives (3 s.h.)
      (ANT, ECO, GEG, HIS, POL, PSY, SOC, INT)
4. **Natural Sciences: 9 s.h.**
   a. Mathematics (3 s.h.)
      (any – MAT 021 recommended)
   b. Mathematics (3 s.h.)
      (any – MAT 023 recommended)
   c. Laboratory Science Elective (3 s.h.)
      (AST, BIO, CHM, GEG (meteorology), GEL, MAR, PHY)

MAJOR PROGRAM REQUIREMENTS (72 s.h.)

An additional 3 clock hours of work each week, outside of the scheduled class meeting times, is required in all studio courses.

The curriculum has been designed in logical sequences which mandate the completion of certain courses before others. This is particularly true of the art studio and art education courses.

Students should register for the specific courses listed each semester. Some courses are offered only spring or fall. Should schedule conflicts arise, the student should consult with his/her advisor. ARU 399 must be scheduled for the senior year.

1. **Professional Education: 33 s.h.**
   a. ARU 110: Teach. Art/Visual Cult. in Elem. Ed 3
   b. ARU 210: Teach. Art/Visual Cult. in Mid. Schools 3
   c. ARU 310: Teach. Art/Visual Cult. in HS 3
   d. ARU 301: Art Education Field Experience 4
   e. EDU 100: Perspectives on American Education 3
   f. SPU 100: Introduction to Special Education 3
   g. ARU 390: Student Teaching A 7
   h. ARU 391: Student Teaching B 7
2. **Art Studio – Basics: 15 s.h.**
   a. ART 031: Two-Dimensional Design 3
   b. FAR 015: Drawing I 3
   c. ART 032: Three-Dimensional Design 3
   d. FAR 016: Drawing II 3
   e. ART/FAR 182: Intro to Digital Media 3
3. **Art Studio – Breadth: 15 s.h.**
   a. CFT 121: Ceramics I 3
   b. FAR 111: Introduction to Painting 3
   c. Two-Dimensional Elective (select one) 3
      i. CFT 131: Weaving I
      ii. FAR 131: Introduction to Watercolor
      iii. FAR 151: Introduction to Life Drawing
   d. Three-Dimensional Elective (select one) 3
      i. ART 270: Installations
      ii. CFT 110: Craft Design
      iii. CFT 141: Non-Loom Fabric Structures
      iv. CFT 151: Wood Design
      v. CFT 161: Fine Metals
      vi. FAR 171: Sculpture
   e. Multiples Elective (select one) 3
      i. ART 201: Serigraphy
      ii. ART 330: Animation
      iii. FAR 141: Printmaking
      iv. FAR 161: Photography
4. **Art Studio – Concentration: 6 s.h.**
   Two courses at the 200 level or above in any approved CFT, FAR, FAS, or CDE concentration area
5. **Visual Art Elective: 3 s.h.**
   Any ARH, ART, CDE, CFT, CDH, FAR, FAS, or RAR
6. **Senior Exhibition: 0 s.h.**
   ARU 399: Senior Exhibition 0

SEQUENCED BY SEMESTER

<u>First Semester</u>

a. ART 031: Two-Dimensional Design
b. FAR 015: Drawing I
c. ENG 023: English Composition
d. ARH 025: Art History B
e. Mathematics (MAT 101: Fundamentals of Math I recommended)

Second Semester

a. ART 032: Three-Dimensional Design
b. FAR 016: Drawing II: (FAR 015 prerequisite)
c. Mathematics (MAT 102: Fundamentals of Math II recommended)
d. English Literature
e. SPE 010: Fundamentals of Speech

Third Semester

a. ARU 110: Teaching Art/Visual Culture in Elementary Settings
b. ART/FAR 182: Introduction to Digital Media
c. CFT 121: Ceramics
d. ARH 024: Art History A
e. PSY 011: General Psychology

Fourth Semester

a. Three-Dimensional Elective (ART, CFT, FAR)
b. FAR 111: Introduction to Painting
c. CFT 121: Ceramics I
d. Global Perspectives (ART, ARH, or RAR)
e. PSY 140: Educational Psychology

Fifth Semester

a. ARU 210: Teach. Art/Visual Cult. in Mid. Schools
b. Multiples Elective (ART, FAR)
c. Two-Dimensional Elective (CFT, FAR)
d. RAR 200: Visual Culture: Theory
e. Lab Science Elective

Sixth Semester

a. ARU 310: Teach. Art/Visual Cult. in HS
b. Visual Art Elective
(any ART, ARH, ARU, CDE, CDH, CFT, FAR, FAS, RAR)
c. Visual Art Concentration
(200 level or above in any CFT, FAR, or CDE concentration area)
d. RAR 300: Visual Culture: Practice
e. Social Science Elective
(ANT, ECO, GEG, HIS, POL, PSY, SOC, INT)

Seventh Semester

a. ARU 301: Art Education Field Experience
b. SPU 100: Introduction to Special Education
c. Visual Art Concentration
(200 level or above in CFT, FAR, or CDE concentration area)
d. Health Elective (HPD 110, 115, 116)
e. Humanities Elective (Mod. Lang., PHI, MUS, THE, WST)

Eighth Semester

a. ARU 390: Student Teaching A
b. ARU 391: Student Teaching B

BACHELOR OF FINE ARTS IN COMMUNICATION DESIGN (120/124 s.h.)

(Effective Fall 2003)

Mission:

The Mission of the Communication Design department is to provide students with the professional and technical skills required careers as visual communicators. Curricular emphasis is on conceptual development through the use of critical thinking and mastery of technical skills. Common core courses ground students in fundamentals, while specific concentrations with the major allow them to specialize in graphic design, advertising design, interactive design* or illustration. Students graduate fully prepared to enter the profession or advance their education through graduate studies.

Goals:

1. To prepare students for careers in the fields of graphic design, advertising design, interactive design and illustration.
2. To instill in students a fundamental knowledge of the origins, traditions and history of design.
3. To teach conceptual development through critical thinking.
4. To prepare students to critique and discuss design work effectively.
5. To inspire students to strive for excellence that is intellectually challenging and allows for individual growth.
6. To provide students with a firm academic and design grounding that will enable them to continue to grow professionally and personally.

Objectives:

1. To provide appropriate admission requirements in Communication Design.
2. To provide safe and appropriate environments for each academic and studio area in Communication Design.
3. To provide curricular flexibility at the upper level in order to foster cross-departmental study.
4. To provide in-depth academic and studio experiences in relationship to Communication Design.
5. To provide off-campus internships as opportunities to produce comprehensive enriching programs.

* Web design and various multi-media techniques.

GENERAL EDUCATION REQUIREMENTS (42/43 s.h.)

1. **Basic Requirements: 6/7 s.h.**
   a. English Composition – 3 s.h.
   b. Health – 2/3 s.h.
   c. Physical Education or Dance – 1 s.h.
2. **Humanities: 18 s.h.**
   a. ARH 024 or 025: Art History – 3 s.h. *
   b. Art History – 3 s.h. *
   c. Literature, Modern Language or Philosophy – 3 s.h.
   d. Music, Speech or Theatre – 3 s.h.
   e. CDH 150: Historical Survey of Graphic Design A – 3 s.h.
   f. CDH 151: Historical Survey of Graphic Design B – 3 s.h.
3. **Social Sciences: 6 s.h.**
   a. History or Political Science – 3 s.h.
   b. Anthropology, Economics, Geography, Psychology, or Sociology – 3 s.h.
4. **Natural Sciences/Math: 3 s.h.**
   a. Biological Science, Physical Science or GEG 202/205, or the Natural Sciences (including ENV 100), or Math – 3 s.h.
5. **Additional Elective: 9 s.h.**
   Any courses (except for studio courses with ART, CDE, CFT, and FAR prefixes), ART 010, 015 are permitted – 12 s.h.

* Students may substitute another art history course for one of the courses listed above.

MAJOR PROGRAM REQUIREMENTS (78/81 s.h.)

An additional 3 clock hours of work each week, outside of the scheduled class meeting times, are required in all studio courses.

1. **Foundation Courses: 14 s.h.**
   Take **EACH** of the following courses:
   a. ART 031: Two-Dimensional Design – 3 s.h.
   b. ART 032: Three-Dimensional Design – 3 s.h.
   c. CDE 022: Introduction to Digital Design I – 2 s.h.
   d. FAR 015: Drawing I – 3 s.h.
   e. FAR 016: Drawing II – 3 s.h.
   (These courses should be taken in the first two semesters to serve as a foundation for later coursework)
2. **General Requirements: 25 s.h.**
   Take **EACH** of the following courses:
   a. CDE 122: Introduction to Digital Description II – 2 s.h.
   b. CDE 130: Typography – 3 s.h.
   c. CDE 141: Visual Translation – 3 s.h.
   d. CDE 147: Visual Thinking – 2 s.h.
   e. CDE 151: Illustration Techniques – 3 s.h.
   f. CDE 220: Print Media Production – 2 s.h.
   g. CDE 231: Advanced Typography – 2 s.h.
   h. CDE 374: Portfolio Seminar – 2 s.h.
   i. CDE 399: Senior Exhibition – 0 s.h.
   j. FAR 151: Introduction to Life Drawing – 3 s.h.
   k. FAR 161: Introduction to Photography – 3 s.h.
3. **Concentration Selections (25/28 s.h.)**
   Select **THREE** of the following courses: – 11/12 s.h.
   a. CDE 238: Graphic Design I – 4 s.h.
   b. CDE 241: Advertising Design I – 4 s.h.
   c. CDE 252: Illustration I – 4 s.h.
   d. CDE 276: Interactive Design I: Web Design – 4 s.h.
   e. Art Studio Elective – 3/4 s.h. **
   Select **TWO** of the following courses: 7/8 s.h.
   a. CDE 239: Graphic Design II – 4 s.h.
   b. CDE 242: Advertising Design II – 4 s.h.
   c. CDE 253: Illustration II – 4 s.h.
   d. CDE 277: Interactive Design II: Multimedia – 4 s.h.
   e. Art Studio Elective – 3/4 s.h. *
   Select **FOUR** 2 s.h. SENIOR SEMINAR courses: 7/8 s.h.
   a. CDE 381: Publication for Print Media – 2 s.h.
   b. CDE 382: Identity Systems – 2 s.h.
   c. CDE 383: Non-Profit/Corporate/Institutional – 2 s.h.
   d. CDE 384: Consumer Product Advertising – 2 s.h.
   e. CDE 385: Advanced Web – 2 s.h.
   f. CDE 386: Advanced Multi-Media – 2 s.h.
   g. CDE 387: The Visual Essay – 2 s.h.
   h. CDE 388: Self Promotion for Illustrators and Designers – 2 s.h.
   OR
   ** two 2 – credit seminar courses and one Art Studio Elective – 3/4 s.h.
4. **Concentration Requirements: 14 s.h.**
   A. **For the Graphic Design, Advertising Design, or Interactive Design: 14 s.h.**
      Select **TWO** Workshop courses – 4 s.h.
      a. CDE 394: Internship – 10 s.h.* OR
      b. Art Studio Electives – 10 s.h.
   * To select CDE 394, students must have a "B" average in the specific concentration.
   B. **For the Illustration Concentration: 14 s.h.**
      Select **ONE** or **TWO** workshops depending on total credits for Art Studio Electives – 4 s.h. **
      CDE 344/345 Advanced Illustration Seminar I & II – 4 s.h.
      Art Studio Electives – 6 s.h. **
   ** Art Studio Elective may be ART, CDE, CFT, FAR, TVR 055.

NOTE: Up to 6 s.h. may be ACC, BUS, MGM, MKT

Available Topics for half semester Workshop Courses are as follows:
- Advanced Computer Layout
- Animation
- Art of Humor, Satire and Caricature
- Campus Graphics
- Digital Animation
- 3D Computer Animation
- Motion Graphics
- Package Design
- Poster Design
- Restaurant Graphics

BY SEMESTER ALIGNMENT

First Semester	s.h.
Drawing I	3
2-D Design	3
Academic Elective	3
Academic Elective	3
ARH 024: Art History	3
	15

Second Semester	
Drawing II	3
3-D Design	3
Introduction to Digital Design I (half semester)	2
Academic Elective	3
English Composition	3
ARH 025: Art History (or another Art History course)	3
	17

Third Semester (CD Introduction)	
Typography	3
Visual Thinking (half semester)	2
Introduction to Digital Design II (half semester)	2
History of Graphic Design A	3
Introduction to Life Drawing *	3
Academic Elective	3
	16

Fourth Semester (CD Introduction)	
Visual Translation (Computer)	3
Illustration Techniques	3
Introduction to Photography *	3
History of Graphic Design B	3
Academic Elective	3
	15

Fifth Semester	
Select any THREE of the first five subject areas below:	11/12
Graphic Design I	
Advertising Design I	
Interactive Design I	
Illustration I	
Art Elective	3/4
Academic Elective	3
Academic Elective	3
	14/15

Sixth Semester	
Select any TWO of the first five subject areas below:	7/8
Graphic Design II	
Advertising Design II	
Interactive Design II	
Illustration II	
Art Elective	3/4

Print Media Production (half semester)	2
Advanced Typography (half semester)	2
Academic Elective	3
	14/15

Semesters below interchangeable for Graphic Design, Advertising Design, Interactive Design concentration with Internship.

Seventh Semester	s.h.
Select FOUR 2 credit senior seminar units or TWO 2 credit units and an art elective:	
Graphic Design Senior Seminar I and II	7/8
Advertising Design Senior Seminar I and II	
Interactive Design Senior Seminar I and II	
Illustration Senior Seminar Visual Essay and Self Promotion	
Art Elective	3/4
Workshop	2
Academic Elective or Art Elective **	3
Academic Elective	3
	15/16

Eighth Semester	
Graphic Design, Advertising Design, Interactive Design (when eligible for internship)	
Internship	10
Portfolio Seminar	2
Workshop	2
	14

Illustration Concentration	
Advanced Illustration Seminar I and II	4
Art Elective	3/4
Portfolio	2
Workshop ***	2
Academic Elective	3
	14/15

Design Students not taking Internship	
Two art studio electives	6
Portfolio	2
Workshop	2
Workshop	2
Academic Elective	3
	15

Required: Senior Exhibition

* Interchangeable third or fourth semesters.
** Art elective if Illustration concentration or if not taking an internship

BACHELOR OF FINE ARTS IN CRAFTS (120/127 s.h.)

(Effective January 2004)

Goals:

1. To foster programming that is commensurate with the contemporary demands of crafts and their related fields.
2. To foster the knowledge, skills and dispositions students will need to continue future professional, personal and artistic growth in crafts and their related fields.
3. To foster an environment that honors and rewards faculty who produce crafts.
4. To foster a challenging environment that allows for comprehensiveness and individual growth in crafts and their related fields.
5. To foster the development of initiatives that are open to university, local and regional groups that promote crafts sensibilities.
6. To foster crafts related initiatives that encourage international exchanges of students and faculty.
7. To integrate understanding of cultural diversity throughout the program.
8. To foster an understanding of the meaningful role technology plays in the production of crafts.

Objectives:

1. Meet or exceed initial certification requirements in compliance with NASAD standards.
2. Establish and assess the admission requirements for the degree.
3. Establish and assess the curriculum, including scope and sequence.
4. Establish and assess appropriate exit requirements for crafts majors.
5. Provide opportunities for instruction in the processes, procedures, and products associated with artistic production.
6 Provide introductory and advanced studio instruction in areas relevant to art education.
7. Provide curricular flexibility at the upper level in order to foster cross-departmental study.
8. Maintain safe and appropriate environments for all academic and studio areas staffed by the program.
9. Provide opportunities for the acquisition of knowledge and skills in crafts and their related fields at both general and specialized levels.
10. Provide support for the artistic, scholarly, and professional development of the faculty.
11. Provide a forum dedicated to the understanding of the objects and issues associated with crafts.
12. Provide opportunities for students to work to develop independent perspectives and solutions to problems associated with crafts.
13. Provide opportunities through field trips, campus exhibitions and visiting artists and scholars as a complement to the regular campus academic and studio offerings.
14. Provide opportunities for involvement with local, regional, and national organizations.
15. Provide access to study abroad programs, visiting artists and scholars, and student exchanges.
16. Provide educational opportunities for students to learn about crafts and their relationship to traditional and contemporary cultures.
17. Integrate technology throughout the program offerings and through introductory and advanced digital media courses.
18. Utilize existing and emerging technologies in the teaching of crafts courses.

This program offers the student a comprehensive curriculum leading to a studio career or graduate study in Crafts.

This degree program requires 120/127 semester hours, 39/40 of which are in General Education, including Basic Requirements, Humanities, Social Sciences, and Natural Sciences.

The degree program is structured with a foundation year required of all studio majors. Following this year the student with the assistance of his/her advisor, chooses Craft courses from a range of FOUR Craft studio areas: Ceramics, Fibers, Fine Metals, and Wood. Students can choose to specialize in one area or choose from either a limited or diverse selection from all areas.

NOTE: Students must seek advisement at all stages of their programs. Admission into the Craft program requires the submission of a portfolio.

Minor Programs: Crafts
Students majoring in Art Education, Communication Design and Fine Arts are eligible to enroll in this minor.

GENERAL EDUCATION REQUIREMENTS (39/40 s.h.)

1. **Basic Requirements: 6/7 s.h.**
   a. English Composition – 3 s.h.
      (ENG 023, 024, 025, or 230)
   b. Health (HPD 110, 115, 116) – 2/3 s.h.
   c. Physical Education or Dance – 1 s.h.
      (HPD 011-095)
2. **Humanities: 12 s.h.**
   a. ARH 024: Art History A – 3 s.h.
   b. ARH 025: Art History B – 3 s.h.
   c. Modern Language, Literature, or Philosophy – 3 s.h.
   d. Music, Speech, Theatre, or Related Arts – 3 s.h.
3. **Social Sciences: 6 s.h.**
   a. Economics, History, Political Science – 3 s.h.
   b. Anthropology, Geography, Psychology, or Sociology – 3 s.h.
4. **Natural Sciences and Mathematics: 6 s.h.**
   a. Any Natural Science course with Lab from the following prefixes: AST, BIO, CHM, GEG, GEL, MAR, PHY – 3 s.h.
   b. Mathematics – 3 s.h.
5. **Additional Electives: 9 s.h.**
   Excluding CFT prefixes – 9 s.h.

MAJOR PROGRAM REQUIREMENTS (81-87 s.h.)

1. **Required Foundations: 12 s.h.**
   a. FAR 015: Drawing I 3
   b. FAR 016: Drawing II 3
   c. ART 031: Two-Dimensional Design 3
   d. ART 032: Three-Dimensional Design 3
2. **Required Art Studios: 12 s.h.**
   a. FAR 171: Introduction to Sculpture 3
   b. CFT 171: Computer Aided Modeling and Rendering 3
   c. FAR 161: Photography I 3
   d. FAR 111: Introduction to Painting **OR** 3
      FAR 131: Introduction to Watercolor
3. **Crafts Requirements: 45-48 s.h.**
   A. **Crafts Survey**
      CFT 010: A Survey of Crafts 3
   B. **Areas of Specialization: 23 s.h.**
      Select **ONE** of the following craft areas
      (Ceramics, Fibers, Fine Metals or Wood)
      CFT 1 3
      CFT 2 4
      CFT 3: Studio 1 4
      CFT 3: Studio 2 4
      CFT 3: Studio 3 4
      CFT 3: Studio 4 4
      CFT 3: Studio 5 4
   C. **Additional Crafts Selections: 16-19 s.h.**
      To be selected from courses in Ceramics, Fibers, Fine Metals, or Wood.
      CFT 3
      CFT 3/4
      CFT 3/4
      CFT 4
      CFT 4
   D. **Crafts Seminar: 3 s.h.**
      CFT 381: Craft Seminar 3
4. **Art History Elective: 3 s.h.**
   ARH 3
5. **Open Electives: 9-12 s.h.**
   Any art course within the Visual Arts areas with ARH, ART, ARU, CDE, CFT, FAR, FAS, or RAR prefixes (excluding ART 010)
   1. 3/4
   2. 3/4
   3. 3/4
6. **Student Exhibition: 0 s.h.**
   CFT 399: Student Exhibition 0

BY SEMESTER ALIGNMENT
An additional 3 clock hours of work each week, outside of the scheduled class meeting times, is required in all Studio courses.

First Semester	s.h.
ENG 023: English Composition I	3
FAR 015: Drawing I	3
ART 031: Two-dimensional Design	3
ARH 024: Art History A	3
Humanities course	3
	15

Second Semester	
ARH 025: Art History B	3
General Education Elective	3
FAR 016: Drawing II	3
ART 032: Three-Dimensional Design	3
Crafts Specialization course	3
	15

Third Semester	
Health course	2/3
Physical Education or Dance I	1
Humanities course	3
CFT 171: Computer Aided Modeling and Rendering	3
FAR 171: Introduction to Sculpture	3
Crafts Specialization course	4
	16/17

Fourth Semester	
FAR 111: Introduction to Painting **OR**	3
FAR 131: Introduction to Watercolor Painting	
General Education Elective	3
CFT 010: A Survey of Crafts *	3
Crafts Specialization course	4
Crafts Selection course	3/4
	16/17

Fifth Semester	
Math course	3
Open Elective	3/4
(Select courses from the following prefixes: ARH, ART, ARU, CDE, CFT, FAR, FAS, or RAR)	
FAR 161: Photography I	3
Crafts Specialization course	4
Crafts Selection course	3/4
	16/18

Sixth Semester	
Social Science course	3
Crafts Selection course	3/4
Crafts Specialization course	4
Open Elective	3/4
(Select courses from the following prefixes: ARH, ART, ARU, CDE, CFT, FAR, FAS or RAR)	
Natural Science with Lab course	3
	16/18

Seventh Semester

General Education Elective	3
Art History Elective	3
Open Elective	3/4
(Select courses from the following prefixes: ARH, ART, ARU, CDE, CFT, FAR, FAS or RAR)	
Crafts Specialization course	4
Crafts Selection course	3/4
	16/18

Eighth Semester

Social Science course	3
CFT 381: Craft Seminar *	3
Crafts Specialization course	4
Crafts Selection course	3/4
Open Elective	3/4
(Select courses from the following prefixes: ARH, ART, ARU, CDE, CFT, FAR, FAS or RAR)	
CFT 399: Student Exhibition **	0
	16/18

* CFT 010 A Survey of Crafts, CFT 381 Crafts Seminar, and CFT 115 Drawing for Designers, are offered every other year.
** During the senior year, each student is expected to exhibit examples of his/her work. The student will schedule his/her exhibition by registering for CFT 399 Student Exhibition.

NOTE: Each 300 level Crafts studio is repeatable for up to 20 s.h. However, students are limited to one studio course (4 s.h.) per Crafts area each semester.

BACHELOR OF FINE ARTS IN STUDIO ART (120/123 s.h.)

(Effective Fall 2002)

Goals:

1. To provide a studio art program that is commensurate with and responsive to contemporary discourse in higher education in studio art.
2. To familiarize students with contemporary art, theories and discourses.
3. To familiarize students with the history of art.
4. To foster an understanding of artistic production and to promote familiarity with major, traditional and emerging art mediums.
5. To prepare studio art majors to enter the professional arts community.
6. To foster expertise and individual creativity in at least one traditional or emerging art medium.
7. To foster critical thinking, analytical and verbal skills as they pertain to the arts.
8. To develop new learning opportunities in the visual arts at Kutztown University.
9. To foster an understanding of art's relevance to contemporary life.
10. To foster an intellectually challenging environment that welcomes diversity and individual growth.
11. To develop curricular offerings in digital art.
12. To enhance current curricular offerings in studio art and art history by applying current technologies.

The studio art program offers a B.F.A., a professional degree, in Studio Art. The major program (81 semester hours) is combined with a course of study in general education (39-42 semester hours) to provide professional training within a liberal arts context. The program is comprehensive and flexible, combining a breadth of studio experience with in-depth study of one major medium. After completing 12 credits in foundation drawing and design, students take introductory studios in all of the major mediums. Students choose an area of concentration (drawing, painting, printmaking, sculpture, photography), which is completed with 18 credits. For flexibility, students choose 21 credits of arts electives in any combination of studio (including digital art), crafts, art history and visual studies. The requirement of 15 credits in art history supports student creative development and sharpens critical thinking and analytical skills. A required course in the Business of Art and participation in Senior Exhibition acquaint students with professional practices as they prepare for a career in visual arts. Graduates are prepared to pursue advanced degrees, teach in private schools and art centers, work as professional illustrators and photographers, and enter the art community through museum or gallery work.

GENERAL EDUCATION REQUIREMENTS (39/42 s.h.)

1. **Basic Requirements: 6/7 s.h.**
   - A. English Composition – 3 s.h.
   - B. Health – 2/3 s.h.
   - C. Physical Education or Dance – 1 s.h.
2. **Humanities: 12 s.h.**
   - A. Art History 024 or 025 – 3 s.h.
   - B. Modern Languages, Literature, or Philosophy – 3 s.h.
   - C. Music, Speech, or Theatre – 3 s.h.
   - D. Elective in any Humanities area above – 3 s.h.
3. **Social Sciences: 9 s.h.**
   - A. History or Political Science – 3 s.h.
   - B. Anthropology, Economics, Geography, Psychology, or Sociology – 3 s.h.
   - C. Elective in any Social Science area above – 3 s.h.

   (Specified GEG courses may **NOT** be taken in this category.)
4. **Natural Sciences/Math: 6/8 s.h.**
   - A. Biological Science with Lab, Physical Science with Lab, or GEG 204, 324 – 3/4 s.h.
   - B. Elective in Math (except MAT 021 & 022) or the Natural Sciences — 3/4 s.h.

   (ENV 100 and specified GEG courses may be taken as an elective in this category.)
5. **Additional Elective: 6 s.h.**
   - A. Select any courses (except for studio courses with ART, CDE, CFT, FAR and FAS prefixes and except for MAT 021, MAT 022, HPD 011-095) – 3 s.h.

MAJOR PROGRAM REQUIREMENTS (81 s.h.)

1. **Studio Art/Core: 63 s.h.**
   - A. Foundation Courses: 12 s.h.
     Drawing I – 3 s.h.
     Drawing II – 3 s.h.
     2D Design – 3 s.h.
     3D Design – 3 s.h.
   - B. **Studio Requirements: 18 s.h.**
     Introduction to Painting – 3 s.h.
     Introduction to Printmaking – 3 s.h.
     Introduction to Life Drawing – 3 s.h.
     Introduction to Photography – 3 s.h.
     Introduction to Sculpture – 3 s.h.
     Business of Art – 3 s.h.
     Student Exhibition – 0 s.h.

C. **Art History Requirements: 12 s.h.**
Art History A and B – 6 s.h.
European Modernism – 3 s.h.
Art History Elective – 3 s.h.
Art History Elective – 3 s.h.
(one elective must be in non-modern area)

D. **Art Electives: 21 s.h.**
Select courses with the following prefixes: ARH, ART, CDE, CFT, FAR, FAS, RAR (excludes all foundation courses and ART 015)

2. **Studio Concentration: 18 s.h.**
Concentration to be in Drawing, Printmaking, Painting, Photography or Sculpture.

NOTES: Advanced studio courses will be offered each semester to fulfill art studio concentration and elective needs. A maximum of 6 s.h. in any one art studio course is permitted in one semester, but only if the student registers for two separate 3 s.h. sections of that course.

A student may fulfill art elective needs by taking any course listed under Art History, Communication Design, Crafts, Fine Arts or Related Arts.

Students are encouraged to take Art History courses. At least one 300 level Art History course must be in the non-modern area. Up to 9 s.h. may be counted within Art Electives. During the second semester of the senior year, each student shall be required to enroll in FAR 399 Student Exhibition, and exhibit examples of his/her work.

300 level courses in Watercolor Studio, Serigraphy Studio, Ceramics Studio, and Wood Design Studio all have prerequisite introductory courses. It is best to take these introductory courses during the Sophomore year or at the beginning of the Junior year. These courses should be counted under Art Electives.

BACHELOR OF ARTS IN MUSIC (120 s.h.)

Mission:
The mission of the Kutztown University Department of Music is to provide music majors, music education majors, minors and concomitants with a quality education in music, and to provide non-music majors, for whom the study of music is an integral part of the liberal arts education, with an understanding leading to a lifelong enjoyment of music, by offering historical, theoretical, pedagogical, as well as music education and performance courses, integrated with the development of listening skills, critical thinking, and an awareness of aesthetic principles and contemporary technology.

Goals:
1. Graduates will demonstrate knowledge and skills associated in the study and performance of music.
2. The program seeks to enhance the quality of Kutztown University by offering the study of music to interested students and providing the University community with the opportunity to enjoy both student and professional performances on campus.
3. The music education program for Elementary Education majors will respond to the training needs in the 21st century by means of a thorough professional education curriculum, and will respond to the requirements of the State of Pennsylvania for specific experiences in Integrating the Arts.

Objectives:
1. To offer courses in General Education, encompassing Music Literature, Theory/Composition, and Performance to the entire University.
2. To serve the College of Education through continued course work in Elementary Music Methods with courses which teach students how to integrate the arts in the elementary curriculum.
3. To attract talented performing musicians and prepare those students who wish to enter graduate level programs in music, as well as provide a foundation for various professional careers related to music through the BA Music Degree.
4. To attract future excellent teachers in the field of music education.
5. To develop and maintain a variety of performing organizations ranging from large groups to small ensembles as well as provide individualized instruction in applied music.
6. To maintain and develop Concomitant and Music Minor curricula that serve students enrolled in other major degree programs.

GENERAL EDUCATION REQUIREMENTS (54 s.h.)

1. **Basic Requirements: 15/16 s.h.**
   A. Composition (ENG 023-025, 230) – 3 s.h.
   B. Oral Communication (SPE 010): Fundamentals of Speech – 3 s.h.
   C. Foreign Language – 6 s.h.*
   D. Health (HPD 110, 115-116) – 2/3 s.h.
   E. Physical Education (HPD 011-095) – 1 s.h.
2. **Humanities: 9 s.h.**
   A. Literature – 3 s.h.
   B. Music Speech, or Theatre – 3 s.h.
   C. Art History or Philosophy – 3 s.h.
   (ARH, ART 010, 015, PHI and RAR 105)
3. **Social Sciences: 9 s.h.**
   A. History or Political Science – 3 s.h.
   B. Anthropology, Psychology, or Sociology – 3 s.h.
   C. Geography or Economics – 3 s.h.
4. **Natural Sciences and Mathematics: 9 s.h.**
   A. Math – 3 s.h.
   B. Biology (lab required) – 3 s.h.
   C. Physical Science (lab required) – 3 s.h.
5. **General Electives: 12 s.h.**
   Select any credit courses offered or accepted by the University that count toward graduation.

* All 6 s.h. must be in the same language (FRE, GER, or SPA) at the 021-022 level or above, excluding FRE 138. FRE 257-258, SPA 251-252)

MAJOR PROGRAM REQUIREMENTS (66 s.h.)

1. **Basic Requirements: 20 s.h.**
   Take **EACH** of the following courses:
   MUS 101: Aural Skills I
   MUS 102: Harmony & Theory I
   MUS 201: Aural Skills II
   MUS 202: Harmony & Theory II
   MUS 213: Aural Skills III
   MUS 214: Harmony & Theory III
   MUS 325: Conducting
   MUS 380: Senior Sem. in Music

NOTE: MUS 020 Basic Concepts and Skills of Music or its equivalent, is a prerequisite for MUS 102. MUS 020 may be used as a Music elective.

2. **Music Literature: 6 s.h.**
   Take **EACH** of the following:
   MUS 211: Music from Ancient Times to 1825
   MUS 212: Music from 1825 to Present
3. **Applied Music: 16 s.h.**
   A. **Private Instruction: 7 s.h.**
   Seven semesters in student's solo applied medium with final performance for faculty or public (See Notes)

B. **Ensembles: 8 s.h.**
   * Large Ensembles (6 semesters)
   * Small Ensembles (2 semesters)

C. **Senior Recital: 1 s.h.**
   MUP 399

4. **Music Electives: 6 s.h.**
   Select **ONE** of the following:
   MUS 303: Electronic Music Composition
   MUS 310: Composition and Arranging
   MUS 320: Keyboard Harmony
   MUS 330: Analysis of Music Stylistic and Structural
   MUS 379: Directed Studies in Music
   Select any course with the MUS/MUP prefix except MUS 223 and MUS 229.
5. **Concomitant Courses: 12 s.h.**
   Select any courses from the following prefixes: ACC, AMS, ANT, ARH, ART, ARU, AST, AVC, BIO, BUS, CDE, CFT, CHM, CIS, CRJ, DAN, ECO, EDU, ELU, ENG, FAR, FAS, FIN, FLA, FRE, GEG, GEL, GER, HEA, HIS, INT, LIB, MAR, MAT, MAU, MED, MGM, MKT, NUR, PED, PHI, PHY, POL, PSY, RAR, RUS, SOC, SPA, SPE, SPU, SWK, THE, TVR, WRI, WST.
6. **Open Electives: 6 s.h.**
   Select any courses with the following prefixes: ACC, AMS, ANT, ARH, AST, BIO, BUS, CHM, CIS, CRJ, ECO, ENG, FIN, FLA, FRE, GEG, GEL, GER, HIS, INT, MAR, MAT, MED, MGM, MKT, NUR, PHI, PHY, POL, PSY, RAR, RUS, SOC, SPA, SPE, SWK, THE, TVR, WRI, WST.

NOTES: No more than 48 credit hours in courses with a MUS and MUP prefix may be counted toward the 120 s.h. required for graduation. (MUS 010 may be taken in General Education, but may not be included in the 48 credit hour limit for the major.)

Music courses which are listed with multiple prefixes (e.g. MUS/THE) are calculated as part of the 48 credit hour limit.

Piano proficiency is required. The student may schedule the proficiency test for piano during any semester of the program. If needed, students may take Class Piano as a Music Elective.

Progress in the student's solo applied medium will be observed by faculty juries each semester. In the 7th semester the jury will determine if the student is to deliver a culminating performance of 50 minutes for the public or of 25 minutes for the faculty.

BACHELOR OF SCIENCE IN MUSIC EDUCATION (120 s.h.)

Vision Statement:
The Bachelor of Science degree in Music Education at Kutztown University will provide our students with a quality education in music, and will:

- Respond to the students' training needs in the 21st century by means of a thorough music education curriculum.
- Respond to the needs and requirements of the state of Pennsylvania for professionally trained teachers of music.
- Respond to the degree requirements of the National Association of Schools of Music.
- Establish Kutztown University as a center for quality music education.

Goals:
As a competency-based program, graduates of the BS in Music Education at Kutztown University who will be candidates for certification in Pennsylvania will be able to demonstrate a knowledge of and competence in applying the fundamental concepts of music necessary for teaching at the elementary, middle and secondary levels (K-12).

1. Graduates will be able to apply analytical and historical knowledge to curriculum development, lesson planning, and to daily classroom and performance activities.
2. Graduates will be able to demonstrate knowledge of the basic elements of music.
3. Graduates will be able to demonstrate ability in hearing music and reading music.
4. Graduates will be able to arrange and adapt music from a variety of sources to meet the needs and ability levels of school performing groups and classroom situations.
5. Graduates will be able to demonstrate knowledge of technology as it applies to teaching music in classroom situations.
6. Graduates will be able to apply techniques of artistic criticism of music in performances and classroom situations.
7. Graduates will be able to demonstrate competence in music performance through concentration in a major applied area as well as functional performance skills in piano, voice, melodic classroom instruments, and all major band and orchestral instruments.
8. Graduates will be able to create accurate and musically expressive performances with various types of performing groups and in general classroom situations.

Objectives:
Kutztown University will provide students with a quality musical education and will:

1. Respond to the students' training needs in the 21st century by means of a thorough music education curriculum.
2. Respond to the needs and requirements of the State of Pennsylvania for professionally trained teachers of music.
3. Respond to the degree requirements of the National Association of Schools of Music.
4. Establish Kutztown University as a center for quality music education.

As a graduate of the music education program, you will be certified to teach general, instrumental, and choral music in kindergarten through twelfth grade in Pennsylvania schools. This certification is also accepted as initial certification in many other states. As part of the preparation leading to the B.S. in Music Education, courses include Harmony and Theory, Aural Skills, Music History, Conducting, Music Technology, Techniques courses covering the areas of Strings, Woodwinds, Brass and Percussion. Additionally, a sequence of four Methods courses in Elementary, Secondary, Choral and Instrumental prepare the teacher candidate through guided field experiences leading up to the Student Teaching semester. A total of 17 semester hours of Applied Music are also a part of this degree program, which includes the presentation of a Senior Recital. A demonstrated proficiency in piano is also required.

STUDENTS ENROLLED IN MUSIC EDUCATION ARE SUBJECT TO ALL COLLEGE OF EDUCATION REQUIREMENTS AS LISTED IN THE CATALOG.

GENERAL EDUCATION REQUIREMENTS (39 s.h.)

1. **Required Courses: 9 s.h.**
   A. Composition (ENG 023-025, 230#+) – 3 s.h.
   B. Oral Communication (SPE 010#+) – 3 s.h.
   C. Health (HPS 110, 115-116, 120) – 2/3 s.h.
   D. Dance or Phys. Ed (HPS 011-095, 170) – 1 s.h.
2. **Humanities: 12 s.h.**
   A. Literature#+ (ENG) – 3 s.h.
   B. Language, Philosophy, Theatre Art History, or RAR 105, 342 – 3 s.h.

C. Music Literature+
MUS 211 Music/Ancient Times-1825 – 3 s.h.
D. Music Literature+
MUS 212 Music/1825-Present – 3 s.h.

3. **Social Sciences: 9 s.h.**
   A. American History (HIS 025 or 026) – 3 s.h.
   B. Psychology+ (PSY 011) – 3 s.h.
   C. Psychology+ (PSY 140 Educational Psychology) – 3 s.h.
4. **Natural Sciences/Mathematics: 9 s.h.**
   A. Mathematics#+ (MAT 021 or higher) – 3 s.h.
   B. Natural Science with Lab – 3 s.h.
   C. Mathematics Elective#+ (MAT 022 or higher) – 3 s.h.

MAJOR PROGRAM REQUIREMENTS (81 s.h.)

1. **Specialization: 63 s.h.**
   Required Courses: 27 s.h.
   MUS 102: Harmony & Theory I+ - 3 s.h.
   MUS 101: Aural Skills I+ - 2 s.h.
   MUS 202: Harmony & Theory II+ - 3 s.h.
   MUS 201: Aural Skills II+ - 2 s.h.
   MUS 214: Harmony & Theory III+ - 3 s.h.
   MUS 213: Aural Skills III+ - 2 s.h.
   MUS 205: Physical Properties of Sound – 3 s.h.
   MUS 230: Intro to Music Technology+ - 3 s.h.
   MUS 310: Composition & Arranging+ - 3 s.h.
   MUS 325: Conducting (Vocal & Inst)+ - 3 s.h.
2. **Applied Courses: 17 s.h.**
   MUP xxx: Major Performance Area (total) – 7 s.h.
   MUS 024: Class Piano I+ – 1 s.h.
   MUS 079: Voice Class I+ – 1 s.h.
   MUP xxx: Large Ensembles (5 s.h.)
   MUP xxx: Small Ensembles (2 s.h.)
   MUP 399: Senior Recital – 1 s.h.
3. **Music Education Courses: 16 s.h.**
   MUU 220: Elementary Music Methods#+ - 3 s.h.
   MUU 222: Secondary Music Methods#+ - 3 s.h.
   MUU 231: String Techniques#+ - 1 s.h.
   MUU 232: Woodwind Techniques#+ - 1 s.h.
   MUU 233: Brass Techniques#+ - 1 s.h.
   MUU 234: Percussion Techniques#+ - 1 s.h.
   MUU 320: Instrumental Methods#+ - 3 s.h.
   MUU 322: Choral Methods#+ - 3 s.h.
4. **Music Electives: 3 s.h.**
   Any MU courses+ - 3 s.h.

PROFESSIONAL SEMESTER (18 s.h.)

1. **Professional Education Courses: 6 s.h.**
   EDU 100: Perspectives on Am. Ed.#+ - 3 s.h.
   SPU 100: Intro to Special Education#+ - 3 s.h.
2. **Student Teaching: 12 s.h.**
   MUU 390: Student Teaching I# - 6 s.h.
   MUU 391: Student Teaching II# - 6 s.h.

These courses require a "C" or better
+ These courses are required prior to student teaching.
* Praxis I exam should be completed by 48 S.H.

NOTES: Minimum eligibility to declare Music Education is a 3.0 QPA. Piano proficiency is required. The student may schedule the proficiency test for piano during any semester of the program. If needed, students may take Class Piano as a Music Elective. Progress in the student's solo applied medium will be observed by faculty juries each semester. The student will present a senior recital. The jury in the semester prior to the recital will determine if the student is to deliver a culminating performance of 50-minutes for the public or of 25-minutes for the faculty.

For further information, contact the Department of Music.

BACHELOR OF ARTS IN SPEECH COMMUNICATION (120 s.h.)

(Effective Spring 2006)

Mission:
The mission of the B. A. Speech Communication program is to develop within students the attitudes, knowledge, training and character to support responsible communication and participation in a democratic society.

Goals:
1. To provide Speech Communication majors with in-depth studies:
   a. So they may apply knowledge of human communication to pedagogical and professional pursuits.
   b. So they may prepare for advanced study in Speech Communication.
2. To provide for the general education of undergraduates in order that students, regardless of curriculum preference, will be able to:
   a. Communicate effectively orally, exercise reasoning power and make decisions with due consideration for the ethical and social issues involved.
   b. Complete Speech Communication courses in support of selected majors, minors and/or concomitants.
   c. Understand, appreciate and critically react to the aesthetic dimension of human experience.

Objectives:
Upon completion of the B.A. Speech Communication program, students will be able to:
1. Demonstrate an understanding of the elements of the communication process.
2. Present ideas with clarity utilizing resourcefulness and moral responsibility.
3. Understand and apply ethical dimensions to communication situations.
4. Apply communication strategies appropriate to a variety of communication contexts.
5. Discuss historical and contemporary theories, techniques and effects of human communication.
6. Analyze and evaluate public speakers.
7. Demonstrate an understanding of the process and effects of communication in organizational, small group and interpersonal settings.
8. Demonstrate an understanding of the role of culture as an element in the communication process.
9. Critically examine and use argument in a variety of communication settings.
10. Critically evaluate and present a variety of cultural and aesthetic texts.
11. Understand and implement research and technological methodologies consistent with the objectives of our courses.

This curriculum prepares students to enter communication-related fields including business, industry, government, not-for-profit agencies, social services, law, and public affairs, and to be prepared for such areas as public relations, training & development, consulting, human relations, marketing and management.

Coursework includes persuasion, interviewing, oral interpretation, listening and public relations. An internship gives on-the-

job training. Additional courses in the arts and sciences, as well as a block of freely chosen electives, permits the student to choose many complementary courses, including art, electronic media, computer science, journalism, and political science.

Minor Programs:
Speech Communication and Public Relations. (Students in all majors except Speech Communication are eligible to enroll in Speech Communication and Public Relations minor.)

GENERAL EDUCATION REQUIREMENTS (60 s.h.)

1. **Basic Requirements: 15 s.h.**
   A. Composition – 3 s.h.
   B. SPE 010: Fundamentals of Speech – 3 s.h.
   C. Modern Language – 6 s.h. *
   D. Health – 2/3 s.h.
   E. Physical Education or Dance – 1 s.h.
   (HPD 011 - 095)
2. **Humanities: 12 s.h.**
   A. Literature – 3 s.h.
   B. Music, Speech, or Theatre – 3 s.h.
   C. Art History or Philosophy: – 3 s.h.
   (ART 010, 015, RAR 105, 342 are permitted.)
   D. Elective in Humanities or Modern Language – 3 s.h.
   (ART 010, 015, CDH and RAR courses are also permitted.)
3. **Social Sciences: 12 s.h.**
   A. History or Political Science – 3 s.h.
   B. Anthropology, Psychology, or Sociology –3 s.h.
   C. Economics or Geography – 3 s.h.
   D. Elective in any Social Sciences discipline listed in this group – 3 s.h.
   (Specified GEG courses may **NOT** be taken in this category.)
4. **Natural Science and Mathematics: 12 s.h.**
   A. Mathematics (except MAT 021) – 3 s.h.
   B. Biological Science with Lab – 3 s.h.
   C. Physical Science with Lab or GEG 204, 324 – 3 s.h.
   D. Elective in any Natural Science or Mathematics – 3 s.h.
   (ENV 100 and specified GEG courses may be taken as an elective in this category.)
5. **General Education Electives: 9 s.h. ***
   Select any courses from the approved prefixes as listed in the Advisement Handbook (except SPE courses and HPD 011 - 095).

* The Modern Language requirement under Section 1 must be satisfied by two courses in the same language at the intermediate level or above. Modern Language courses at the elementary level (011, 012) may be taken under Section 5 of General Education.

MAJOR PROGRAM REQUIREMENTS (60 s.h.)

1. **Basic Requirements: 18 s.h.**
   Take EACH of the following courses:
   SPE 101: Introduction to Speech Communication Theory and Research – 3 s.h.
   SPE 110: Small Group Communication – 3 s.h.
   SPE 120: Oral Interpretation I – 3 s.h.
   SPE 130: Interpersonal Communication – 3 s.h.
   SPE 205: Argumentation and Debate – 3 s.h.
   SPE 210: Persuasive Speaking: Theory and Practice – 3 s.h.
   SPE 327: Rhetorical Theory and Criticism – 3 s.h.
2. **Choose one course from each pair: 6 s.h.**
   a. SPE 170: Introduction to Public Relations – 3 s.h.
   SPE 274: Organizational Communication – 3 s.h.
   b. SPE 120: Oral Interpretation I – 3 s.h.
   SPE 201: Storytelling I – 3 s.h.
3. **Speech Electives: 21 s.h.**
   A. Select any course with SPE prefix at the 200 level or above (except SPE 390): 12 s.h.
   B. Select any course with SPE prefix (except SPE 010): 9 s.h.
   (A maximum of 6 s.h. in SPE 390, Speech Communication Internship, are applicable to the major.)
4. **Open Electives: 12/13 s.h.**
   Excludes freshman colloquium and developmental courses.

Minor Programs:
The minor in Speech Communication and the minor in Public Relations are available for students who have a career desire to work in those fields or who wish to complement their major programs.

BACHELOR OF ARTS IN THEATRE (120 s.h.)

(Effective Fall 2004)

Mission:
The mission of the B. A. Theatre degree program at Kutztown University is to provide students with an understanding and appreciation of the nature and function of theatre, not only as an art form but also as a craft, through a firm grounding in all the major areas of theatre.

Goals:
1. To provide multiple opportunities for each student to develop fundamental training necessary to pursue a future career in one (or more) of the following areas of the educational or professional theatre: acting, directing, design, technical theatre (costumes, lighting, construction), theatre management, musical theatre and theatre/communications.
2. To provide an environment within which both majors and non-majors can explore their own potential in theatre through extra-curricular and co-curricular programs designed to place equal emphasis on academic students and creative experiences.
3. To develop men and women who can draw upon their liberal arts education to enrich their lives and work, giving them an increased sensitivity to the cultural, social and ethical dimensions of their work in theatre.
4. To prepare students for graduate studies in theatre.
5. To accentuate the affective approach as well as the cognitive approach to theatre training through intensified one-on-one teacher/student relationships in both courses and production activities.
6. To provide in-depth theatre experiences for qualified students through work on faculty-directed productions in such areas as: performance, management, direction and design.
7. To provide opportunities for student internships with professional theatre companies, particularly in Pennsylvania and in New York City.
8. To instill in all students a sense of commitment to a high set of standards regarding any work they do in theatre at whatever level.
9. To create a learning environment that enable students to understand and experience the value of integrating their commitment to theatre with a fundamental commitment to the critical principles of the cultural, social and ethical dimensions of their work in theatre.

Objectives:
Upon completion of the B. A. Theatre program, students will be able to:
1. Appreciate theatre as an art form important to society.
2. Recognize significant forms and styles of production.

3. Develop a critical eye and ear in seeing and reading plays.
4. Develop an aesthetic sense, combining an appreciation of the visual and aural aspects of a theatrical production.
5. Apply to and be accepted by an accredited graduate theatre program.
6. Enter the world of professional theatre at the entry level, having been provided with the fundamental work towards entering the theatre.
7. Understand that their academic training in theatre, as part of a liberal arts education, is not just for the sake of theatre but serves as a preparation for the world outside the theatre.

This curriculum provides a basic foundation of coursework toward a life in the profession — acting, directing, designing, building, managing or marketing or entry into graduate study. Courses include play analysis, history and criticism, movement and voice. Each semester short and long productions provide opportunity to apply and develop skill. An internship provides training in a professional theatre. Supplementary courses in the arts and sciences enable each student to become more flexible in meeting the job market.

Minor Programs:
The Theatre minor is open to students in all majors (except Theatre) who may have an interest in Theatre Arts or who wish to supplement their major program. The Musical Theatre minor is open to students in all majors including Theatre and Music who wish to supplement their major program.

GENERAL EDUCATION REQUIREMENTS (60 s.h.)

1. **Basic Requirements: 15/16 s.h.**
   - A. Composition (ENG 023, 024, 230) – 3 s.h.
   - B. Oral Communication - 3 s.h.
     SPE 010: Fundamentals of Speech
   - C. Modern Language – 6 s.h. *
     (Intermediate level or above in the same language)
   - D. Health (HPD 110, 115, 116) – 2/3 s.h.
   - E. HPD 057: Introduction to Dance I – 1 s.h.
2. **Humanities: 12 s.h.**
   - A. Art History or Philosophy – 3 s.h.
     (ARH or PHI or RAR 105 or RAR 342)
   - B. Literature (ENG) – 3 s.h.
   - C. Music,* Speech, or Theatre – 3 s.h.
   - D. Humanities Electives – 3 s.h.
     (Elective in Humanities or Modern Language)
3. **Social Sciences: 12 s.h.**
   - A. History or Political Science – 3 s.h.
   - B. Anthropology, Psychology, or Sociology – 3 s.h.
   - C. Economics or Geography – 3 s.h.
   - D. Elective in Social Sciences – 3 s.h.
4. **Natural Science and Mathematics: 12 - 14 s.h.**
   - A. Mathematics – 3 s.h.
     MAT (except MAT 021 & 022)
   - B. Biology with Lab – 3/4 s.h.
   - C. Physical Science with Lab – 3/4 s.h.
     (AST, CHM, GEG,* GEL or PHY)
   - D. Elective in any Natural Science or MAT – 3 s.h.
5. **Additional Electives: 9 s.h.***
   Select courses without THE prefix except HPD 011 - 095.

* Only certain courses apply.

MAJOR PROGRAM REQUIREMENTS (60 s.h.)

1. **Required Courses: 39 s.h.**
   Take EACH of the following courses: 27 s.h.
   - A. THE 015: Introduction to Theatre – 3 s.h.
   - B. THE 125: Stage Makeup – 3 s.h.
   - C. THE 131: Acting – 3 s.h.
   - D. THE 140: Play Production – 3 s.h.
   - E. THE 195: Theatre Practicum – 3 s.h. total
     (THE 195 must be repeated six times.)
   - F. Select **ONE** of the following courses: 3 s.h.
     THE 200: Voice and Movement – 3 s.h.
     THE 220: Intermediate Acting – 3 s.h.
   - G. THE 203: Script Analysis for Theatre Production – 3 s.h.
   - H. Select **ONE** of the following courses: 3 s.h.
     THE 205: Costuming – 3 s.h.
     THE 215: Scenic Production – 3 s.h.
   - I. THE 240: Fundamentals of Directing – 3 s.h.
   - J. THE 336: Theatre History IV – 3 s.h.
   - K. Select **TWO** from the following courses: 6 s.h.
     THE 333: Theatre History I – 3 s.h.
     THE 334: Theatre History II – 3 s.h.
     THE 335: Theatre History III – 3 s.h.
   - L. THE 380: Senior Seminar – 3 s.h.
2. **Theatre Electives: 6 s.h.**
   Select THE courses at the 200 level or above.
3. **Concomitant Courses: 9 s.h.**
   Take the following course: 3 s.h.
   SPE 051: Voice and Diction
   Select **ONE** of the following Dramatic Literature, Shakespeare courses: 3 s.h.
   ENG 330: Shakespeare on the Stage – 3 s.h.
   ENG 331: Shakespeare's Earlier Plays – 3 s.h.
   ENG 332: Shakespeare's Later Plays – 3 s.h.
   Select **ONE** of the following Dramatic Literature courses: 3 s.h. *
   ENG 353: Development of the Drama – 3 s.h.
   ENG 363: Modern Drama – 3 s.h.
   ENG 438: Major Modern Dramatists – 3 s.h.
   FRE 300: French Classical Drama - 3 s.h.
   FRE 345: Modern French Drama and Theatre - 3 s.h.
   RUS 345: Modern Russian Drama and Theatre - 3 s.h.
   SPA 350: Spanish Drama of the Golden Age - 3 s.h.
   THE 460: Special Topics - 3 s.h.
4. **Open Electives: 6 s.h.**
   Select any courses from the approved prefixes: ACC, AMS, ANT, ARH, ART, ARU, AST, AVC, BIO, BUS, CDE, CFT, CHM, CIS, CRJ, DAN, ECO, EDU, ELU, ENG, FAR, FIN, FLA, FRE, GEG, GEL, GER, HIS, INT, MAR, MAT, MAU, MED, MGM, MIC, MKT, MUS, NUR, PED, PHI, PHY, POL, PSY, RAR, RUS, SOC, SPA, SPE, SPU, SWK, TVR, WRI, WST

NOTES: THE 015 Introduction to Theatre may be taken simultaneously with THE 031, but is a prerequisite for all other THE courses. THE 140 Play Production must be taken before the Junior Year. Proper prerequisites must be met for dramatic literature courses.

Undergraduate Course Descriptions

RATIONALE FOR COURSE

The numbering of undergraduate courses is in keeping with the following pattern:

1. Those courses that are basic and introductory in nature are numbered 000-099.
2. Those courses that are intended for, but not restricted to, upper class majors are numbered 300-399.
3. All remaining undergraduate courses are numbered 100-299.
4. Courses numbered 400 to 499 are graduate courses open to undergraduate juniors and seniors who have either a grade point average of at least 2.90 or permission of the instructor.

ACCOUNTING

Completion of the lower division core requirements with at least 2.0 QPA average is a prerequisite for every 300 level College of Business course.

ACC 121 Financial Accounting **3 sh**
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. A computer project using financial accounting software is required.

ACC 122 Managerial Accounting **3 sh**
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. PREREQUISITE: ACC 121, BUS 171.

ACC 305 Cost Accounting **3 sh**
Cost Accounting furnishes management with the necessary accounting tools for planning and controlling activities. Specifically, the collection, presentation, and analysis of cost data should help management as it deals with the areas of budgeting, cost-volume-profit analysis, job-order cost systems, activity based cost systems, process cost systems, standard cost systems and variance analysis. By focusing on basic concepts, analyses, uses, and procedures instead of procedures alone, the course shows cost accounting as a managerial tool for business strategy and implementation. This course is designed for accounting majors and is taught from an accountant's point of view.

ACC 306 Advanced Cost Accounting **3 sh**
The course builds on and expands topics introduced in ACC 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. PREREQUISITE: ACC 305.

ACC 312 Accounting Information Systems **3 sh**
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. PREREQUISITES: ACC 305 or permission of the instructor and ACC 321.

ACC 313 Concepts of Taxation and Tax Planning **3 sh**
The course will cover concepts and principles of both business and individual taxation and tax planning as they apply primarily to the business enterprise. Emphasis is on a managerial approach to taxation, whereby tax principles and rules are applied, where appropriate, as a facet of financial planning of the business enterprise.

ACC 317 Tax Accounting I **3 sh**
This course is an in-depth study of the Federal income taxation of individuals and provisions having common application to individuals and businesses. Topics covered include tax administration and proce-dure, tax research, gross income and exclusions, deductions and losses, property transactions, capital gains and losses, accounting periods and methods and the alternative minimum tax for individuals. In addition to theory, the practical compliance aspects of individual tax preparation are covered.

ACC 318 Tax Accounting II **3 sh**
This course is a continuation of ACC 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 and estates and trusts). Emphasis will be placed upon tax research and tax planning. In addition to theory, the practical compliance aspects of tax return preparation will be considered. PREREQUISITE: ACC 317.

ACC 321 Intermediate Accounting I **3 sh**
A rigorous study of current financial accounting theory and practice. Builds on the fundamental concepts covered in the accounting principles courses and develops a more professional level of analysis. Coverage includes the development of accounting standards, the conceptual frame-work 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.

ACC 322 Intermediate Accounting II **3 sh**
A continuation of Intermediate Accounting I. Coverage includes long-term liabilities; stockholder's equity, dilutive securities and earnings per share; investments; revenue recognition; accounting for income taxes, pensions and leases; statement of cash flows. PREREQUISITE: ACC 321.

ACC 323 Advanced Accounting **3 sh**
This course covers advanced accounting problems including consolidated financial statements, branch and foreign operations, price-

leveling changes, bankruptcy and reorganization. PREREQUISITE: ACC 322.

ACC 325 Not-For-Profit and Government Accounting 3 sh
This course is a study of accounting, budgetary, financial control and evaluation procedures with respect to financial operations of governmental organizations and other not-for-profit institutions. The course includes accounting for federal government, state and local governments, hospitals, voluntary health and welfare organizations, colleges and universities, public schools and charities.

ACC 330 Auditing Practice and Standards 3 sh
This course is a rigorous introduction to audit theory, practice and ethics. It integrates the accounting, ethical, legal and auditing responsibilities of the Certified Public Accountant. Topics covered include au-dit reports, professional ethics, legal liability, the audit process, the nature of evidential matter, audit procedures in an EDP environment and an introduction to audit-related statistical applications. A comput-erized 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: ACC 305, 312, 322.

ACC 380 Senior Seminar in Accounting 3 sh
Readings, research and discussions in accounting, with particular emphasis on the role of accounting in contemporary society. Case studies which integrate accounting and business principles are covered. Required of all Accounting majors. PREREQUISITE: ACC 322 and senior status.

ANTHROPOLOGY

ANT 010 Cultural Anthropology 3 sh
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.

ANT 020 Physical Anthropology 3 sh
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.

ANT 021 Laboratory in Physical Anthropology 2 ch - 1 sh
A survey of the tools, techniques, and research concerns of the physical anthropologist, including osteology, anthropometry, ontogeny, and dermatoglyphics. PREREQUISITE: ANT 020 concurrently or previously.

ANT 030 Introduction to Archaeology 3 sh
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 archaeological sites from around the world. We will also consider current issues in archaeology.

ANT 031 Archaeological Fieldwork and Laboratory 3 ch – 1 sh
This course provides hands-on training in archaeological field lab techniques through the survey, excavation, and analysis of local archaeological sites. It can be undertaken independently of ANT 030.

ANT 101 North American Indian 3 sh
The comparative ethnology of non-literate tribes of North and Central America as they existed at Spanish contact times.

ANT 102 The South American Indian 3 sh
This course deals with the origin of the people of South America, the rise of the high civilization of the Pre-Inca and the Inca people. Much time is spent with the cultural adaptation of the various tribes of South America to the ecological condition in which they live.

ANT 115 Communitarian Societies 3 sh
A survey and analysis of those small, voluntary, and experimental communities whose purpose was to achieve drastic social reform by demonstration of success on a peaceful, micro-cosmic level. Concentration on communitarian groups in the U.S.A. from the 18th through 20th centuries, including societies such as the Ephrata Cloister, the Oneida Perfectionists, and the Sunrise Cooperative Farm Community.

ANT 125 The Anthropology of Death and Dying 3 sh
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.

ANT/SOC 130 Marriage and the Family in Cross-Cultural Perspective 3 sh
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? PREREQUISITE: ANT 010 or SOC 010.

ANT 135 Pennsylvania German Cultural Traditions 3 sh
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.

ANT 138 Caribbean Cultures 3 sh
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.

ANT 150 Subsaharan Africa 3 sh
A survey of the peoples and cultures of Africa south of the Sahara with emphasis on specific groups illustrating the variation of the area. Contact with non-African cultures and the consequences for Africa are considered.

ANT 165 Islamic Cultures **3 sh**
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, concen-trating 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 con-temporary Muslim world, issues such as women and Islam, family insti-tutions, the implementation of Muslim law, the "honor and shame" ethic, and the use of violence for religious ends.

ANT 171 Peoples and Cultures of India and South Asia **3 sh**
A general introduction to the cultural traditions of India, Pakistan, Bangladesh, Nepal and Sri Lanka. Major areas of focus include religion (Hinduism, Buddhism, and Islam), caste, family, village and tribal life, modernization and cultural change. PREREQUISITE: ANT 010.

ANT 180 The Pacific and Australia **3 sh**
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.

ANT 190 Human Cultural Diversity and Adaptations in Pennsylvania **3 sh**
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.

ANT 212 Anthropology of Religion **3 sh**
The course will involve a cross-cultural study of religious institutions in primitive and non-western societies with a view toward understanding the meaning and functions of religion in society and culture. PREREQUISITE: ANT 010.

ANT 215 Female and Male in Anthropological Perspective **3 sh**
A cross-cultural survey of the relationships between the sexes and of the range of roles associated with female and male will be combined with an exploration of the factors which may help explain these cross-cultural patterns. PREREQUISITE: ANT 010 or permission of the instructor.

ANT 220 Economic Anthropology **3 sh**
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.

ANT 226 Anthropology and Education **3 sh**
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.

ANT 230 New World Archaeology **3 sh**
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.

ANT 235 Pennsylvania Archaeology **3 sh**
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.

ANT 240 World Prehistory **3 sh**
A survey of cultural development of homo sapiens and his hominid ancestors from the lower paleolithic to the rise of urban centers in the Old and New World.

ANT/SOC 246 Third World Development **3 sh**
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). PREREQUISITE: ANT 010 or SOC 010.

ANT 250 Linguistic Anthropology **3 sh**
An introduction to the major anthropological issues dealing with language and communication. This includes: the origins and evolution of language, animal communication, the structure of language and nonverbal communication, and the relationship between language, society and culture. PREREQUISITE: ANT 010 or permission of the instructor.

ANT 254 Medical Anthropology **3 sh**
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.

ANT 258 Forensic Anthropology **3 sh**
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.

ANT 272 Human Genetics **3 sh**
Molecular, Mendelian, populational and behavioral genetics of humans are studied from both a lecture and a problem-solving view. PREREQUISITES: ANT 020 OR BIO 010 or BIO 104.

ANT 273 Primate Studies **3 sh**
This course covers non-human primate anatomy, taxonomy, distribution, adaption, and behavior as related to the human species.

ANT 274 Human Evolution **3 sh**
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.

ANT/PSY 290 Culture and Personality **3 sh**
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. Also may be taken as PSY 290. PREREQUISITES: Either ANT 010 or PSY 011.

ANT 320 Archaeological Field Methods **3 sh**
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.

ANT 321 Advanced Archaeological Field Methods **3 sh**
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 inter-preted. The course must be taken in the same semester as ANT 320.

ANT 335 Ethnographic Research Methods in Anthropology 3 sh
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.

ANT 360 History and Theory of Anthropology **3 sh**
Various schools of anthropological thought are studied for their contributions to the development of current anthropological theory and practice. PREREQUISITE: ANT 010 or permission of the instructor.

ANT 370 Readings in Anthropology **1 - 3 sh**
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. PREREQUISITE: ANT 010, 020, or 030 as appropriate or permission of the instructor. Offered as required. This course may be repeated for credit.

ANT 371 Selected Topics in Anthropology **3 sh**
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.

ANT 379 Independent Study **1 - 3 sh**
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.

ANT 380 Senior Seminar in Anthropology **3 sh**
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.

ANT 390 and ANT 391 Internship in Anthropology **1 – 6 sh**
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. PREREQUISITES: Junior or Senior status. Anthropology Major.

ANT 398 Honors Supplementary Research **1 – 3 sh**
See page 139.

ART

ART 015 Art, Design, and Visual Culture **3 ch – 3 sh**
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.

ART 031 Two-Dimensional Design **6 ch – 3 sh**
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.

ART 032 Three-Dimensional Design **6 ch – 3 sh**
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.

ART/FAR 182 Introduction to Digital Media **6 ch – 3 sh**
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 image and audio oriented 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 electronic media and prepares students for advanced digital art courses and other courses requiring a basic familiarity with these media. PREREQUISITES: ART 031, ART 032, FAR 015, and FAR 016, or permission of the instructor.

ART 201 Serigraphy **6 ch – 4 sh**
An introduction to the single and multicolor stencil screen printing process (transographic). Experiences ranging from basic identification and preparation of materials and equipment, through processes and procedures, to the production of silkscreen prints. Students are expected to fulfill all the course requirements assigned in relationship to the number of credit hours earned. PREREQUISITES: ART 031, ART 032, FAR 015, FAR 016 or permission of the instructor.

ART 211 Women in the Arts **3 sh**
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.

ART 238 Contemporary Visual Communication **6 ch – 4 sh**
In this course, students gain proficiency in the creation of videotapes, animations, and slide productions. Contemporary media are analyzed for form, content and their impact upon society. Students are expected to fulfill all the course requirements assigned in relationship to the number of credit hours earned.

ART 270 Installations **6 ch – 4 sh**
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 artworks. PREREQUISITES: ART 031, ART 032, FAR 015, and FAR 016, or permission of the instructor.

ART 301, 302, 303, 304, 305, 306 Serigraphy Studio I - VI **6 ch – 4 sh**
Advanced studio experiences in the single and multicolor stencil printing process are investigated. Individualized design experiences, studio activities, and problems are planned to encourage an appreciation for the production and application of serigraphic techniques by the artist, designer, and craftsperson. Students are expected to fulfill all the course requirements assigned in relationship to the number of credit hours earned. (Repeatable up to 24 s.h. with an 8 s.h. maximum per semester.) PREREQUISITE: ART 201.

ART/CDE 330 Animation **6 ch – 4 sh**
This course provides the opportunity for gaining rudimentary skills in the creation of non-computerized animation. While the emphasis is upon the production of animations, the origins of the art form will be explored and the renaissance in independent animation will be examined. PREREQUISITES: ART 031, FAR 015, FAR 016.

ART 370 Selected Topics in Art Education **1 – 3 ch, 1 – 3 sh**
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.

ART 371 Selected Topics in Art Studio **6 ch – 4 sh**
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. Repeatable up to 12 s.h.

ART 385 Individual Problems Seminar **3 sh**
An opportunity is provided to pursue a personal interest in an area of study that represents a particular independent challenge in art education, aesthetic education, or studio. The student will work with the professor on an individual basis during the study of his/her area of focus and will periodically report/display the findings/results to his/her peers in a seminar setting.

ART 392 Field Experience in Art **2 – 32 ch, 1 – 16 sh**
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 399 Student Exhibition **0 sh**
This student exhibition is a requirement for graduation. All BFA Related Arts with a Visual Arts Concentration 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.

ART EDUCATION

ARU 110 Teaching Art and Visual Culture in Elementary Settings **6 ch – 3 sh**
This course provides students with an introduction to teaching art and visual culture in K-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 observation of elementary classrooms, 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 both lecture/discussions and performance-based activities.

ARU 210 Teaching Art and Visual Culture in Middle School Settings **6 ch – 3 sh**
This course provides learners with an introduction to teaching art and visual culture in grade levels sixth through eighth. Learners in this class will investigate curriculum planning, personal and social development in the arts, instructional strategies, as well as historical and theoretical issues in art education. Learner activities will include observation of middle school classrooms, studio and critical response activities, and the design of curriculum plans and instructional materials appropriate for art and visual culture in middle school settings. The class will be conducted within a studio framework and will include both lecture/discussions and performance-based activities. PREREQUISITE: ARU 110.

ARU 227 Visual Arts & Human Development 3 sh
Course content is directed toward the theoretical bases of children's development in the visual arts. Visual and aesthetic development of both the typical and atypical student from pre-school to late adolescence is investigated. The making, perceiving and responding to the arts by children is examined by means of literature, lectures, seminars and observation of children. Implications which special conditions have for the art learning process are examined. A term project is required.

ARU 245 Curriculum Theory and Design for Art 3 sh
This is a lecture-discussion course. Students study theories of art education, theories of curriculum, and the principles of curriculum planning for art within a historical perspective. A survey of the literature provides guidelines for applying learning processes and theory toward the development, organization, implementation, and evaluation of curricula. Students acquire skills for selecting content, writing goals and objectives, implementing subject matter, developing teaching strategies and evaluating learning processes. Emphasis is placed on integrating the content from the field of curriculum with the content from the disciplines comprising art education: aesthetics, art criticism, art history, and the production of art. PREREQUISITES: ARU 227.

ARU 301 Art Education Field Experience 4 sh
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 earned. PREREQUISITES: ARU 227 Visual Arts and Human Development and ARU 245 Curriculum Theory and Design for Art.

ARU 305 The Study of Aesthetic Education 3 sh
As a culminating experience of the aesthetic education concentration this course explores contending theories of aesthetic education and their practical application in the classroom. In this course the student is required to demonstrate his/her ability to develop educational experiences focusing on relationships among the various arts and between the aesthetic education program and the general education program. PREREQUISITE: RAR 105.

ARU 310 Teaching Art and Visual Culture in High School Settings 6 ch – 3 sh
This course provides learners with an introduction to teaching art and visual culture in 9-12 classrooms. Learners in this class will investigate curriculum planning, personal and social development in the arts, instructional strategies, as well as historical and theoretical issues in art education. Learner activities will include observation of high school classrooms, studio and critical response activities, and the design of curriculum plans and instructional materials appropriate for art and visual culture in high school settings. The class will be conducted within a studio framework and will include both lecture/discussion and performance-based activities. PREREQUISITE: ARU 110, 210.

ARU 327 Teaching of Aesthetics, Criticism, Art History and Studio 3 sh
In this course students prepare themselves to teach art history, criticism, aesthetics, and studio as part of the general art curriculum. Students study and develop curricula which integrate the various discipline components of art into a comprehensive program of art education. Individual, small group, and large group instructional activities are developed. Students examine and evaluate existing teaching resources and plan and produce their own. PREREQUISITES: ART 031, ART 032, ARU 245, FAR 015, FAR 016, RAR 105, ARH 024, RAR 342.

ARU/SPU 329 Arts and Crafts For The Atypical 6 ch – 3 sh
Field experiences, research, and art production analysis provide an orientation to the understanding of the art of atypical individuals. Implications which handicapping conditions have for the art learning process are examined through art studio experiences.

ARU 370 Selected Topics in Art Education 1 – 3 ch, 1 – 3 s.h.
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.

ARU 377 - 380 Independent Study: Studio I – IV 1 – 4 sh
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. PREREQUISITE: permission of instructor and department chairperson.

ARU 390 Art Student Teaching and Practicum I 7 sh
ARU 391 Art Student Teaching and Practicum II 7 sh
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 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 Student Teaching; during the seminar, students discuss with the University supervisor teaching strategies, class-room management, application of theoretical models, and other pre-professional concerns.

ARU 399 Student Exhibition 0 sh
This student exhibition is a requirement for graduation. All BS in Art Education degree candidates and certification students participate in a Senior Show. Seniors who will be graduating in December register for the senior exhibition held at the end of the Fall semester. Seniors who will be graduating 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.

ART HISTORY

ARH 024 Art History A 3 sh
This course will include the historical development of painting, sculpture, architecture, and craft arts from Pre-history through the Gothic Period in Western Art. Emphasis will be placed on cultural, economic, religious and philosophical factors and their relationship to art.

ARH 025 Art History B **3 sh**
This course will include the historical development in Western art of painting, sculpture, architecture, and craft arts from the Renaissance through the present. Emphasis will be placed on cultural, economic, religious, and philosophical factors and their relationship to art.

ARH 302 Early Christian and Byzantine Art **3 sh**
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. PREREQUISITE: ARH 024 or permission of instructor.

ARH 303 Art of Ancient Greece and Rome **3 sh**
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. PREREQUISITE: ARH 024 or permission of instructor.

ARH 304 Renaissance Art **3 sh**
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. PREREQUISITE: ARH 025 or permission of the instructor.

ARH 305 Medieval Art: Carolingian to High Gothic **3 sh**
This course presents a chronological development in style, iconography, and iconology of western painting, sculpture, architecture, and other art forms of this period. PREREQUISITE: ARH 024 or permission of the instructor.

ARH 306 Art of Northern Europe: 1350-1580 **3 sh**
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. PREREQUISITE: ARH 024 or permission of the instructor.

ARH 307 European Art: 1580-1780 **3 sh**
This course concerns itself with painting, sculpture, architecture, and the minor arts of Europe of the periods commonly known as the Baroque and Rococo. PREREQUISITE: ARH 025 or permission of the instructor.

ARH 308 European Art: 1780 - 1880 **3 sh**
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. PREREQUISITE: ARH 025 or permission of the instructor.

ARH 309 Art Since 1950 **3 sh**
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. PREREQUISITE: ARH 025 or permission of the instructor.

ARH 311 English Cathedrals **3 sh**
England has twenty-six cathedrals, thirteen of which are considered world class architectural structures and the supreme expression of early English architecture. These Anglican structures, dating from monastic foundations in the early middle ages, reveal within their individual forms great divergencies of style. These stylistic variations stem from many sources and span many centuries. This course will investigate the most important events that both created an environment in which the great cathedrals were built and those that brought about the many artistic changes and divergencies in the structures themselves. Four of the most important of these events which will be examined are: the conversion of England to Christianity in the sixth century as a result of the missionary efforts supported by Pope Gregory the Great; the development of the great monasteries in England and the founding of the great bishoprics; the 1066 victory of Duke William the Norman at the Battle of Hastings; and finally, the rapidly spreading influence of the French Gothic style throughout the continent and England. The course will examine how the development of these great religious structures in England was dramatically and finally affected by the Dissolution of the Monasteries in 1539, bringing to a close the era of the great medieval cathedrals in England. PREREQUISITE: ARH 024 or permission of the instructor.

ARH 321 The History of Photography **3 sh**
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. PREREQUISITES: ARH 025 or permission of the instructor.

ARH 334 American Art **3 sh**
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. PREREQUISITE: ARH 025 or permission of the instructor.

ARH 338 European Modernism: 1880 – 1940 **3 sh**
This course investigates thepainting, 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. PREREQUISITE: ARH 025.

ARH 339 Independent Studies in the History of Art **3 sh**
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. PREREQUISITE: ARH 024 and/or ARH 025, or permission of the instructor.

ARH 380 Senior Seminar in The History of Art **2 sh**
Historiography of the discipline, history of art: its history, methodology, and philosophy; all presented in the form of a colloquium.

ARH 385 Selected Topics in Art History **3 sh**
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. PREREQUISITES: ARH 024 and/or ARH 025. Further prerequisites may apply depending on the topic. Repeatable for each selected topic.

ASTRONOMY

AST 020 Introductory Astronomy **4 ch - 3 sh**
AST 021 Introductory Astronomy
A descriptive survey of the heavens including the constellations and stars, the earth as an astronomical body, the sun and our planetary system, eclipses, comets, measurement of time, the calendar, 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 this course. It is closed to students who have taken AST 026. This course does not satisfy major, concomitant or specialization requirements for Secondary Education Science and/or Liberal Arts Science Majors.

AST 026 - Elements of Modern Astronomy **3 sh**

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 AST 020-021 or its equivalent. This course does not satisfy the laboratory course requirement for physical sciences under general education.

AST 040 Honors Astronomy: The History of Astronomical Discovery **4 ch - 3 sh**

AST 041 Honors Astronomy: The History of Astronomical Discovery Laboratory

This course will investigate the significant early astronomical obser-vations, 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. PREREQUISITE: Enrolled in Honors program.

AST 140 Astronomy I **4 ch - 3 sh**

AST 141 Astronomy I Laboratory

A survey of the solar system with a special emphasis on the planets and their satellites, the minor planets, comets, and meteors. The historical developments of astronomy and physics and the application of astronomy in time determination, the calendar, celestial navigation and astronautics are introduced. There will be several planetarium and telescopic observation sessions. PREREQUISITE: MAT 105 or MAT 115 or permission of the instructor.

AST 142 Astronomy II **4 ch - 3 sh**

AST 143 Astronomy II Laboratory

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 with special emphasis on the Milky Way Galaxy. Some concepts of astrophysics, radio astronomy and cosmogony are introduced. There will be several planetarium and telescopic observation sessions. PREREQUISITES: AST 140-141, MAT 106 or MAT 115 or permission of the instructor.

AST 240 The Planetarium **5 ch - 3 sh**

AST 241 The Planetarium Laboratory

This course introduces the planetarium, its operation and maintenance. The student will learn the operation of the planetarium and the production of visual aids and tape recordings for use in planetarium presentations. The student will also become familiar with the use and operation of telescopes. PREREQUISITE: AST 142-143 or permission of the instructor.

AST 370 Research in Astronomy **1 - 4 sh**

This course will involve an individual research program on a specialized topic in astronomy and will require either library research, observational work, use of the computer or planetarium, or a combination of these. The results of such work might be published. PREREQUISITES: AST 140-141, 142-143 and the consent of the instructor. This course may be repeated for credit.

BIOLOGICAL SCIENCES

BIO 010 Introduction to Biology **4 ch - 3 sh**

BIO 011 Introduction to Biology Laboratory

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.

BIO 042 Principles of Molecular Biology **5 ch - 4 sh**

BIO 043 Principles of Molecular Biology Laboratory

An introduction to the principles related to molecular biology, metabolism and the genetics of inborn metabolic errors or defects. Diabetes will be used as a model disease system. It is a laboratory course intended for students with majors who would benefit from a one semester college molecular biology experience. This course does not satisfy major requirements in molecular biology for the B.S. in Biology.

BIO 104 Principles of Biology **6 ch - 4 sh**

BIO 105 Principles of Biology Laboratory

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. PREREQUISITES: One year of high school chemistry or CHM 020/021 or permission of the instructor.

BIO 106 Introduction to Zoology **6 ch – 4 sh**

BIO 107 Introduction to Zoology Laboratory

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. PREREQUISITE: BIO 104/105.

BIO 108 Introduction to Botany **6 ch – 4 sh**

BIO 109 Introduction to Botany Laboratory

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. PREREQUISITE: BIO 104/105.

BIO 120 Anatomy and Physiology I **5 ch - 4 sh**

BIO 121 Anatomy and Physiology I Laboratory

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. PREREQUISITE: BIO 104 and 106 or permission of the department.

BIO 122 Anatomy and Physiology II **5 ch - 4 sh**
BIO 123 Anatomy and Physiology II Laboratory
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: BIO 120/121 or permission of the department chairperson.

BIO 130 Environmental Issues: Global Perspectives **3 sh**
An exploration of human interactions with other organisms and the environment. Major topics will include: human impacts on ecosystems, population dynamics, and environmental deterioration. The paradigm for the course is the integration of science, technology and society. PREREQUISITE: Three semester hours of Biology. (Not applicable to science majors.)

BIO 140 Biology and Society **3 sh**
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. PREREQUISITE: Three semester hours of Biology. (Not applicable to science majors.)

BIO 146 Basic Nutrition and Diet Therapy **3 sh**
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.)

BIO 150 Natural History **5 ch – 3 sh**
BIO 151 Natural History Laboratory
An introduction to natural history with emphasis on the vertebrates (exclusive of birds). Taxonomic and ecological aspects and emphasis on flora and fauna will be considered. Laboratory studies include methods of collection, identifying, preserving, storing, and exhibiting of specimens. This course is designed for elementary and secondary education majors. (Not applicable to other biology major programs.)

BIO 160 Introduction to Microbiology **5 ch – 3 sh**
BIO 161 Introduction to Microbiology Laboratory
A general introductory study of microorganisms with special emphasis on human microflora and disease. Laboratory studies include methods of culturing and identifying representative forms. PREREQUISITE: Three semester hours of Biology. (Not applicable to biology major programs.)

BIO 210 Ornithology **5 ch – 3 sh**
BIO 211 Ornithology Laboratory
A study of birds east of the Rocky Mountains with special emphasis on birds of the Middle Atlantic States. Field study emphasized with trips to selected local environments. Laboratory and field identification, physiology, morphology and ecology of birds are emphasized. PREREQUISITE: Three semester hours of Biology with Lab.

BIO 220 Plant Anatomy **5 ch – 3 sh**
BIO 221 Plant Anatomy Laboratory
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: BIO 104 and 108.

BIO/ENV 222 Environmental Biology **5 ch – 3 sh**
BIO/ENV 223 Environmental Biology Laboratory
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: BIO 104 and either 106 or 108 or permission of the department chairperson.

BIO/ENV 224 Applied Environmental Microbiology **5 ch – 3 sh**
BIO/ENV 225 Applied Environmental Microbiology Laboratory
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: BIO 104 and 106.

BIO/MAR 226 Marine Biology **5 ch – 3 sh**
BIO/MAR 227 Marine Biology Laboratory
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 manipula-tions, and a weekend field trip. PREREQUISITE: One year of Biology or permission of the instructor.

BIO 230 Taxonomy of Vascular Plants **5 ch – 3 sh**
BIO 231 Taxonomy of Vascular Plants Laboratory
The various systems of classification, distinguishing features of the principle groups with practical experience in the identification of flowering plants and ferns of the region with the use of keys. Each student is required to preserve, mount and identify a collection of native plants which serve as a study aid and which may be used in high school teaching. PREREQUISITES: BIO 104 and 108.

BIO 232 Plant Physiology **5 ch – 3 sh**
BIO 233 Plant Physiology Laboratory
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: BIO 104, 108 and CHM 100 and 102.

BIO 234 Animal Physiology **5 ch – 3 sh**
BIO 235 Animal Physiology Laboratory
A study of function in higher vertebrates, using humans as the basis of comparison, at the level of organs, systems, and organisms. PREREQUISITES: BIO 104, 106 and CHM 100 and 102.

BIO 236 Introductory Plant Pathology **5 ch – 3 sh**
BIO 237 Introduction to Plant Pathology Laboratory
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: BIO 104 and 108, or permission of the department chairperson.

BIO 242 Ecosystem Ecology **5 ch – 3 sh**
BIO 243 Ecosystem Ecology Laboratory
Principles and concepts pertaining to the ecosystem. Introduction to local terrestrial and aquatic habits. PREREQUISITES: BIO 104, 106 and 108 or permission of the department chairperson.

BIO/MAR 260 Marine Invertebrates **5 ch – 3 sh**
BIO/MAR 261 Marine Invertebrates Laboratory
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. PREREQUISITE: One year of biology or consent of the instructor.

BIO 264 Comparative Anatomy of the Vertebrates **5 ch – 3 sh**
BIO 265 Comparative Anatomy of the Vertebrates Laboratory
A comparative study of the diversity of organization of the organ systems in representative vertebrates. Lecture emphasis is placed on evolution and morphology with respect to function. Lab emphasis is on the comparative morphology of several representative vertebrates. PREREQUISITE: BIO 104 and 106.

BIO 298 HON: Seminar in Biotechnology **3 sh**
The focus of this course will be to examine various biotechnological advances in genetics and agriculture and to further study their impact not only on biological systems, but also on society. This course may not be used to satisfy Category IV B of General Education or to meet Biology degree requirements.

BIO 302 Entomology **5 ch – 3 sh**
BIO 303 Entomology Laboratory
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: BIO 104 and 106 or permission of the department chairperson.

BIO 306 Food Microbiology **5 ch – 3 sh**
BIO 307 Food Microbiology Laboratory
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. PREREQUISITE: BIO 224/225.

BIO 310 Genetics **5 ch – 3 sh**
BIO 311 Genetics Laboratory
This course examines the fundamental principles of heredity. Topics include Mendelian inheritance, cell division, chromosome mapping, microbial genetics, population and evolutionary genetics, DNA structure and function, recombinant DNA techniques, the control of gene expression, moveable genetic elements and extranuclear genetic material. PRERE-QUISITES: Six semester hours of Biology and MAT 105 or MAT 115 or by special permission of the department chairperson.

BIO 312 Vertebrate Biology **5 ch – 3 sh**
BIO 313 Vertebrate Biology Laboratory
A study of the major vertebrate animals with emphasis on taxonomy, morphology, evolution, development, physiology and systematic relationship of vertebrate animals. Laboratories will involve identification, development, morphology and techniques for preservation and collection. PREREQUISITES: BIO 104 and 106.

BIO 314 Animal Behavior **5 ch – 3 sh**
BIO 315 Animal Behavior Laboratory
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: BIO 104 and 106.

BIO 316 Invertebrate Biology **5 ch – 3 sh**
BIO 317 Invertebrate Biology Laboratory
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: BIO 104 and 106.

BIO 318 Embryology **5 ch – 3 sh**
BIO 319 Embryology Laboratory
Correlation of the major stages of development based on both the experimental and physiological aspects of embryology. Laboratory will consist of a microscopic study of frog, chick, pig and human development. PREREQUISITES: BIO 104 and 106.

BIO/MAR 320 Physiological Ecology of Animals **5 ch – 3 sh**
BIO/MAR 321 Physiological Ecology of Animals Laboratory
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: One semester of organic chemistry, and zoology, or permission of the instructor.

BIO 322 Population and Community Ecology **5 ch – 3 sh**
BIO 323 Population and Community Ecology Laboratory
Principles of population and community ecology. Population growth, regulation, structure and dispersal. Interspecies interactions. Biotic community concept, community analysis and species diversity. PREREQUISITES: BIO 104, 106 and 108, or permission of the department chairperson.

BIO 324 Plant Ecology **5 ch – 3 sh**
BIO 325 Plant Ecology Laboratory
This course provides an introduction to plant population, physiological, 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, and reproductive intra- and inter-specific competition, a survey of co-evolutionary BIO 108.

BIO/MAR 326 Marine Ecology **5 ch – 3 sh**
BIO/MAR 327 Marine Ecology Laboratory
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. PREREQUISITE: One year of college biology and MAR 110 recommended OR consent of the instructor.

BIO 330 Histology **5 ch – 3 sh**
BIO 331 Histology Laboratory
The microscopic study of cells, tissues and organ systems of the vertebrates. Laboratory will consist of microscopic study of prepared tissue sections. PREREQUISITE: BIO 104 and 106, or permission of the department chairperson.

BIO 332 Limnology **5 ch – 3 sh**
BIO 333 Limnology Laboratory
Detailed descriptions and analyses of the ecology of freshwater ecosystems, permanent and intermittent; research procedures, pollution problems, cycles and successions, biota, management, and functional dynamics. Main emphasis will be on North American forms. Field work will include an individual report on a problem rather than collections only. PREREQUISITES: BIO 104, 106 and 108, or permission of the department chairperson.

BIO 334 Medical Parasitology **5 ch – 3 sh**
BIO 335 Medical Parasitology Laboratory
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: BIO 104 and 106.

BIO 336 Medical Microbiology **5 ch – 3 sh**
BIO 337 Medical Microbiology Laboratory
An introduction to the concepts and clinical applications of immunology, medical mycology and medical parasitology. Emphasis is placed on structure, function, and identification of fungi and animal parasites. Emphasis is also placed on immunological mechanisms and diseases. PREREQUISITES: BIO 104 and BIO 106.

BIO/MAR 338 Ecology of Marine Plankton Lecture **5 ch – 3 sh**
BIO/MAR 339 Ecology of Marine Plankton Laboratory
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, VA. PREREQUISITE: One year of college biology.

BIO/MAR 340 Marine Mammals **5 ch – 3 sh**
BIO/MAR 341 Marine Mammals Laboratory
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. PREREQUISITES: Five courses in biology, and at least Junior class standing prior to the start of the course or permission of the instructor.

BIO/MAR 344 Marine Botany **5 ch – 3 sh**
BIO/MAR 345 Marine Botany Laboratory
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: BIO 104, 108 or permission of the instructor.

BIO 346 Molecular Biology **5 ch – 3 sh**
BIO 347 Molecular Biology Laboratory
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: BIO 104, 106, and CHM 214, or by special permission of the department chairperson.

BIO/MAR 348 Biological Oceanography Lecture **5 ch – 3 sh**
BIO/MAR 349 Biological Oceanography Laboratory
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, VA. PREREQUISITES: One year of college biology. RECOMMENDED: Introduction to Oceanography.

BIO 350 Cell Biology **5 ch – 3 sh**
BIO 351 Cell Biology Laboratory
A comprehensive study of the cell with emphasis placed on ultrastructure and function of biological membranes and cellular organelles. Laboratory designed to investigate patterns of cell growth and basic cell structure and function. Both protistan and mammalian cell systems will be utilized. PREREQUISITES: BIO 104, 106, 108 and CHM 214, or by permission of the department chairperson.

BIO/MAR 352 Coral Reef Ecology **5 ch – 3 sh**
BIO/MAR 353 Coral Reef Ecology Laboratory
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. PREREQUISITES: 4 courses in biology designated for science majors and SCUBA certification required.

BIO/MAR 360 Anatomy of Marine Chordates **5 ch – 3 sh**
BIO/MAR 361 Anatomy of Marine Chordates Laboratory
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. PREREQUISITE: BIO 104, 106 or by permission of the department chairperson.

BIO 370 Research in Biology **1 – 3 sh**
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. PREREQUISITES: Minimum of 18 sh in Biology, GPA of 2.50 or higher, and Junior or Senior standing.

BIO 371 Selected Topics in Biology **3 sh**
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. PREREQUISITES: BIO 104, 106 and 108 or permission of the department chairperson.

BIO 380 Senior Seminar in Biology **2 ch – 2 sh**
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. PREREQUISITE: Senior standing or permission of the instructor.

BIO 390 Internship in Biology **3 – 6 sh**
Supervised, practical work experience in laboratory and/or field situations. Students interested in developing an individualized professionally oriented program which may 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. PREREQUISITES: Minimum of 18 sh in Biology, GPA of 2.50 or higher overall, and Junior or Senior standing.

BIO 398 Honors Supplementary Research **1 – 3 sh**
See page 139.

BIO 435 Advanced Genetics **3 sh**
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. PREREQUISITE: BIO 310-311.

BIO 440 Evolution **3 sh**
Various philosophies of evolutionism with major emphasis on plant and animal affinities. Use of taxonomic, chemical, genetic and paleontological evidences will be stressed.

BIO 447 Immunology **3 sh**
Infectious diseases of man, their cause, treatment, and control with emphasis on the theoretical and practical aspects of antigen-antibody systems, serology, and antibiosis. PREREQUISITE: 3 s.h. in Microbiology.

BIO 457 Systematic Entomology **3 sh**
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.) PREREQUISITE: BIO 302 or permission of the department chairperson.

BIO 467 Cell Physiology **4 ch – 3 sh**
This course is a basis for the study of molecular biology and uses historical and current topic approaches. A short research project using either a protozoan or mammalian cell culture is required.

BIO 470 Selected Topics in Biology **3 sh**
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: BIO 104, 106, 108 or permission of the department chairperson.

BUSINESS

Completion of the lower division core requirements with a minimum 2.0 QPA average is a prerequisite for every 300 level College of Business course.

BUS/UST 001 University Studies: The First Year Seminar **3 sh**
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.

BUS 120 Principles of Business Statistics **3 sh**
An introduction to statistical concepts with emphasis on their role in business decision making. Topics include measures of central tendency, sampling, hypothesis testing, regression and correlation analysis and probability distributions.

BUS 131 Business Law I **3 sh**
This course is a survey of legal principles found in transactions common in today's business world. The case study method will be employed and the following topics will be covered: crimes, torts, contracts, agency, employment, partnerships, limited liability companies and corporations.

BUS 132 Business Law I **3 sh**
This course is an in-depth study of the law of commercial transactions. The case study method is used in the course and the Uniform Commercial Code is reviewed. Topics covered include personal property and bailments, sales, product liability, negotiable instruments, secured transactions, bankruptcy, real property, estates, and trusts. This course is recommended for accounting and finance majors. PREREQUISITE: BUS 131.

BUS 171 Business Information Systems: Theory & Practice **3 sh**
This course provides an introduction to basic information resource management principles as well as hands-on instruction in spreadsheet and database software in solving business problems. Topics include business information systems concepts, database concepts, role and importance of information in business, and basic to intermediate coverage in using spreadsheet and database software. Classes are conducted in a microcomputer laboratory using a hands-on approach.

BUS 310 Advanced Business Computer Applications **3 sh**
This course focuses on the use of the microcomputer as a managerial tool, which facilitates the solution of complex business problems. Throughout the course the student will be presented with common business situations. The student will use the microcomputer to aid in the development of solutions to the situations presented. The situations presented will be general enough to apply to each of the disciplines within the College of Business. Though the specific software used may remain flexible, typically the student will be introduced to the advanced features of 1) microcomputer operating systems and 2) electronic spreadsheets. Additional software may include high level programming languages, data base management packages, accounting systems, and systems which provide access to stock quotes and financial information

about public companies, as is appropriate based upon the situation being analyzed.

BUS 312 Microcomputer Database Systems **3 sh**
This course teaches students how to create database applications for use in solving business problems that require the storing and retrieving of information. The course begins with an overview of essential concepts and a brief review of the software's standard mode of operation and then leads to the design and development of integrated business database systems. Employing the techniques of event-driven programming, the student designs objects and programs events for data entry, data editing, background processing, and displaying and printing of documents. In addition, the course examines various methods for interfacing with the non-technical end-user.

BUS 320 Advanced Business Statistics **3 sh**
This course is specifically designed to emphasize the investigation and application of various advanced statistical concepts useful for the solution of modern business and economic problems. Coverage areas include analysis of variances, multiple and curvilinear correlation and regression analysis, model building and residual analysis.

BUS 331 Legal Environment of Business **3 sh**
This course is an introduction to the legal environment in which organizations and individuals find themselves. It views legal strategies in which the private and public sectors interact. Topics covered include overview of the legal process, jurisdiction, administrative agencies, securities regulation, antitrust, employment regulation, computers and the law, consumer protection, environmental law, and international trade and law. PREREQUISITE: BUS 131.

BUS 353 Management Information Systems **3 sh**
This course provides a comprehensive study of management information systems in the contemporary business environment. Topics of study include computer and communication technologies, the current organizational environment, types of information systems (i.e. Transaction Processing Systems, Decision Support Systems, Group Decision Support Systems, Office Information Systems, Inter-organizational Systems, Expert Systems, Artificial Intelligence, etc.), systems theory as a vehicle of analyzing and designing complex systems, systems analysis and design, and the operation, maintenance, and control of management information systems. Throughout the course emphasis is placed upon innovative uses of computer and communication technologies for competitive positioning and for restructuring of business processes. The student will be required 1) to demonstrate an understanding of the technical material by reviewing current periodicals and comparing the results of the review to the material presented in the text, and 2) to demonstrate an ability to apply theory by completing case studies. This course is designed primarily for non-accounting majors; accounting majors may be admitted with permission of the dean. PREREQUISITES: BUS 171, MGM 300.

BUS 379 Independent Study **1 - 3 sh**
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.

BUS 390 Internship in Business **3 - 6 sh**
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. Students shall complete at least 150 hours of internship involvement for 3 semester hour credits. Application should be made through the College of Business Internship Committee. If another three credits of internship is requested in a subsequent semester, a different internship experience, with a new set of application materials, will need to be submitted to the College of Business Internship Committee for approval. Total internship credit may not exceed 6 credits. PREREQUISITES: Completion of 75 credit hours prior to the commencement of the internship; obtain the required 2.0 QPA in the major and a 2.0 QPA overall; completion of the lower division business core subjects with a 2.0 QPA (ACC 121, ACC 122, ECO 011, ECO 012, BUS 120, BUS 131); completion of coursework appropriate to the internship's functional area; permission of the College of Business Internship Committee.

BUS/NUR 400 Health Care Management **3 sh**
This course explores major issues, trends and changes occurring within the health care industry. An applied understanding of the specialized organizations such as health maintenance organization, clinics, long-term care institutions, home care services, laboratories, and outpatient units will be explored. The learner will examine the environment, changes in governmental regulations and societal change of the respective health care industry and the impact of those on the consumer. In addition, a study of the internal organizational issues more specifically the clinical/operating activities unique to specific organizations will be examined. Emphasis will be placed on identifying managerial functions and issues in order to assist the health care system to adapt effectively. The management of human resources, and major managerial responsibilities will be studied. PREREQUISITE: Graduate level: Admission to MBA Program and completion of MGM 300 or a minimum of Senior Level Status plus completion of NUR 322/375.

CHEMISTRY

CHM 001 Preparatory Chemistry **3 sh**
This course is intended to prepare students for success in General Chemistry I (CHM 100). Although the topic of this course is chemistry, special emphasis is placed on developing strategies that will enable students to apply mathematical techniques, logical thinking, conceptual understanding and problem solving in all areas of science. Enrollment in this course is limited to science and science education majors who have not taken or who have not successfully completed General Chemistry I. PREREQUISITE: High School algebra.

CHM 020 Introduction to Chemistry **4 ch – 3 sh**
CHM 021 Introduction to Chemistry Laboratory
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.

CHM 040 Principles of Chemistry **5 ch – 4 sh**
CHM 041 Principles of Chemistry Laboratory
This course provides an introduction to the principles related to atomic theory, nuclear reactions, chemical reactions, periodic behavior, chemical bonding, kinetic theory, stoichiometry, pH: acids/bases and organic compounds. It is a laboratory course intended for students with majors that would benefit from a one semester college chemistry experience. This course does not satisfy major, concomitant, or specialization requirements for Secondary Education and/or Liberal Arts and Sciences majors in the Departments of Biology and Physical Sciences.

CHM 051 Introduction to Forensic Science **3 sh**

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.

CHM 100-101 General Chemistry I **6 ch – 4 sh**
CHM 101 General Chemistry I Laboratory
CHM 102 General Chemistry II **6 ch – 4 sh**
CHM 103 General Chemistry II Laboratory

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. PREREQUISITE: High school algebra and chemistry or MAT 105. First semester is a prerequisite for the second semester.

CHM 214 Organic Chemistry I **7 ch – 4 sh**
CHM 215 Organic Chemistry I Laboratory
CHM 216 Organic Chemistry II **7 ch – 4 sh**
CHM 217 Organic Chemistry II Laboratory

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: CHM 100-101 and 102-103; first semester is a prerequisite to second semester.

CHM/ENV 220 Environment Analysis **5 ch – 3 sh**
CHM/ENV 221 Environment Analysis Laboratory

This course provides information on modern methods of analytical chemistry utilizing as much as possible a "hands-on" approach. Attention will be paid to the operation of various pieces of analytical apparatus, their range of application, their advantages, and disadvantages, and to the physical or chemical phenomena which form the basis of the analytical method. PREREQUISITE: CHM 214-215.

CHM 230 Analytical Chemistry I **8 ch – 4 sh**
CHM 231 Analytical Chemistry I Laboratory

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/V is spectrophotometry, potentiometry, and gas and liquid chromatography. PREREQUISITES: CHM 100/101 and CHM 102/103 or equivalent.

CHM 310 Biochemistry **6 ch – 4 sh**
CHM 311 Biochemistry Laboratory

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. PREREQUISITE: Two semesters of Organic Chemistry.

CHM 312 Biochemistry II **6 ch – 4 sh**
CHM 313 Biochemistry II Laboratory

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. PREREQUISITE: One semester of Biochemistry or both Molecular Biology and Cell Biology courses.

CHM 314 Physical Chemistry I **6 ch – 4 sh**
CHM 315 Physical Chemistry I Laboratory
CHM 316 Physical Chemistry II **6 ch – 4 sh**
CHM 317 Physical Chemistry II Laboratory

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: MAT 272, PHY 100-101 and 102-103 and three semesters of chemistry. First semester is prerequisite for the second semester.

CHM 318 Advanced Biochemistry **3 sh**

The course is designed to study the various biochemical processes of photosynthetic carbon dioxide fixation in higher plants and in photosynthesis bacteria. Also included is the effect of changing environmental conditions on photosynthesis. PREREQUISITE: CHM 310.

CHM 320 Advanced Inorganic Chemistry I **6 ch – 4 sh**
CHM 321 Advanced Inorganic Chemistry I Laboratory

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: CHM 100, 102, 214, 216, and 230.

CHM 326 Advanced Organic Chemistry-Mechanisms **3 sh**

The study of mechanisms of organic reactions is emphasized. Modern theory viewpoints are applied to problems in organic chemistry. PREREQUISITES: CHM 214-215 and 216-217 or consent of the instructor.

CHM 336 Advanced Physical Chemistry **3 sh**

A course designed to treat some selected topics in physical chemistry in greater detail than is done in the introductory course. PREREQUISITES: CHM 314 and 316.

CHM 340 Analytical Chemistry II **8 ch – 4 sh**
CHM 341 Analytical Chemistry II Laboratory

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: CHM 230 and 231, or ENV 220 and 221.

CHM 351-353 Selected Topics in Chemistry 1 – 3 sh
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.

CHM 370 Research in Chemistry I 1 – 3 sh
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. PREREQUISITES: 12 s.h. of chemistry courses and consent of the instructor.

CHM 371 Research in Chemistry II 1 – 3 sh
This course allows a student to continue working on a project which was started in CHM 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. PREREQUISITE: CHM 370 and the consent of the instructor. (The combined credit total for CHM 370 and CHM 371 will not exceed 4 semester hours.)

CHM 380 Senior Seminar in Chemistry 2 sh
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.

CHM 390 Internship in Chemistry 1 – 4 sh
Supervised, practical work experience in laboratory and/or field situations. Students interested in developing an individualized voca-tionally oriented program which may assist in future career options may structure a work-study experience with the cooperating agency or orga-nization. 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. PREREQUISITE: Junior and Senior standing and approval of department head.

CHM 398 Honors Supplementary Research 1 – 3 sh
See page 139.

CHM 470 Selected Topics in Chemistry 1 – 3 sh
This course provides students with an opportunity for in–depth study at an advanced level of topics that are of current interest in the field of chemistry. The format of the course will vary to best address the educational goals as they relate to the selected topic. This course may be repeated for up to 6 credits provided the same topic is not repeated. PREREQUISITES: CHM 100, 102, and 214 or permission of the instructor.

COMMUNICATION DESIGN

CDE 022 Introduction to Digital Design I 6 ch – 2 sh
This half semester 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.

CDE 122 Introduction to Digital Design II 6 ch – 2 sh
This half semester course is an intermediate-to-advanced course which will continue to build on the concepts and skills established in CDE 022 Introduction to Digital Design I. CDE 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. PREREQUISITES: CDE 022 Introduction to Digital Design I or permission of instructor.

CDE 130 Typography 6 ch – 3 sh
A study of the principles of designing with type, including type history, and technological advancements in typesetting. There is special emphasis on type selection, specification, and creative typographic design solutions. PREREQUISITES: ART 021, ART 022, ART 031, ART 032 or with permission of the Communication Design Department.

CDE 141 Visual Translation 6 ch – 3 sh
The study and practice of techniques for representing visual ideas. A variety of tools and digital technology will be used in developing graphic layouts for presentation. PREREQUISITES: CDE 022 Introduction to Digital Design I; CDE 122 Introduction to Digital Design II; CDE 130 Typography; CDE 147 Visual Thinking; or with permission of the instructor.

CDE 147 Visual Thinking 6 ch – 2 sh
A half-semester 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. PREREQUISITES: ART 021 Drawing I; ART 022 Drawing II; ART 031 Two-Dimensional Design and ART 032 Three-Dimensional Design, or with permission of instructor.

CDE 151 Illustration Techniques 6 ch – 3 sh
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: ART 021, ART 022, ART 031, FAR 151 or permission of the Communication Design Department.

CDE 220 Print Media Production **6 ch – 2 sh**
A half-semester course in the study of print media reproduction processes to facilitate effective preparation of art for the various contemporary printing methods. PREREQUISITES: CDE 022 Introduction to Digital Design I; CDE 122 Introduction to Digital Design II; CDE 130 Typography; CDE 141 Visual Translation; CDE l47 Visual Thinking; or permission of the instructor.

CDE 231 Advanced Typography **6 ch – 2 sh**
Students in this half-semester course will further explore the possibilities of the typographic form as a means of visual communication. Emphasis will be placed on expressive typography and mastery of typographic design and layout. Students will use advanced typographic techniques to create communications solutions that might include advertisements, promotions, brochures, packaging, educational materials, books or posters among others. The primary design element utilized will be typography. Students will learn to use typography to communicate as both art and message through experimentation, manipulation and integration of letterforms and imagery. PREREQUISITES: CDE 022 Introduction to Digital Design I; CDE l22 Introduction to Digital Design II; CDE 130 Typography; CDE 141 Visual Translation; CDE l47 Visual Thinking; or permission of the instructor.

CDE 238 Graphic Design I: Symbology **6 ch – 4 sh**
A study of the fundamentals of graphic design as applied through symbology including the interaction of type and image. PREREQUISITES: CDE 022 Introduction to Digital Design I; CDE 122 Introduction to Digital Design II; CDE 130 Typography; CDE 141 Visual Translation; CDE 147 Visual Thinking; or with the permission of the instructor.

CDE 239 Graphic Design II: Editorial Design **6 ch – 4 sh**
The study of the design and structuring of information for magazines, newspapers, newsletters and periodicals. Emphasis will be placed on the hierarchy of text on the page. The primary focus of the course will be on the entity of the publication, which could include covers, content pages, special sections or supplements, feature stories and articles. PREREQUISITES: CDE 022 Introduction to Digital Design I; CDE 122 Introduction to Digital Design II; CDE 130 Typography; CDE 141 Visual Translation; CDE 147 Visual Thinking; CDE 238 Graphic Design I; or with the permission of the instructor.

CDE 241 Advertising Design I **6 ch – 4 sh**
This course is a study of the fundamentals of the history and the fundamentals of advertising, the breakdown of roles within an advertising agency, and the function of the advertising designer relative to this hierarchy. 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 person-ality. PREREQUISITES: CDE 022 Introduction to Digital Design I; CDE 122 Introduction to Digital Design II; CDE 130 Typography; CDE 141 Visual Translation; CDE 147 Visual Thinking; or with the permission of the instructor.

CDE 242 Advertising Design II **6 ch – 4 sh**
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: CDE 022 Introduction to Digital Design I; CDE 122 Introduction to Digital Design II; CDE 130 Typography; CDE 141 Visual Translation; CDE 147 Visual Thinking; CDE 241 Advertising Design I; or with the permission of the instructor.

CDE 252 Illustration I **6 ch – 4 sh**
Illustration I is the study of the fundamental building blocks of Illustration. A variety of concepts and compositional forms illustrators use will be explored. The impact and process of computer illustration will be addressed. PREREQUISITES: CDE 151 Illustration Techniques or with permission of the instructor.

CDE 253 Illustration II **6 ch – 4 sh**
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: CDE 151 Illustration Techniques; CDE 252 Illustration I; or with permission of the Communication Design Department.

CDE 276 Interactive Design I: Web Design **6 ch – 4 sh**
This course will introduce students to design for the World Wide Web. Since its inception in 1993 the World Wide Web has become a pervasive form of communication throughout the world. The need for skilled designers has increased as the WWW has transformed from text-based documents to a multi-media communications system. Digital Design II will prepare students to create HTML-based web pages and sites and to understand the technical infrastructure of network-based communications. PREREQUISITES: CDE O22 Introduction to Digital Design I; CDE l22 Introduction to Digital Design II; CDE 141 Visual Translation; CDE l47 Visual Thinking; or permission of the instructor.

CDE 277 Interactive Design II: Multimedia **6 ch – 4 sh**
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 & 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: CDE 022 Introduction to Digital Design I; CDE l22 Introduction to Digital Design II; CDE 130 Typography; CDE 141 Visual Translation; CDE l47 Visual Thinking; or by permission of the instructor.

CDE/ART 330 Animation **6 ch – 4 sh**
This course provides the opportunity for gaining rudimentary skills in the creation of non-computerized animation. While the emphasis is upon the production of animations, the origins of the art form will be explored and the renaissance in independent animation will be examined. PREREQUISITES: ART 031, FAR 015, FAR 016.

CDE 344/345 Advanced Illustration Seminar I & II **6 ch – 2 sh**
The students in these half semester seminars will be required to create a series of illustrations that will be stylistically linked. These pieces will be used as the basis for a professional illustration portfolio. Individual artistic expression will be encouraged. The process and the approach in creating a professional illustration, as well as, an understanding of the different illustration markets and how the individual student's style fits into a specific market will also be explored. PREREQUISITES: CDE 151 Illustration Techniques; CDE 252 Illustration I; CDE 253 Illustration II; or with the permission of instructor. Repeatable up to 4 s.h.

CDE 359 - 373 Communication Design Workshops 6 ch – 2 sh
Each semester the department offers a series of workshops to supplement students' major interests. Subjects are chosen from the following: Advanced Computer Layout, Art of Humor, Campus Graphics, Digital Animation, Package Design, Motion Graphics, Poster Design, Restaurant Graphics, Satire and Caricature, and 3D Computer Animation. Workshop subject materials is concentrated and taught in a half semester. Workshop subjects are taught during either the first or second half of a semester. PREREQUISITES: Satisfactory completion of all courses leading to Senior status in Communication Design or by approval of the instructor. PREREQUISITE FOR CDE 362 only: Campus Graphics: Student must have 3.0 GPA within the major or permission of the instructor.

CDE 374 Portfolio Seminar 6 ch – 2 sh
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. PREREQUISITE: Satisfactory completion of all courses leading to Senior status.

CDE 375 Selected Topics in Communication Design: Graphic Design 6 ch – 3 sh
A course permitting specialized or advanced subjects, not available in other courses, to be offered as occasion warrants. Topics may be in any aspect of graphic design, advertising design, or illustration and may require studio work, research, or travel. PREREQUISITES may apply in some cases.

CDE 377, 378, 379, 380 Independent Study in Communication Design 3 sh
Independent study involves individual pursuit and self-determination in Communication Design studio area not being offered by the University. PREREQUISITE: permission for up to 12 s.h. Limit 3 s.h. per semester.

CDE 381 Senior Design Seminar: Publication for Print Media 6 ch – 2 sh
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. PREREQUISITES: CDE O22 Introduction to Digital Design I; CDE 122 Introduction to Digital Design II; CDE 130 Typography; CDE 141 Visual Translation; CDE 147 Visual Thinking; CDE 220 Print Media Production; CDE 231 Advanced Typography; CDE 238 Graphic Design I; CDE 239 Graphic Design II; or permission of instructor.

CDE 382 Senior Design Seminar: Identity Systems 6 ch – 2 sh
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 symbology, 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. PREREQUISITES: CDE O22 Introduction to Digital Design I; CDE l22 Introduction to Digital Design II; CDE 130 Typography; CDE 141 Visual Translation; CDE l47 Visual Thinking; CDE 220 Print Media Production; CDE 231 Advanced Typography; CDE 238 Graphic Design I; CDE 239 Graphic Design II or permission of instructor.

CDE 383 Senior Advertising Seminar: Non-Profit/ Corporate Institutional 6 ch – 2 sh
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 non-profit and corporate/institutional advertising. PREREQUISITES: CDE O22 Introduction to Digital Design I; CDE 122 Introduction to Digital Design II; CDE 130 Typography; CDE 141 Visual Translation; CDE 147 Visual Thinking; CDE 220 Print Media Production; CDE 231 Advanced Typography; CDE 241 Advertising Design I; CDE 242 Advertising Design II or with the permission of instructor.

CDE 384 Senior Advertising Seminar: Consumer Product Advertising 6 ch – 2 sh
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: CDE 022 Introduction to Digital Design I; CDE 122 Introduction to Digital Design II; CDE 130 Typography; CDE 141 Visual Translation; CDE l47 Visual Thinking; CDE 220 Print Media Production; CDE 231 Advanced Typography; CDE 241 Advertising Design I; CDE 242 Advertising Design II or with the permission of instructor.

CDE 385 Senior Interactive Design Seminar: Advanced Web 6 ch – 2 sh
This half-semester course will cover advanced principles and techniques for designing web-based communications. As the Web continues to expand and transform, this course will train students in contemporary design practices and technology. It will build on the skills learned in Digital Design I and II to enable the student to design efficient, effective communication for the World Wide Web. PREREQUISITES: CDE 022 Introduction to Digital Design I; CDE 122 Introduction to Digital Design II; CDE 147 Visual Thinking; CDE 141 Visual Translation; CDE 220 Print Media Production; CDE 231 Advanced Typography; CDE 276 Interactive Design I or permission of the instructor.

CDE 386 Senior Interactive Design Seminar: Advanced Multimedia 6 ch – 2 sh
Advanced Multimedia is a half-semester seminar allowing for more thorough and deeper instruction in the process and production of interactive design. Advanced Multimedia builds on the skills and concepts learned in Interactive Design II and encourages the student to explore the boundaries for human-computer interaction and focuses on uses for multimedia not previously experienced in Interactive Design II. The format of the course will enhance a students ability to work efficiently and at a more "real-world" pace. PREREQUISITES: CDE O22 Introduction to Digital Design I; CDE 122 Introduction to Digital Design II; CDE 130 Typography; CDE 141 Visual Translation; CDE l47 Visual Thinking; CDE 220 Print Media Production; CDE 231 Advanced Typography; CDE 277 Interactive Design II; or by permission of the instructor.

CDE 387 Senior Illustration Seminar: The Visual Essay 6 ch – 2 sh
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: CDE 151 Illustration Techniques; CDE 252, Illustration I; CDE 253 Illustration II; or with the permission of the instructor.

CDE 388 Senior Seminar: Self-Promotion for Illustrators and Designers **6 ch – 2 sh**
This half semester Senior Seminar involves exploration of marketing and self-promotion strategies necessary for success in today's illustration/design market. PREREQUISITES: CDE 151 Illustration Techniques; CDE 252 Illustration I; CDE 253 Illustration II; or with the permission of the instructor.

CDE 392 Field Experience in Communication Design **3 sh**
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.

CDE 394 Communication Design Internship **40 ch – 10 sh**
Internship provides the senior student concentrating in either Graphic Design, Advertising Design or Photography (Illustration excluded) with professional experience in an area design advertising or photography firm. The experience will be 40 hours per week for seven and one-half weeks. Seniors must make application for this course and have a 3.0 QPA in specific courses within their concentration. The course Production Processes must be included in the average for Graphic Design and Advertising Design concentrations. No other full semester daytime course may be scheduled during the internship semester.

CDE 399 Student Exhibition **0 sh**
This student exhibition is a requirement for graduation. All BFA degree candidates in Communication Design 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.

COMMUNICATION DESIGN HISTORY

CDH 150 Historical Survey of Graphic Design A **3 sh**
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.

CDH 151 Historical Survey of Graphic Design B **3 sh**
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.

COMPUTER SCIENCE

CIS 112 Visual Basic Programming **3 sh**
This course is designed to help the student develop sound programming methodology using the Visual Basic language and to gain an understanding of the key concepts in computer science. Topics include the Visual Basic development environment, GUI interfaces, the software development cycle, modular design, data flow, execution flow, abstraction, generalization, management of complexity, variables, subroutines, one and two dimensional arrays, and processing string data. An algorithmic approach and top-down design are presented in the solution of problems.

CIS 135 Computer and Information Science I **3 sh**
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. PREREQUISITE: MAT 105 or its equivalent.

CIS 136 Computer and Information Science II **3 sh**
This course extends the topics developed in CIS 135. Also covered are: concepts of data abstraction, encapsulation, recursion; search and sort methods; and simple data structures. PREREQUISITE: C or better in CIS 135.

CIS 235 Assembly Language Programming **3 sh**
This course is designed to provide an understanding of the internal execution of a program by a modern digital computer. Topics include computer components and organization, representation of numbers and characters, instruction codes, machine language programming, assembly systems, input-output, subroutines, and macros. PREREQUISITE: MAT 125 and C or better in CIS 136.

CIS 237 Data Structures **3 sh**
Topics include basic concepts of data; linear lists, strings, arrays and orthogonal lists; representation of trees and graphs; storage systems, structures, allocation and collections, multilinked structures; symbol tables and searching techniques; formal specification of data structures, data structures in programming languages and generalized data management systems. PREREQUISITES: MAT 125 and C or better in CIS 136.

CIS 241 Advanced Visual Basic Programming **3 sh**
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: MAT 125, and either CIS 112 or CIS 135.

CIS 242 Scripting Languages and Client/Server Computing **3 sh**
This course provides an opportunity to implement computing solutions to classical Client/Server problems. The client side consists of the user interface and associated processing. The server side consists of data manipulation and storage as well as client communication. Appropriate scripting languages will be used in the implementation of each side. Some attention will be given to the network over which the information from client to server flows. PREREQUISITES: MAT 125, and either CIS 112 or CIS 135.

CIS 243 Java Programming **3 sh**
This course introduces the student to event-driven, object-oriented programming using applets. The student is introduced to the design, creation, use, and communication that takes 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. PREREQUISITE: C or better in CIS 136.

CIS 280 Cooperative Internship in Computer Science I 3 – 6 sh
The internship consists of 6 to 12 weeks of full-time employment that provides students with a supervised industrial experience in computer science. The internship is supervised by a member of the Mathematics and Computer Science Department. This internship is available only to Computer Science majors, and is taken on a pass/fail basis. PREREQUISITE: Substantial completion of the required and concomitant courses in the Computer Science major with an above average grade-point average. Approval by the department chair is required.

CIS 310 Procedure Oriented Programming Languages 3 sh
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. PREREQUISITES: MAT 126 and CIS 237.

CIS 341 Information Security 3 sh
This course is an introduction to the basic concepts of information security. Topics include security requirements, security threats, active and passive attacks on data transmission, intrusion prevention and detection, viruses and other malicious programs, cryptography, cryptanalysis, and trusted information systems. PREREQUISITE: MAT 126 and either CIS 237 or permission of instructor.

CIS 342 e-Commerce Applications 3 sh
This course introduces the students to the multi-disciplinary field of Electronic Commerce. Electronic commerce occurs when business transactions are done using telecommunication networks. E-commerce involves the exchange of business/technical information using Electronic Data Interchange (EDI), E-mail, Electronic Funds Transfer (EFT) and other technologies. The course will focus on business-to-business (B2B) E-commerce. The major goal will be to have the students model and implement part of an E-commerce application. PREREQUISITES: MAT 126 and CIS 237.

CIS 343 Operating Systems 3 sh
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. PREREQUISITES: MAT 126 and CIS 237.

CIS 352 UNIX: Systems Programming and Administration 3 sh
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, using the WWW, and installation will be illustrated. Under the latter, such topics as file primitives and directory access, system utilities, processes, signals and signal handling, inter-process communication, semaphores, file and record-locking, sockets, and terminal manipulation are studied. Meaningful applications which illustrate the topics will be examined. PREREQUISITE: MAT 126 and CIS 237.

CIS 354 Information Systems: Theory and Practice 3 sh
Topics include characteristics of on-line information systems, structured analyzing design and development considerations, concepts and techniques of information organization, storage and retrieval; problems of simultaneous access, and file security and recovery. PREREQUISITE: MAT 126 and CIS 237.

CIS 370 Selected Topics in Computer Science 3 sh
This is a seminar in advanced topics of computer and information science; content will vary dependent upon interest of instructor and students, and the course may be repeated once for additional credit. PREREQUISITE: Consent of student's advisor, instructor and department chairperson.

CIS 372 Independent Study and/or Projects in Computer Science 1 – 6 sh
This course involves individual independent study in some area of computer science under the direction of a CIS 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, mech-anical 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. PREREQUISITES: Permission of the student's advisor, instructor, and department chairperson.

CIS 380 Cooperative Internship In Computer Science II 3-6 sh
This second internship consists of 6-12 weeks of full-time employment that provides students with a supervised industrial experience in computer science. The internship is supervised by a member of the Mathematics and Computer Science Department. This internship is available only to Computer Science majors, and is taken on a pass/fail basis. PREREQUISITES: CIS 280 and approval by the department chair is required.

CIS 385 Computer and Information Science Seminar 3 sh
This course is used to satisfy the senior seminar requirement for CIS majors. The course is designed to integrate the student's work in the CIS major and to provide opportunity for the student to engage in a significant project to structure and apply CIS content and procedures. PREREQUISITES: 75 credits completed and permission of the instructor.

CIS 398 Honors Supplementary Research 1 - 3 sh
See page 139.

CIS 402 File Management Techniques I 3 sh
An examination of the basic structures used in external storage files and the techniques to manage those files. Basic file system organization; external storage devices; common file structures, sequential, indexed, indexed-sequential, direct, and VSAM files, tree structured files, list structured files, file systems, sorting files, file protection, file system evaluation. PREREQUISITES: MAT 126 and CIS 237 or unconditional admission to the Graduate program in CIS or permission of instructor.

CIS 411 Networking I 3 sh
This course deals with the theory, implementation and administration of Local Area Networks. It is also concerned with the mechanisms by which Local Area Networks are extended. A dedicated file-server based LAN will be the main instructional model. PREREQUISITES: MAT 126 and CIS 237 or unconditional admission to the Graduate program in CIS or permission of instructor.

CIS 415 Design and Analysis of Algorithms I 3 sh
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: MAT 126 and CIS 237 or unconditional admission to the Graduate program in CIS or permission of instructor.

CIS 421 Web-Based Java Programming **3 sh**
This course introduces the students to Web-based, client/server programming using Java. The students learn the difference between program driven applications and event-driven applications. The students will develop Web-based programs and graphical programs using the latest techniques of Java. Using object-oriented techniques, the students will learn how to develop both the server and client side of an application. The student will learn how to use sockets and threads in establishing communication and controlling execution of their Web applications. The students will learn the basic of Java Beans and JDBC. PREREQUISITES: MAT 126, CIS 237, and CIS 243 or unconditional admission to the Graduate program in CIS or permission of instructor.

CIS 422 Object Oriented Programming I **3 sh**
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: MAT 126 and CIS 237 or unconditional admission to the Graduate program in CIS or permission of instructor.

CIS 425 Compiler Design I **3 sh**
The 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: CIS 235 and CIS 310 or unconditional admission to the Graduate program in CIS or permission of instructor.

CIS 426 Computer Architecture **3 sh**
This course deals with the study of the design of those aspects of a computing system which are visible to the programmer at various machine levels. These include instruction sets, data type representation, I/O mechanisms, and memory addressing techniques. The operational units and their interconnections which result from the architectural specifications will be studied. Specific topics include memory hierarchies, pipelining, RISC vs. CISC, superscalar processors, and microprogramming. Up-to-date examples which illustrate the topics will be used. PREREQUISITES: CIS 136 and CIS 235 or unconditional admission to the Graduate program in CIS or permission of instructor.

CIS 447 Artificial Intelligence I **3 sh**
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). PREREQUISITE: MAT 126 and CIS 237 or unconditional admission to the Graduate program in CIS or permission of instructor.

CIS 456 Data Base Management Systems I **3 sh**
This course provides an introduction to data base concepts; data models and data normalization; data language, data base design and implementation. Included is an examination of the three fundamental system types; tree, network and relational specification – as well as the use of DBMS in real life problems. PREREQUISITES: MAT 126 and CIS 237 or unconditional admission to the Graduate program in CIS or permission of instructor.

CIS 471 Data Communications **3 sh**
This course deals with the data communications as it occurs in accordance with the OSI seven-layer model for data communication. Topics such as signaling, encoding, error detection, flow control, data transmission, routing, connection and dialog management, data compression, security and applications are discussed. In addition LAN and WAN topics, including TCP/IP, are discussed. PREREQUISITES: CIS 136 and CIS 235 or unconditional admission to the Graduate program in CIS or permission of instructor.

CIS 472 Independent Study and/or Projects in Computer Science **1 – 6 sh**
This course involves individual independent study in some area of computer science under the direction of a CIS 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. PREREQUISITES: Permission of the student's advisor, instructor and department chairperson.

CIS 480 Selected Topics in Computer Science **3 sh**
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. PREREQUISITES: Permission of instructor, advisor, and department chairperson.

CRAFTS

CFT 010 A Survey of Crafts **3 sh**
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, wood, with an overview of other significant crafts. This course may be taken by non-craft majors and used as a general education elective.

CFT 110 Craft Design **6 ch – 3 sh**
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.

CFT 115 Drawing for Designers **6 ch – 3 sh**
This course is to aid the student in developing and presenting ideas in the design and craft areas. Drawing with and without instruments, emphasis will be placed upon perspectives and rendering techniques.

CFT 121 Ceramics I **6 ch – 3 sh**
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.

CFT 131 Weaving I **6 ch – 3 sh**
Basic weaving techniques are developed through the use of the four-harness loom, as well as simple weaving devices.

CFT 141 Non-Loom Fabric Structures I **6 ch – 3 sh**
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.

CFT 151 Wood Design I **6 ch – 3 sh**
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.

CFT 161 Fine Metals I **6 ch – 3 sh**
Experiences are centered around the creation of jewelry and metal crafts. Emphasis on 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.

CFT 171 Computer Aided Modeling and Rendering **6 ch – 3 sh**
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.

CFT 175 Introduction to Product Design **6 ch – 3 sh**
This course provides an introduction to the profession of Product Design. Product designers conceive, plan, and develop models of consumer products, such as toasters, lamps, helmets, furniture, etc. Students in this class will develop an understanding of the range of artifacts that are included in this field, design products related to specific assignments, learn to work within constraints related to materials and markets, develop a design concept, create models and prototypes, and explain and promote the value of their solutions. PREREQUISITE: ART 031, ART 032, FAR 015, and FAR 016 or permission of the instructor.

CFT 210 Applied Design for Crafts **6 ch – 3 sh**
This course explores advanced three-dimensional design concepts as they apply to crafts. Emphasis is placed on the complex systems of design as they relate to designing specific objects for functional applications. Investigation of the structural aspects of design, as well as current technological developments in materials and processes is stressed. PREREQUISITE: ART 032.

CFT 221 Ceramics II **6 ch – 4 sh**
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. PREREQUISITE: CFT 121.

CFT 231 Weaving II **6 ch – 4 sh**
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. PREREQUISITE: CFT 131 Weaving I.

CFT 241 Non-Loom Fabric Structures II **6 ch – 4 sh**
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. PREREQUISITE: CFT 141 Non-Loom Fabric Structures I.

CFT 251 Wood Design II **6 ch – 4 sh**
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. PREREQUISITE: CFT 151 Wood Design I.

CFT 261 Fine Metals II **6 ch – 4 sh**
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. PREREQUISITE: CFT 161 Fine Metals I.

CFT 268 Enameling **6 ch – 4 sh**
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 CFT 361, CFT 362, CFT 363, CFT 364, or CFT 365. (Repeatable up to 8 semester hours.) Students are expected to fulfill all the course requirements assigned in relationship to the number of credit hours earned.

CFT 321, 322, 323, 324, 325 Ceramics Studio I-V **6 ch – 4 sh**
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 20 s.h. with a 8 s.h. maximum per semester.) Students are expected to fulfill all the course requirements assigned in relationship to the number of credit hours earned. PREREQUISITES: CFT 121 Ceramics I and CFT 221 Ceramics II.

CFT 331, 332, 333, 334, 335 Weaving Studio I-V **6 ch – 4 sh**
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 20 s.h. with a 8 s.h. maximum per semester.) Students are expected to fulfill all the course requirements assigned in relationship to the number of credit hours earned. PREREQUISITES: CFT 131 Weaving I and CFT 231 Weaving II.

CFT 341, 342, 343, 344, 345 Non-Loom Fabric Structures Studio I-V **6 ch – 4 sh**
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 20 s.h. with a 8 s.h. maximum per semester.) Students are expected to fulfill all the course requirements assigned in relationship to the number of credit hours earned. PREREQUISITES: CFT 141 Non-Loom Fabric Structures I and CFT 241 Non-Loom Fabric Structures II.

CFT 351, 352, 353, 354, 355 Furniture Studio I - V **6 ch – 4 sh**
Further advanced study in woodworking techniques and furniture design is provided with emphasis on concentration in areas of the student's choice. Work includes research and experimentation of advanced joinery, lathe turning and veneering. A study is made of marketing, production costs and shop maintenance. (Repeatable up to 20 s.h. with a 8 s.h. maximum per semester.) Students are expected to fulfill all the course requirements assigned in relationship to the number of credit

hours earned. PREREQUISITES: CFT 151 Wood Design I and CFT 251 Wood Design II.

CFT 361-365 Fine Metals Studio I-V **6 ch – 4 sh**
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 20 s.h. with a 8 s.h. maximum per semester.) Students are expected to fulfill all the course requirements assigned in relationship to the number of credit hours earned. PREREQUISITE: CFT 161 Fine Metals I and CFT 261 Fine Metals II.

CFT 370 Selected Topics in Crafts **4 – 6 sh**
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. Repeatable up to 12 s.h.

CFT 377, 378, 379, 380 Independent Study: Craft Studio **1 – 4 sh**
An opportunity is provided to pursue an interest in an area of study that represents a particular independent challenge in ceramics, fibers, fine metals, or wood. This study is expected to diverge from normal course requirements. (Repeatable up to 16 semester hours; limit 4 s.h. per semester.) Students are expected to fulfill all the course requirements assigned in relationship to the number of credit hours earned. PREREQUISITE: permission of instructor and department chairperson.

CFT 381 Craft Seminar **3 sh**
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.

CFT 399 Student Exhibition **0 sh**
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

CRJ 010 Introduction to Criminal Justice **3 sh**
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.

CRJ 101 Introduction to Policing **3 sh**
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. PREREQUISITE: CRJ 010 or SWL 010 or permission of instructor.

CRJ/POL 181 Criminal Law **3 sh**
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.

CRJ/POL 182 Criminal Procedures **3 sh**
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.

CRJ 200 Comparative Criminal Justice Systems **3 sh**
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 States. PREREQUISITE: CRJ 010 Introduction to Criminal Justice.

CRJ 201 Comparative Police Systems **3 sh**
The variations in police style, organization, administration and control in different cultural settings will be explored in this course. Specific examination will be directed at why Canadian policing is becoming more centralized while a similar trend in the United States has been slow to develop. The methods of comparative analysis will be used to under-stand policing differences and similarities in intra-national and inter-national context by using Canada and the United States as primary examples. The effects of varying scale of agency organization will be examined. PREREQUISITES: CRJ 010 and CRJ 101 or permission of instructor.

CRJ 210 The Development of the Criminal Justice System **3 sh**
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. PREREQUISITE: CRJ 010.

CRJ/SOC 220 Juvenile Delinquency **3 sh**
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.

CRJ 221 Juvenile Justice System **3 sh**
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.

CRJ/SOC 250 Criminology **3 sh**
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.

CRJ/POL 260 The Judicial Process **3 sh**
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.

CRJ 270 Management of Offenders **3 sh**
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.

CRJ 271 Substance Abuse and Crime **3 sh**
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.

CRJ 301 Investigation and Intelligence **3 sh**
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: CRJ 101 or permission of instructor.

CRJ/POL 312 Constitutional Law II: Civil Liberties **3 sh**
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.

CRJ 362 Research Methods in Criminal Justice **3 sh**
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.

CRJ 370 Selected Topics in Criminal Justice **3 sh**
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. PREREQUISITE: CRJ 010 or permission of the instructor.

CRJ 379 Independent Study **1 – 3 sh**
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.

CRJ 380 Senior Seminar in Criminal Justice **3 sh**
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.

CRJ 390 Field Work in Criminal Justice I **16 ch – 6 sh**
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. PREREQUISITES: Students must complete 90 credit hours. Cumulative GPA at Kutztown University must be at least 2.8 based on a minimum of 12 credit hours. Grading is pass/fail.

CRJ 398 Honors Supplementary Research **1 – 3 sh**
See page 139.

DANCE

Introduction to Dance I, Introduction to Dance II, and Conditioning for Dancers are listed in the "Health, Physical Education and Dance" section with a new HPD prefix.

DAN 022 Ballet I **4 ch – 2 sh**
Development of basic technique including barre, port de bras, center floor, adagio, allegro, and basic vocabulary. Discussion of anatomical principles with various styles and approaches to ballet. Analysis of the aesthetics of dance and student compositions appropriate to this level.

DAN 033 Modern Dance I **4 ch – 2 sh**
Elementary modern dance technique and vocabulary with emphasis on acquisition of flexibility, strength and coordination. Analysis of the aesthetics of dance and student compositions appropriate to this level.

DAN 044 Jazz Dance I **4 ch – 2 sh**
This course encompasses Elementary Jazz dance techniques and vocabulary with emphasis on isolation movements, stretches, and rhythmic combinations. Rhythmic experience through exposure to and choreography of simple routines is provided.

DAN 106 Dunham Technique **4 ch – 2 sh**
Development of basic Dunham technique which encompasses authentic Afro-Caribbean dance. Discussion of the social, cultural, and historical implications of this dance form. Exposure to rhythmic experiences and choreography of simple routines provided.

DAN 110 Dance Production **3 sh**
This course focuses on all aspects of dance production with the exception of choreography and the technique itself. Stage design, lighting, makeup, costuming and sound will be among the subjects presented in this survey. Additionally, the business aspects of a dance performance are reviewed. Practical work on current dance productions, in addition to class meetings, will be an important part of the course work.

DAN 122 Ballet II **5 ch – 3 sh**
Development of intermediate technique and theory with emphasis on refinements necessary for adagio and allegro combinations, jumps, beats, and turns. Analysis of the aesthetics of dance and student compositions appropriate to this level. In addition to the four hours per week in the ballet technique class, students are assigned one hour per week in the dance studio for individual work on culminating projects involving choreography, reconstructions, or education. PREREQUISITE: Ballet I or by audition.

DAN 133 Modern Dance II **5 ch – 3 sh**
Intermediate-level technique with theory of modern dance to develop space-time coordination and strength for more complex movement combinations. Analysis of the aesthetics of dance and student compositions appropriate to this level. In addition to the four hours per week in the modern dance technique class, students are assigned one hour per week in the dance studio for individual work on culminating choreography projects. PREREQUISITE: Modern Dance I or by audition.

DAN 144 Jazz Dance II **5 ch – 3 sh**
Intermediate jazz dance techniques with emphasis on more complex jazz walk combinations, turns, adage movements, hops, jumps and leaps are included in this course. Rhythmic experiences through exposure to more complex combinations and compositions are an intricate part of the course. In addition to the four hours per week in the jazz dance tech-

nique class, students are assigned one hour per week in the dance studio for individual work on culminating choreographic projects. PREREQUISITE: Jazz Dance I or by audition.

DAN 165 Dance Alignment **4 ch – 2 sh**
This course acquaints the student with the means to achieve correct body alignment, the techniques needed to effectively develop the placement of a dancer's body.

DAN 166 Kinesiology For The Dancer **3 sh**
Kinesiology For The Dancer focuses on the structure, function, and use of the dancer's body. The course will include skeletal and neuromuscular analysis, information on the physiological systems that support human movement, the study of the types of injuries common to dance, and preventative measures and treatment modalities. Body types or somatypes, nutritional needs of dancers, and individual movement style will also be dealt with, including characteristic patterns in the use of time, space, and force. Throughout the course, the focus will be on relating kinesiological concepts to practical analysis of dance movement. PREREQUISITE: PED 101.

DAN 210 Dance Production II **3 sh**
This course focuses on all aspects of dance production with the exception of choreography and the technique itself. Stage design, lighting, makeup, costuming and sound will be among the subjects presented in this survey. Additionally, the business aspects of a dance performance are reviewed. Practical work on current dance productions, in addition to class meetings, will be an important part of the course work.

DAN 211 Teaching Methodology in Dance **3 sh**
This course is designed to develop the knowledge and methodology for teaching the three major forms of Western theatrical dance i.e., ballet, modern dance and jazz dance. This course will acquaint the student with educational methods unique to each dance technique. Skills basic to organizing, planning and teaching a dance class will be presented in a context of diverse student populations and educational settings.

DAN 222 Ballet III **5 ch – 3 sh**
Advanced technique and theory with emphasis on pointe, partnering, stagecraft and development of individual style, analysis of aesthetics of dance and student compositions appropriate to this level. In addition to the four hours per week in the ballet technique class, students are assigned one hour per week in the dance studio for individual work on culminating projects involving choreography, reconstructions, or education. PREREQUISITE: Ballet II or by audition.

DAN 223 Ballet IV **5 ch – 3 sh**
Advanced technique and theory with emphasis on pointe, partnering, stagecraft and development of individual style, analysis of aesthetics of dance and student compositions appropriate to this level. In addition to the four hours per week in the ballet technique class, students are assigned one hour per week in the dance studio for individual work on culminating projects involving choreography, reconstructions, or education. PREREQUISITE: Ballet III or by audition.

DAN 224 Ballet V **5 ch – 3 sh**
Advanced technique and theory with emphasis on pointe, partnering, stagecraft and development of individual style, analysis of aesthetics of dance and student compositions appropriate to this level. In addition to the four hours per week in the ballet technique class, students are assigned one hour per week in the dance studio for individual work on culminating projects involving choreography, reconstructions, or education. PREREQUISITE: Ballet IV or by audition.

DAN 227 Pointe I **5 ch – 3 sh**
This course will acquaint the student proficient in ballet with the correct method of dancing on pointe; techniques designed to enhance strength and coordination needed to master this form. In addition to the four hours per week in the pointe technique class, students are assigned one hour per week in the dance studio for individual work on culminating projects involving choreography, reconstructions, or education. PREREQUISITE: Ballet III or by audition.

DAN 228 Pointe II **5 ch – 3 sh**
This course concentrates on the development of pointe technique at the intermediate level. Analysis and practice of correct weight placement, body mechanics and balletic style enables the student to acquire a higher level of skill when dancing on pointe. In addition to the four hours per week in the pointe technique class, students are assigned one hour per week in the dance studio for individual work on culminating projects involving choreography, reconstructions, or education.

DAN 229 Pointe III **5 ch – 3 sh**
This course develops pointe technique at the advanced level for the advanced ballet dancer. Performance quality is emphasized through the study of a classical variation on pointe. In addition to the four hours per week in the pointe technique class, students are assigned one hour per week in the dance studio for individual work on culminating projects involving choreography, reconstructions, or education.

DAN 233 Modern Dance III **5 ch – 3 sh**
Advanced-level modern dance technique and theory. Intensive work emphasizing musicality, improvisation and personal performance styles. Analysis of the aesthetics of dance and student compositions appropriate to this level. In addition to the four hours per week in the modern dance technique class, students are assigned one hour per week in the dance studio for individual work on culminating choreography projects. PREREQUISITE: Modern Dance II or by audition.

DAN 234 Modern Dance IV **5 ch – 3 sh**
Advanced-level modern dance technique and theory. Intensive work emphasizing musicality, improvisation and personal performance styles. Analysis of the aesthetics of dance and student compositions appropriate to this level. In addition to the four hours per week in the modern dance technique class, students are assigned one hour per week in the dance studio for individual work on culminating choreography projects. PREREQUISITE: Modern Dance III or by audition.

DAN 235 Modern Dance V **5 ch – 3 sh**
Advanced-level modern dance technique and theory. Intensive work emphasizing musicality, improvisation and personal performance styles. Analysis of the aesthetics of dance and student compositions appropriate to this level. In addition to the four hours per week in the modern dance technique class, students are assigned one hour per week in the dance studio for individual work on culminating choreography projects. PREREQUISITE: Modern Dance IV or by audition.

DAN 239 Advanced Techniques and Improvisation **5 ch – 3 sh**
This course provides work at an advanced-professional level of technique, and includes intensive development of improvisational skill. Emphasis will be placed on integrating technical skill with creative response, analyzing a wide range of movement styles, and exploring the potential uses of improvisation in the professional setting.

DAN 241 History of Dance I **3 sh**
This course acquaints the student with the historical development of dance from the earliest cultures to the 1800s. It is designed as a general

survey of the role of dance in primitive cultures to formal ballet, exclusive of American influences and modern techniques.

DAN 242 History of Dance II **3 sh**
This course acquaints the student with the historical development of dance from the 1800s to present day. It is designed as a general survey of the role of dance from the inception of ballet to post-modern technique.

DAN 244 Jazz Dance III **5 ch – 3 sh**
This advanced-level jazz dance course includes both technique and theory. Intensive work emphasizing personal performance style, improvisation, musicality and stage projection is stressed. Special emphasis is placed on performance. In addition to the four hours per week in the jazz dance technique class, students are assigned one hour per week in the dance for individual work on culminating choreographic projects. PREREQUISITE: Jazz Dance II or by audition.

DAN 245 Jazz Dance IV **5 ch – 3 sh**
This advanced-level jazz dance course includes both technique and theory. Intensive work emphasizing personal performance style, improvisation, musicality and stage projection is stressed. Special emphasis is placed on performance. In addition to the four hours per week in the jazz dance technique class, students are assigned one hour per week in the dance for individual work on culminating choreographic projects. PREREQUISITE: Jazz Dance III or by audition.

DAN 246 Jazz Dance V **5 ch – 3 sh**
This advanced-level jazz dance course includes both technique and theory. Intensive work emphasizing personal performance style, improvisation, musicality and stage projection is stressed. Special emphasis is placed on performance. In addition to the four hours per week in the jazz dance technique class, students are assigned one hour per week in the dance for individual work on culminating choreographic projects. PREREQUISITE: Jazz Dance IV or by audition.

DAN 257 Creative Movement and Dance in an Educational Environment **3 sh**
This course introduces the student to the basic elements of dance and the primary tools of creative movement that can be utilized to promote a child's thinking and motivate interest. Areas such as characterization, use of props, and body sculpting will be explored as a means of encouraging a child's need to move, socialize, discuss, and become intrinsically involved with learning. The inclusion of management skills and execution of sample lessons will provide the student with the practical knowledge needed for implementation in any educational environment.

DAN 258 Partnering/Supported Adagio **2 ch – 1 sh**
An in-depth study of supported adagio, commonly referred to as partnering, as it is incorporated into ballet, modern and jazz technique.

DAN 268 The Choreographic Process I **4 ch – 3 sh**
This course acquaints the student with the process of choreography; the techniques and tools needed to effectively articulate a dancer's intentions through movement. Evaluation of dance composition in relation to inception, choreographic tools, design, and accompaniment are explored through a series of movement experiences and presentations.

DAN 269 The Choreographic Process II **4 ch – 3 sh**
This course provides the opportunity for further development of the skills, techniques and tools used in the process of choreography. Emphasis is placed on Effort-Shape theory, use of space, and the development of thematic structure.

DAN 274 Labanotation **3 sh**
This course introduces the student to the basics of reading and writing movement in symbols, using the Labanotation System developed by Rudolf Laban. Emphasis is placed on reading skills, Motif Writing, and the beginning of Structured Description.

DAN 275 Dance in the Musical Theatre **3 sh**
This course provides studio work in technique and choreography, and supplemental lectures exploring the role of dance in American musical theatre. Technique classes will explore such dance styles as jazz, tap, Afro-Caribbean, ballroom dance, modern and ballet; with lecture and discussion centering on the contribution of these styles to today's musical theatre.

DAN 279 Dance Variations **2 ch – 1 sh**
An advanced study of dance in which the student learns variations of important works of famous choreographers in the areas of ballet, modern and jazz.

DAN 290 Dance Production Practicum **1 sh**
This course is a study, through preparation, rehearsal, and performance, of the processes of dance production. Projects assigned by the instructor concentrate the students' study in one aspect of dance for a current live dance presentation. Assignments are possible in lighting, costuming, management or presentation. The course may be repeated up to a total of four credits provided assignments vary. PREREQUISITE: DAN 110 .

DAN 310 Dance Production III **3 sh**
This course focuses on all aspects of dance production with the exception of choreography and the technique itself. Stage design, lighting, makeup, costuming and sound are among the subjects presented in this survey. Additionally, the business aspects of a dance performance are reviewed. Practical work on current dance productions, in addition to class meetings, are an important part of the course work.

DAN 370 Selected Topics for Advanced Studies in Dance **3 sh**
Study of a specific area or areas of dance; e.g. character dance, the study of national dances as found in classical ballet, or jazz or Broadway dances. Analysis of the aesthetics of the advanced studies topics culminating with an in-depth student research project. PREREQUISITE: DAN 222, DAN 233 or DAN 244.

DAN 380 Independent Study in Dance **1 – 3 sh**
Independent Study provides an opportunity for individuals to pursue scholarly activity in an area pertinent to the discipline of Dance not covered within a regularly offered undergraduate course in Dance. 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.

DAN 390 Internship in Dance **3 – 12 sh**
Upon approval of a cooperating agency, the student is placed in a situation in which practical professional experience can be acquired from some organization related to his career plans. Interested students should apply through their advisor. PREREQUISITES: Junior or senior status and recommendation of the Department of Health, Physical Education and Dance. Course may be repeated to a maximum of twelve credits.

DAN 391 Senior Synthesis **3 sh**
Senior Synthesis involves the preparation of a culminating project in dance, other than written research. This course includes, but is not restricted to, projects involving choreography, reconstruction, or any studio or performance based event. PREREQUISITES: Senior status and the recommendation of the department.

DEVELOPMENTAL MATHEMATICS

DVM 000 Developmental Mathematics **3 sh**
This course provides a review of arithmetic and elementary algebra for students who need to improve their skills in these areas. Credit is recognized for satisfactory completion of Developmental Mathematics, but that credit is not applicable to any requirements for a degree.

DEVELOPMENTAL READING

DVR 000 Developmental Reading **3 sh**
This course provides instruction in reading skills necessary for college work. Analysis of written materials in terms of modes of discourse, methods of development, and patterns of organization is stressed. Emphasis is on development of critical reading skills, improvement of comprehension, building of vocabulary, and development of reading rate flexibility. Credit is recognized for satisfactory completion of Developmental Reading, but that credit is not applicable to any requirements for a degree.

ECONOMICS

ECO 011 Principles of Macro-economics **3 sh**
Basic economic concepts, national income, money and banking, role of the government, individual and business in capitalistic economy.

ECO 012 Principles of Micro-economics **3 sh**
Economic principles of input and output, and of income distribution. Basic concepts of international economics are included.

ECO 150 Economic History of the United States **3 sh**
The factors and forces underlying the changes taking place as a young, primarily agricultural, country emerges as a wealthy and complex industrial power. The role of government and of the individual. PREREQUISITES: ECO 011 and ECO 012.

ECO 201 Development Economics **3 sh**
Development Economics is a theory and policy oriented course that examines domestic and global aspects of the process of economic growth in third world countries and emphasis on growth experiences and strategies of selected countries as they relate to agrarian reform, industrialization, income distribution, foreign trade and employment. PREREQUISITES: ECO 011 and ECO 012.

ECO 205 Intermediate Microeconomics **3 sh**
Microeconomics is the study of the allocation of resources among competing uses in society. The analysis focuses on the implications of decision-making by individual economic units — consumers and firms — under alternative market structures. Required for Economics majors. PREREQUISITES: ECO 011 and ECO 012.

ECO 210 Intermediate Macroeconomics **3 sh**
Measurement and analysis of the levels of national income, employment, prices and interest rates; empirical and theoretical approaches to explaining and forecasting economic fluctuations; evaluation of the roles of fiscal and monetary policy, especially in the United States. PREREQUISITES: ECO 011 and ECO 012.

ECO 270 Comparative Economic Systems **3 sh**
A comparative analysis of the various types of economic systems, focusing on the United States, mainland China, Western Europe, Japan, the less developed countries, and the changing economies of the formerly communist nations. PREREQUISITES: ECO 011 and ECO 012.

ECO 301 Industrial Relations **3 sh**
The broad field of industrial relations: the development of the labor movement, employment and unemployment, methods of settling industrial disputes and the role of labor in the economy including current federal and state legislation. PREREQUISITES: ECO 011 and ECO 012.

ECO 310 Money and Banking **3 sh**
The structure and historical development of the monetary system of the United States and the role of money in determining the level of employment, production, and prices. Includes analysis of financial markets, financial intermediaries, and the Federal Reserve System with an emphasis on the theory and practice of monetary policy. PREREQUISITES: ECO 011 and ECO 012.

ECO 315 Government and Business **3 sh**
The roles of government in an evolving, mixed economy with particular emphasis on efforts to preserve and promote competition; the analysis of Supreme Court rulings in antitrust; also conservation, consumer protection; investor protection, and research. PREREQUISITES: ECO 011 and ECO 012.

ECO 320 History of Economic Thought **3 sh**
The evolution of economic ideas and methodology from ancient times to the present. Included are pre-scientific thought; the mercantilists and physiocrats; the classicists and neoclassicists; the historicists; the socialists; the contributions of the twentieth century. PREREQUISITES: ECO 011 and ECO 012.

ECO 322 The Economics of Health and Medicine **3 sh**
A survey of economic theory applied to the use of resources in the health care system. The present system of health care delivery is examined with respect to achievement of social objectives, and policy for improvement is discussed. PREREQUISITE: ECO 012.

ECO 325 The Economics of Law, Crime and Public Choice **3 sh**
An economic analysis of how and why society defines legal behavior as a background both to private and public resource allocation and to the criminal justice system. PREREQUISITE: ECO 012.

ECO 335 Mathematical Economics **3 sh**
An introduction to the use of mathematical models in economics. The application of mathematical theorems and techniques to problems in economic theory and practice. Topics include neoclassical analysis, activity analysis, general equilibrium, and models of growth and fluctuation. PREREQUISITES: ECO 011, ECO 012, MAT 221 or equivalent.

ECO 340 Managerial Economics **3 sh**
The application of microeconomic theory and elementary decision theory to managerial decision making and policy formulation. Topics include: The use of rudimentary statistical decision theory, forecasting, demand, costs, pricing, capital planning, and public sector decision making. PREREQUISITES: ECO 011 and ECO 012.

ECO 345 Econometrics **3 sh**
The estimation and hypothesis-testing of economic models, principally using regression techniques. Topics include input-output analysis, time series analysis and simultaneous equations models. The uses and limitations of these models for economic forecasting are examined with the aid of computers. PREREQUISITES: ECO 011, 012 and either MAT 121, 140 or BUS 120.

ECO 350 Public Finance **3 sh**
The revenues, expenditures, and debit operations of governments. Problems of financing the Federal Government are analyzed from the view-

point of the economic effects of government fiscal policy. PREREQUISITES: ECO 011 and ECO 012, ECO 205 and ECO 210.

ECO 360 International Trade and Finance **3 sh**
Economic efforts of trade among the nations; international monetary problems, determination of exchange rates, trade barriers, international agencies and agreements, and the economics of underdeveloped countries. PREREQUISITES: ECO 011 and ECO 012.

ECO 370 Seminar in Current Economic Literature **3 sh**
The methodology of the practicing economist (historical, statistical, mathematical, case study, etc.) and additions to theory are examined through the reading and discussion of recent monographs and articles. Critical analysis is emphasized. PREREQUISITES: ECO 011 and ECO 012.

ECO 379 Independent Study **1 - 3 sh**
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.

ECO 380 Senior Seminar in Economics **3 sh**
The course consists of readings and discussion and the preparation for the comprehensive examination in Economics. Required of all Liberal Arts students majoring in Economics. PREREQUISITE: Senior status.

EDUCATION

EDU 015 College of Education: First Year Seminar **1 ch - 1 sh**
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.

EDU 100 Perspectives on American Education **3 sh**
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.

EDU/WST 228 Women in Education **3 sh**
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.

EDU/SPU 245 Communication Disorders and the Classroom Teacher **3 sh**
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.

EDU 326 Introduction to Middle Level Education **3 sh**
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.

EDU 350 Diagnostic and Remedial Reading **3 sh**
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: ELU 201 or SEU 340.

EDU 411 Methods for Teaching Foreign Languages to Early Second Language Learners **3 sh**
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. PREREQUISITES: EDU 100 and either FRE 104, GER 104 or SPA 104 or the permission of the instructor.

EDU 426 Brain-Compatible Teaching **3 sh**
This course is designed to allow students the opportunity to relate and apply to the teaching/learning process results of brain research from anthropology, biology, neurology, and cognitive psychology. Additionally, students will "experience" the "process of learning" through group exercises and reflections. Consequently, students will develop instructional plans that reflect brain compatibility and that are appropriate for their area of specialization.

EDU/MLS 433 Cultural Awareness/Sensitivity for ESL/ELL Program Specialists **3 sh**
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.

EDU/MLS 434 Instructional Methods, Materials, and Assessments for ELL/ESL Populations **3 sh**
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.

EDU/MLS 435 English Language Acquisition and Awareness for ELL/ESL Populations 3 sh
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 English language, including grammar, pronunciation, and lexical, morphological, syntax and phonological components, for use in the ESL classroom. Students will learn about first and second language acquisition and the process of literacy development. Additional focus will be placed on non-verbal communication in English-speaking communities. Students will learn appropriate assessment methods for evaluating the effectiveness of instruction.

EDU 491 Tutoring Methods and Strategies for Literacy Volunteers 3 sh
This course will prepare undergraduate/graduate 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 expected to commit 60 hours of lifetime service as volunteer tutors, 20 hours of which will be evaluated during the semester in which the student is taking the course.

EDU 496 Multi-cultural Education 3 sh
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 multicultural 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.

ELECTRONIC MEDIA

Prior to taking advanced Electronic Media (TVR) courses, majors must earn a grade of "C" or higher in all prerequisite courses. Also, in order to be cleared for graduation, all majors must earn a grade of "C" or higher in all TVR courses.

TVR 010 Introduction to Electronic Media 3 sh
A survey of the historical, technical, economic, regulatory, and social aspects of the electronic media. Traditional broadcast radio and broadcast and cable television are considered, as well as emerging media, such as digital broadcasting, World Wide Web streaming, and open video systems. The course also examines electronic media programming, audience measurement, advertising, and audience effects.

TVR 050 Audio Production 6 ch – 3 sh
An introduction to the sound medium and its applications for Electronic Media majors. The fundamental properties of sound are introduced and related to modern audio production techniques. Students conduct lab exercises in editing, mixing, and multi-track recording. Limited enrollment.

TVR 055 Fundamentals of Video Production 6 ch – 3 sh
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.

TVR 070 Scriptwriting for Electronic Media 3 sh
An introduction to the craft of writing scripts for broadcast radio and television, cable systems, and newer technologies. Students learn the process and appropriate formats needed for writing continuity, including commercials and PSA's, as well as long-form informational programs. In addition, they learn how to create effective materials for on-air and off-air promotion.

TVR 110 Fundamentals of Radio 2 ch – 2 sh
An introduction to the radio medium. Various aspects of radio station operation are covered, with emphasis on programming, production, sales, news, and announcing.

TVR 113 Advertising and Sales in the Electronic Media 2 ch – 2 sh
A survey of the structure and process of advertising and time sales in the electronic media. Students are introduced to both local and national advertising campaigns and techniques used for time sales in radio, television, cable and the Internet.

TVR 120 Programming for Electronic Media 2 ch – 2 sh
An introduction to the theory and practice of programming for electronic media, including broadcast radio and television, cable TV, Satellite radio and TV and online video and audio. Specific program formats and schedules are developed and discussed.

TVR 207 Radio Workshop 2 ch – 1 sh
Practical work in various phases of the operation of a radio station. PREREQUISITES: Electronic Media core and TVR 110, or permission of the instructor.

TVR 217 Studio Production Workshop 2 ch – 1 sh
Practical experience in various television studio production crew positions. The student serves as a camera operator, floor manager, audio technician, assistant director, and in other crew positions. Lighting techniques and set design are also discussed. PREREQUISITE: Electronic Media core.

TVR 220 Communication Law 2 ch – 2 sh
This course introduces students to state, federal and case laws as well as Constitutional issues pertaining to the field of media. It traces their historical development and explores their pertinence to today's technology and society. The course allows students to develop an understanding of legal rights and responsibilities and an understanding of the legal system. The course covers material such as freedom of the press, defamation, privacy issues, access to information, free press and fair trials. PREREQUISITE: Electronic Media core or permission of the instructor.

TVR 226 Ethical Issues in the Electronic Media 3 sh
This course considers ethical issues associated with mass communication activities, with an emphasis on the electronic media. After beginning with a general consideration of the process of ethical inquiry and the conflicts in values as experienced by professionals working in the electronic media, the course then examines specific types of programming. Case studies and examples are used throughout the course to illustrate the topic at hand.. PREREQUISITES: TVR 010 and 220, or permission of the instructor. Limited enrollment.

TVR 227 Promotion and Continuity Workshop 2 ch – 1 sh
Practical work in various aspects of promotion and continuity. Students work with producers to promote University radio and cable TV programming. PREREQUISITE: Electronic Media core or permission of the instructor.

TVR 250 Video Engineering and Troubleshooting 3 sh
Students learn basic video troubleshooting, basic technical terminology and concepts, operation of broadcast test equipment, and alignment and adjustment of video production equipment. PREREQUISITE: Electronic Media core.

TVR 255 Video Field Production 6 ch – 3 sh
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 cuts-only, control-track and time-code editing systems. Lighting and audio techniques for field production are treated in depth. PREREQUISITE: Electronic Media core.

TVR 306 Audio Post-Production 6 ch – 3 sh
This course examines audio post-production techniques for video. Topics introduced in TVR 050 (Audio Production) and TVR 255 (Video Field Production) are expanded upon, and new audio production concepts are introduced. Students conduct lab exercises in signal processing, multi-track recording procedures, and audio post-production techniques for video. Limited enrollment. PREREQUISITE: TVR 255 or permission of the instructor.

TVR 320 Electronic Media Management 3 sh
An examination of the structures and functions of various electronic media systems, with an emphasis on effective management. The course applies basic management principles to the specific demands of the electronic media industry. On-line and printed resources are used to provide students with an accurate understanding of the current state of the industry and knowledge of developing trends. Facility and departmental management are considered, with emphasis on financial and personnel issues. PREREQUISITE: Jr. or Sr. standing, or permission of the instructor; Successful completion of Electronic Media core.

TVR 330 Corporate Electronic Media 2 sh
This course is a survey of electronic media used in educational, medical, and other corporate facilities, with an emphasis on the operation of production departments. Specific production techniques and distribution systems are covered in detail. PREREQUISITE: Electronic Media core and TVR 255, or permission of the instructor.

TVR 331 Copyright and Intellectual Property 3 sh
This course serves as an introduction into the basics of copyright and intellectual property issues. Topics include Copyright Basics, Fair Use criteria, and Multi-Media copyright issues through the Digital Millennium Act. Students learn what protections copyright laws afford to creators of works, how to obtain permissions to use copyrighted works, how to secure copyright for works they may prepare now or in the future and how to protect those works from unauthorized use by others as allowed by law. Students also explore the many resources available that deal with copyright and intellectual property. Students are required to have internet access for e-mail, on-line discussion, searches and access to course resources. PREREQUISITE: TVR 220 or permission of the instructor.

TVR 347 Newsgathering Workshop 2 ch – 1 sh
This course provides practical experience with producing insert materials for television news programs. Students use electronic newsgathering (ENG) techniques to write, shoot, and edit local segments for the campus newscast. They also have the opportunity to use professional video and copy sources to produce national and international segments. PREREQUISITE: TVR 120 or 255.

TVR 355 Multi-Camera Video Production 6 ch – 2 sh
This course integrates studio and field production techniques, and emphasizes producing and directing for multi-camera productions. It builds upon skills introduced in the first two video production courses. Lighting theory and applications are further expanded for studio and field production situations. Students are introduced to multi-camera field production by conducting site surveys and planning and producing several remotes during the semester. PREREQUISITE: TVR 255.

TVR 357 Field Videography Workshop 2 ch – 1 sh
This course requires the student to make practical use of production techniques in single-camera field production. Students further develop skills with a field camera such as composition, aesthetic considerations and shooting for editing. Field audio techniques are also explored. Students will work as part of a production team with students enrolled in TVR 367 and TVR 387. PREREQUISITE: TVR 255.

TVR 365 Video Post-Production 6 ch – 3 sh
This course focuses on video post-production equipment and techniques. Students produce programs using advanced post-production techniques. PREREQUISITE: TVR 255.

TVR 367 Post-Production Workshop 2 ch – 1 sh
The student gains practical post-production experience by editing feature stories from raw videotapes shot by students enrolled in TVR 357 and produced by students in TVR 387. The edited features and related materials are then edited into video programs under the direction of student producers enrolled in TVR 387. PREREQUISITE: TVR 365.

TVR 370 Selected Topics in Electronic Media 1– 3 ch; 1– 3 sh
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 6 credit hours, provided that the same topic is not repeated. PREREQUISITE: Junior standing.

TVR 379 Independent Study in Electronic Media 1 - 3 sh
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. PREREQUISITES: Jr. or Sr. standing and permission of the instructor. Repeatable to a maximum of 6 semester hours.

TVR 380 Senior Seminar in Electronic Media 2 sh
This course serves as a forum for students' various internship experiences. It also prepares students for the process of finding and applying for positions in the electronic media profession. Required of all majors, and must be taken concurrently with TVR 390.

TVR 387 Program Producers Workshop 4 ch - 2 sh
The student is assigned the role of producer or co-producer for a weekly, 30-minute cable program. The student works with other students enrolled in TVR 357 and TVR 367 to organize feature segments for inclusion in the program and selects appropriate features to be edited into a program of air quality. PREREQUISITES: TVR 255 and permission of the instructor.

TVR 390 Senior Internship in Electronic Media 12 sh
The Senior Internship in Electronic Media is a program that is designed to give the student a full-time, full semester, supervised practical experi-

ence in an electronic media-related facility, or appropriate corporate, medical, or educational site. The internship must be taken concurrently with TVR 380, Senior Seminar. PREREQUISITES: Senior status, completion of all required Electronic Media courses, a minimum of 2.00 Q.PA. overall and in the Electronic Media courses, and departmental approval.

TVR 398 Honors Supplementary Research **1 - 3 sh**
See page 139.

TVR 399 Honors Seminar in Electronic Media and Society **3 sh**
An interdisciplinary examination of the relationship between the radio, television and Internet media and American society. Students are introduced to the literature on media effects and to simple research techniques which will help them develop their own understanding of the relationship between these powerful media and the society in which they operate. Specific attention is given to media in relation to children, women and minorities, politics, and the Church. PREREQUISITE: Enrollment in the Honors Program or permission of the Honors Committee.

TVR 400 Electronic Media Research **3 sh**
An introduction to research terminology and methods, including basic statistical procedures. Emphasis is placed on developing the students' ability to identify appropriate areas for research and to formulate specific research questions. Attention is also given both to the structure of the electronic media industry and to the role research efforts play in the functioning of that industry. Various research tools and techniques are applied to current issues in electronic media as an introduction to applied research in the field, a foundation for other courses, and to help graduate students with the foundations of thesis research.

TVR 460 Selected Topics: Current Methods in Electronic Media **3 sh**
An in-depth examination of the state of the art in some aspect of electronic media. The course content will normally change each time the course is offered. Both the theoretical foundations and professional applications of the topic are covered. The course is intended for Electronic Media majors and professionals working in the field. It may be repeated for credit to a maximum of 6 credit hours, provided that the same topic is not repeated.

ELEMENTARY EDUCATION

ELU 130 Introduction to Early Childhood Education **3 sh**
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.

ELU 201 Fundamentals of Reading Instruction I (Required) **3 sh**
An introduction to the reading process. Emphasis is placed on perception and reading, language-development and its relation to success in reading, understanding word structure and teaching the skills of word recognition in a variety of ways. Students study reading as a cognitive process. Should be taken in the second semester freshmen year by those with reading as an area of concentration.

ELU 205 Science for the Elementary and Middle Schools (Required) **4 ch – 3 sh**
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. PREREQUISITES: Biological Science with a lab and Physical Science with a lab (Biological and Physical Science requirements in general education).

ELU 207 Health and Physical Education for Elementary Schools (Required) **4 ch – 3 sh**
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.

ELU 233 The Integrated Curriculum in Early Childhood Education **3 sh**
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. PREREQUISITE: ELU 130.

ELU 236 The Arts in the Early Childhood Curriculum **3 sh**
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. PREREQUISITE: ELU 130.

ELU 243 Teaching in the Urban Elementary and Middle Schools **3 sh**
This course will provide students with an awareness of the urban school environment and competencies necessary for effective urban teaching. Specifically the course will investigate the urban community, schools and children. This investigation will then be used as a basis for exploring the role of the urban teacher in the decisions, strategies and techniques necessary for successful urban teaching.

ELU 251 Teaching the Culturally Different Child to Read **3 sh**
This course is designed to provide the elementary teacher with those cognitive and affective competencies required to teach effectively children who are classified as culturally different. PREREQUISITE: ELU 201.

ELU 301 Fundamentals of Reading Instruction II (Required) **3 sh**
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. PREREQUISITE: ELU 201.

ELU 302 Children's Literature (Required) **3 sh**
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.

ELU 303 Language Arts (Required) 3 sh
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.

ELU 304 Social Studies for Elementary Schools (Required) 3 sh
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.

ELU 306 Integrating Principles of Learning and Teaching: Classroom Applications (Required) 3 sh
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.

ELU 308 Mathematics for Elementary Schools (Required) 5 ch – 3 sh
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. ELU 308 is part of the professional semester block. PREREQUISITES: MAT 021 and MAT 022.

ELU 321 Assessment of Children: Birth through the Middle Years (Required) 3 sh
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).

ELU 323 Techniques for Classroom Management and Discipline 3 sh
This course will provide teacher candidates with an in-depth analysis of current techniques for classroom management in early childhood, elementary, and middle school settings. Specific models for dealing with discipline problems and for preventing management breakdown will be examined. PREREQUISITE: Completion of Professional Semester or permission of the instructor.

ELU 334 Instructional Strategies in Early Childhood Education 3 sh
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.

ELU 338 Internship in Early Childhood Education 3 sh
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. PREREQUISITES: ELU 130, ELU 233, ELU 236, ELU 334.

ELU 343 Diversity and the Young Child 3 sh
This course is designed for aspiring and current teachers of young children. It is intended to provide information, strategies, techniques, innovative ideas, and encouragement in implementing a new and essential diversity perspective into programs for young children. Field experience required.

ELU 351 Diagnostic and Remedial Reading 3 sh
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. PREREQUISITES: ELU 201 and ELU 301.

ELU 366 Integrating the Arts into the Elementary Classroom 6 ch – 3 sh
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.

ELU 370 Selected Topics in Elementary Education 1 – 3 ch, 1 – 3 sh
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.

ELU 380 Independent Study in Elementary Education 1 – 3 sh
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.

ELU 390 Student Teaching and Practicum (Elementary I) 7 sh
ELU 391 Student Teaching and Practicum (Elementary II) 7 sh
ELU 390 & 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.

ELU 412 Education and Care of Infants and Toddlers 3 sh
Through research, discussion, practical application 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.

ELU 415 Building Partnerships for Educating Young Children: Families, Schools, and Communities 3 sh
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.

ELU 420 Administration of Programs for Young Children 3 sh
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.

ELU 452 Current Trends in Reading Instruction 3 sh
This course will examine existing programs, experimental programs, and major developments in the teaching of reading. Students will be provided with the theory and practice of reading programs. PREREQUISITE: ELU 201.

ENGINEERING

EGR 121 Engineering Drawing and Lettering 6 ch - 3 sh
This course is an introduction to basic mechanical drawing emphasizing multi-view and pictorial drawing, dimensioning, space analysis, graphs and engineering standards. Lettering and experiences with various design tools and media will facilitate the development of the graphic communication skills for the engineer/draftsman/designer.

ENGLISH

ENG 023 or its equivalent is a prerequisite for all ENG courses, except ENG 025 and ENG 021, and all WRI courses.

ENG 010 Introduction to Literature 3 sh
This course is designed to develop and intensify the student's aesthetic, intellectual, and emotional response to imaginative literature. It is designed as an introductory course in literature for students who are not majoring or minoring in literature, is intended to be used almost exclusively as a course in General Education, and is not applicable to the Major in the B.A. in English or Professional Writing, to the Specialization in the B.S. in Secondary Education/English, or to the Minor in Literature. PREREQUISITE: ENG 023 or its equivalent.

ENG 021 English as a Second Language 3 sh
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.

ENG 022 Introduction to College Composition 3 sh
This is an introductory writing course designed to increase students' writing proficiency to the level required in ENG 023 which fulfills the General Education writing requirement. ENG 022 focuses on the writing process and provides an introduction to critical thinking and analytical writing. A variety of genres are covered in this course including letters, proposals, reviews, personal narratives, persuasive essays, reports, and critical analysis essays. Instructors assign some but not all of the above genres, and there is a possibility of other writing forms being included. 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 the improvement of essential composition skills, including the ability to generate ideas, create a focus and argument in an essay, and develop paragraphs. In addition, the mechanics of good writing, which may include diction, grammar, syntax, usage, and structure, are reviewed as deemed necessary.

ENG 023, ENG 024 College Composition I & II 6 sh
(I) a review of the basic English language skills, together with extensive experience in reading and writing expository essays. (II): extension of the skills and techniques of ENG 023, with emphasis on writing critical analyses. ENG 023 is a prerequisite for all English upper-division writing courses except ENG 021, ENG 022 and ENG 025. Unless the high school record indicates unusual proficiency in writing, students are to take English 023 during their freshman year. (The University Writing Center, staffed by trained peer tutors and faculty volunteers, is open daily to any students desiring assistance in developing their writing skills.)

ENG 025 Honors Composition 3 sh
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 ENG 230.

ENG 100 Principles of Literary Analysis 3 sh
This course will examine basic literary terms and genres and their manifestation in the theme and form of selected works of poetry, drama, and fiction. Required for English General and Secondary Education/English majors, and Literature minors. PREREQUISITE: ENG 023 or its equivalent.

ENG 101, ENG 102 World Literature I & II 6 sh
(I) Representative writings from the beginning to 1650. (II) Representative writings from 1650 to the present. 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. PREREQUISITE: ENG 023 or its equivalent.

ENG 103, ENG 104 American Literature I & II 6 sh
(I): Representative writings from colonial times to the end of the Civil War. (II): representative writings from the end of the Civil War to the present. Particular attention is given to works which illuminate our history, our literary development, and our ideals. Either semester may be taken independently. PREREQUISITE: ENG 023 or its equivalent.

ENG 111 The Bible as Story and Literary Source 3 sh
A study, primarily, of Bible stories often alluded to in literature and, secondarily, of literary forms and techniques used in the Bible. The course is aimed at students who are not familiar with Bible stories. The approach is non-sectarian, emphasizing the literary, archetypal, and spiritual importance of the stories through the ages. PREREQUISITE: ENG 023 or its equivalent.

ENG 113, ENG 114 British Literature I & II 6 sh
(I): Representative writings from Anglo-Saxon times to the close of the 18th century. (II): representative writings from the Romantic era to the present. Aims are broader knowledge of the development of British letters in relation to historical movements, and intelligent appreciation of significant works. Either semester may be taken independently. PREREQUISITE: ENG 023 or its equivalent.

ENG 119 American Genre Film 4 ch – 3 sh
A genre approach to film study designed to introduce the general student to basic concepts in film criticism, aesthetics and history. PREREQUISITE: ENG 023 or its equivalent.

ENG 120 Current Themes in Literature: Apocalypse Now! 3 sh
This course will study the world's end and millennial fever in fiction from H.G. Wells to Stephen King, from the Age of Aquarius to Alien Nation. PREREQUISITE: ENG 023 or its equivalent.

ENG 121 Current Themes in Literature: Science Fiction In The 20th Century 3 sh
Critical analysis, interpretation, and evaluation of modern science fiction, novels and shorter works. PREREQUISITE: ENG 023 or its equivalent.

ENG 122 Current Themes in Literature: The Literature of Peace 3 sh
An analysis of representative peace-oriented writings of various cultures from ancient times to the present as evidenced in poetry, drama, fiction, and non-fiction. PREREQUISITE: ENG 023 or its equivalent.

ENG 123 Current Themes in Literature: American Writers and the Environment 3 sh
A socio-cultural critical approach to representative works in American literature that contemplate nature or are concerned with the environment. PREREQUISITE: ENG 023 or its equivalent.

ENG 124 Current Themes in Literature: American Folklore 3 sh
This course provides students with an introduction to the major genres of folklore, with an emphasis on American folklore. The relationship between folklore and written imaginative literature is explored. Each student is required to engage in one major collection project. PREREQUISITE: ENG 023 or its equivalent.

ENG 125 Current Themes in Literature: Detective Fiction 3 sh
Critical analysis, interpretation, and evaluation of novels and stories of detection. PREREQUISITE: ENG 023 or its equivalent.

ENG 126 Current Themes in Literature: Sports in Literature: An Examination of a Public Metaphor 3 sh
This course offers literary analysis of works which employ sports as a metaphor for the human condition, its social behavior, and the roles of men and women within it. The authors represented include: Robert Coover, Bernard Malamud, Philip Roth, Don DeLillo, Rita Mae Brown, John Updike, Harry Crews, William Faulkner, Ernest Hemingway, Norman Mailer, David Mamet, and Samuel Beckett. PREREQUISITE: ENG 023.

ENG 131 Current Themes in Literature: The Small Town in Literature 3 sh
The course examines the small town, its attitudes and inhabitants in novels, poetry and drama. Focus is on American writing but some world classics will also be studied. PREREQUISITE: ENG 023 or its equivalent.

ENG 135 Contemporary African Novel 3 sh
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. PREREQUISITE: ENG 023 or its equivalent.

ENG 136 Contemporary African Poetry and Drama 3 sh
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. PREREQUISITE: ENG 023 or its equivalent.

ENG 141 Literature and Film 4 ch – 3 sh
Designed to give the student an opportunity to consider the similarities and dissimilarities between literature and film. The focus for such a consideration is several literary works that have been made into films or upon which films have been based. Specific attention is given to structural aspects common to both, such as imagery, language, theme, and point of view. Critical theories relevant to literature and film provide the student with additional areas of study. PREREQUISITE: ENG 023 or its equivalent.

ENG 219 Culture and Media 3 sh
A course designed to apply a group of diverse texts in cultural criticism and theory to the discursive practices of particular media, specifically public relations and advertising. PREREQUISITE: ENG 023 or its equivalent.

ENG 225 Teaching of Adolescent Literature 3 sh
This course will include the study of several classic literary works commonly read by high school students but will focus more intensively on the study of modern and contemporary works written for adolescents. PREREQUISITE: ENG 023 or its equivalent.

ENG 230 Advanced Composition 3 sh
Advanced experience in writing provided through the preparation of articles, reviews, digests, and critical papers employing narrative, expository, descriptive, and argumentative techniques. PREREQUISITE: ENG 023.

ENG 234 Ethnic American Literature 3 sh
This course is an introduction to selected literary writings by 20th-century Asian-American, Native American, and Latino authors, with a critical survey of major themes as well as narrative techniques and strategies. PREREQUISITE: ENG 023 or its equivalent.

ENG 235 The American Autobiography 3 sh
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. PREREQUISITE: ENG 023 or its equivalent.

ENG 236 Black American Literature: Poetry/Drama 3 sh
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. PREREQUISITE: ENG 023 or its equivalent.

ENG 237 Black American Literature: Novel 3 sh
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. PREREQUISITE: ENG 023 or its equivalent.

ENG 238 African Diasporic Literature 3 sh
African Diasporic Literature will introduce students to a broad sampling of the literature written originally in French, Spanish, and Portuguese, and translated in English, by people of African descent dispersed in such places as Argentina, Brazil, Colombia, Cuba, Dominican Republic, Ecuador, Guadelople, 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. PREREQUISITE: ENG 023 or 025.

ENG 242 International Cinema 4 ch – 3 sh
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. PREREQUISITE: ENG 023 or its equivalent.

ENG/SPA 247 Modern Latin American Literature in Translation **3 sh**
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. PREREQUISITE: ENG 023 or its equivalent.

ENG 251 Old Testament Literature **3 sh**
Literary analysis and interpretation of themes, types, characterization, and genres in the Old Testament of the Bible, using a non-dogmatic, non-sectarian approach. PREREQUISITE: ENG 023 or its equivalent.

ENG 252 New Testament Literature **3 sh**
Literary analysis and interpretation of themes, types, characterization, and genres in the New Testament of the Bible, using a non-dogmatic, non-sectarian approach. PREREQUISITE: ENG 023 or its equivalent.

ENG/GER 253 German Literature in English Translation I **3 sh**
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, ENG/GER 254, is a continuation of ENG/GER 253 and treats outstanding writers from Realism through the 20th century. Either semester may be taken independently. PREREQUISITE: ENG 023 or its equivalent.

ENG/GER 254 German Literature in English Translation II **3 sh**
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 GER 253. Either semester may be taken independently. PREREQUISITE: ENG 023 or its equivalent.

ENG/RUS 255 Masterpieces of Russian Literature in English Translation I **3 sh**
This course entails an in-depth study in English translation of selected masterpieces of Russian literature. This course deals with Russian literature from Pushkin through Tolstoy. PREREQUISITE: ENG 023 or its equivalent.

ENG/RUS 256 Masterpieces of Russian Literature in English Translation II **3 sh**
This course entails an in-depth study in English translation of selected masterpieces of Russian literature. This course deals with Chekhov, continues through Tolstaia and includes a survey of modern Russian poetry. PREREQUISITE: ENG 023 or its equivalent.

ENG/FRE 257 Masterpieces of French Literature in English Translation I **3 sh**
This course entails an in-depth study of works from French literature selected for their humanistic character, their artistic quality and their present vitality. Primary emphasis is the appreciation of the innovative approach of each author to the universal themes of love and death, Man and Nature, Man's relation to God, war and peace, freedom and bondage. This survey will include representative works from the major literary genres: novel, essay, short story, drama and poetry (in English). The first semester (I) deals with French literature until 1800. PREREQUISITE: ENG 023 or its equivalent.

ENG/FRE 258 Masterpieces of French Literature in English Translation II **3 sh**
This course entails an in-depth study of works from French literature selected for their humanistic character, their artistic quality and their present vitality. Primary emphasis is the appreciation of the innovative approach of each author to the universal themes of love and death, Man and Nature, Man's relation to God, war and peace, freedom and bondage. This survey will include representative works from the major literary genres: novel, essay, short story, drama and poetry (in English). The second semester (II) deals with French literature until 1800 to the contemporary period. PREREQUISITE: ENG 023 or its equivalent.

ENG 270 Short Story **3 sh**
The development of the short story as a distinct literary type traced by means of wide reading and close analysis. PREREQUISITE: ENG 023 or its equivalent.

ENG 275 Archetypal Women in Myth and Literature **3 sh**
An introduction to myth criticism which applies the method to literary works in which women are central dramatically and symbolically. PREREQUISITE: ENG 023 or its equivalent.

ENG/WST 276 Nineteenth Century Women's Literature **3 sh**
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. PREREQUISITE: ENG 023 or its equivalent.

ENG 277 American Women in Literature **3 sh**
This course explores archetypes, stereotypes, myths, and characteristics of women in American literature. Students study various critical techniques as these techniques affect the woman's role in works written by both men and women. This examination includes the essay, the short story, the diary, poetry, the novel, and the play. PREREQUISITE: ENG 023 or its equivalent.

ENG/WST 278 Women Writers Around the World **3 sh**
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. PREREQUISITE: ENG 023 or its equivalent.

ENG 300 History of the English Language **3 sh**
The origins and development of English; the nature and sources of the British and American vocabularies. PREREQUISITE: ENG 023 or its equivalent.

ENG 321 Early and Medieval Literature **3 sh**
Readings in translation of the Anglo-Saxon epic, lyric, and reflective poetry; later medieval types such as the romance, the satire, and the allegory. Special emphasis will be placed on Chaucer. PREREQUISITE: ENG 023 or its equivalent.

ENG 325 Seventeenth Century Literature **3 sh**
The writings of Browne, Burton, Donne, Marvell, Bunyan, and Milton studied within the framework of English life from 1600 to 1675. PREREQUISITE: ENG 023 or its equivalent.

ENG 327 Eighteenth Century Literature I **3 sh**
Poetry, neoclassical literary criticism, and drama from 1660 to 1780 with consideration of central issues and prevailing attitudes reflected therein; emphasis on major writers. PREREQUISITE: ENG 023 or its equivalent.

ENG 328 Eighteenth Century Literature II **3 sh**
The novel and miscellaneous prose from 1660 to 1789 with consideration of related social, political, and philosophical matters; emphasis on major writers. PREREQUISITE: ENG 023 or its equivalent.

ENG 330 Shakespeare on the Stage **3 sh**
A workshop, offered only in summer sessions, designed to supplement courses in Shakespeare with reference to the staging and performance of Shakespeare's plays. The course is based on reading and examining selected plays through the use of videotapes, films, and available staged performances at summer theatres. PREREQUISITE: ENG 023 or its equivalent.

ENG 331 Shakespeare's Earlier Plays **3 sh**
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. PREREQUISITE: ENG 023 or its equivalent.

ENG 332 Shakespeare's Later Plays **3 sh**
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. PREREQUISITE: ENG 023 or its equivalent.

ENG 334 Introduction to English Linguistics **3 sh**
A comprehensive study of American English grammar, comprised of two aspects: (1) A brief, critical review of traditional Latinized grammar; (2) A comprehensive introduction to phonology, morphology, and the grammars — generative and transformational. PREREQUISITE: ENG 023 or its equivalent.

ENG/SPE 335 The Rhetoric of Literature **3 sh**
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. PREREQUISITE: ENG 023 or its equivalent.

ENG 337 HON: Gothic/Horror Literature **3 sh**
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. PREREQUISITE: ENG 023 or its equivalent.

ENG 338 HON: Crime and Punishment in Literature **3 sh**
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. PREREQUISITE: ENG 023 or its equivalent.

ENG 340 Romantic Movement **3 sh**
The works of Wordsworth, Coleridge, Byron, Shelley, Keats, and their contemporaries in the light of social background, biography, and critical doctrine. PREREQUISITE: ENG 023 or its equivalent.

ENG 343 Nineteenth Century Studies: Poetry 1840-1890 **3 sh**
The major Victorian poets, Browning, Tennyson, and Arnold, are studied in detail, and certain minor poets are examined. PREREQUISITE: ENG 023 or its equivalent.

ENG 344 Nineteenth Century Studies: Prose 1840-1890 **3 sh**
Study of representative prose works in the novel and the essay. PREREQUISITE: ENG 023 or its equivalent.

ENG 350 The Times of Melville and Whitman **3 sh**
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. PREREQUISITE: ENG 023 or its equivalent.

ENG 351 American Literary Realism: 1865 - 1910 **3 sh**
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. PREREQUISITE: ENG 023 or its equivalent.

ENG 352 HON: The World of William Faulkner **3 sh**
An examination of Faulkner's major novels and several of his short stories in the context of the history of America and the aesthetic, political, and philosophic movements prevalent when they were written. PREREQUISITE: ENG 023 or its equivalent.

ENG 353 Development of the Drama **3 sh**
A comprehensive study of world drama from its beginnings to the late 19th century. PREREQUISITE: ENG 023 or its equivalent.

ENG 355 Development of the Novel **3 sh**
The evolution of the world novel traced from its beginnings to World War I. PREREQUISITE: ENG 023 or its equivalent.

ENG 357 HON: Gerard Manley Hopkins: Poetry and Prose as Spiritual Autobiography **3 sh**
This course provides a comparative and intertextual analysis of the poetry and prose of Gerard Manley Hopkins as spiritual autobiography with a focus on his perspective of the Anglo-Gaelic milieu of the late 19th/early 20th century. PREREQUISITE: ENG 023 or its equivalent.

ENG 360 Contemporary British and Irish Literature **3 sh**
British and Irish poetry, drama, and prose fiction since 1914 analyzed in form and content with special attention to the relationship of literary technique and the social and moral comment. PREREQUISITE: ENG 023 or its equivalent.

ENG 363 Modern Drama **3 sh**
Reading and analysis of selected plays from the time of Ibsen to the present. PREREQUISITE: ENG 023 or its equivalent.

ENG 364 Modern Poetry **3 sh**
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. PREREQUISITE: ENG 023 or its equivalent.

ENG 365 Modern Novel **3 sh**
Studies of the world novel since World War I. PREREQUISITE: ENG 023 or its equivalent.

ENG 367 Symbol and Theme in 20th Century American Literature **3 sh**
Symbol and theme as used by representative major American poets, dramatists, and novelists of the Twentieth Century. PREREQUISITE: ENG 023 or its equivalent.

ENG 370 Seminar: Selected Topics in English **1 – 3 sh**
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; however, they may take no more than three hours of credit in any given semester. PREREQUISITE: ENG 023 and permission of the instructor.

ENG 371 Independent Study **1 – 3 sh**
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. PREREQUISITE: ENG 023, permission of the instructor and department chairperson.

ENG 379 Literary Criticism **3 sh**
Major theories of literary criticism traced from Aristotle to modern times. Critical essays and selected American and English masterpieces will be used as models and prototypes. PREREQUISITE: ENG 023 or its equivalent.

ENG 380 Senior Seminar in English **3 sh**
A study of special topics in English and American Literature in preparation for the comprehensive examination. Required of all students in the B.A./English General program. PREREQUISITE: ENG 023 or its equivalent.

ENG 398 Honors Supplementary Research **1 - 3 sh**
See page 139. PREREQUISITE: ENG 023 or its equivalent.

ENG 438 Major Modern Dramatists **3 sh**
This course is a brief critical survey of British and American drama of the twentieth century with primary focus on the work of such major figures as Shaw, O'Neil, O'Casey, Miller, Williams, Albee and Pinter. PREREQUISITE: ENG 023 or its equivalent.

ENG 455 Major Modern Poets **3 sh**
This course is a critical examination of the poetry of major twentieth-century British and American poets such as Crane, Eliot, Frost, Hopkins, Pound, Stevens, Thomas, Williams, and Yeats. PREREQUISITE: ENG 023 or its equivalent.

ENG 457 Major Twentieth Century American Novelists **3 sh**
The American novel from Dreiser to Bellow. Special attention is given to Hemingway and Faulkner. PREREQUISITE: ENG 023 or its equivalent.

ENG 460 Classical Influences on Literature **3 sh**
The influence of Greek and Roman classics on English and American Literature traced from the Renaissance to the Twentieth Century. The Classical readings include epic, tragedy, comedy, and poetry. PREREQUISITE: ENG 023 or its equivalent.

ENG 470 Selected Topics in English **3 sh**
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, provided that the selected topic is different. PREREQUISITE: ENG 023 or its equivalent.

ENG 493 The Twentieth Century British Novel **3 sh**
Comparative studies of selected works of Joyce, Lawrence and Woolf. Analysis of symbol and archetype as structural and thematic device. Rhetorical comparison of elements of style. PREREQUISITE: ENG 023 or its equivalent.

PROFESSIONAL WRITING

WRI 100 Contemporary Issues in Professional Writing **3 sh**
This course introduces students to the range of career opportunities and responsibilities within the field. Faculty members from the professional writing staff will assist the professor of record in developing and presenting an introduction to their respective areas of expertise. Other working professionals — including faculty from other departments, alumni, and area writers and/or employers interested in developing writing talent and/or in sharing their expertise — will be invited to participate when appropriate. Because the course provides an introduction to and overview of professional writing, students should complete the course early in their program. PREREQUISITE: ENG 023 or its equivalent.

WRI 207 Writing for the Workplace **3 sh**
Theory of and practice in written business communication. Letters and memoranda, reports, and a research paper are required. Models and case studies are used extensively. PREREQUISITE: ENG 023 or its equivalent.

WRI 208 Creative Writing: Exploring Forms **3 sh**
This course explores the various forms of creative writing through practical examination of the writing process, writing practice in multiple genres, and experiments in the transformations of familiar forms. While the course is useful particularly to creative writers, it is also designed to develop and sharpen academic or professional writing through creative practice. The course will be modeled as an apprentice workshop. In addition to writing, students will read poetry, fiction, non-fiction, and drama. PREREQUISITE: ENG 023.

WRI 211 Journalism **3 sh**
A study of the methods and philosophy of good journalism. A general survey of the development of journalism in this country and a study of the organization, management, and supervision of the content of school publications are included. PREREQUISITE: ENG 023.

WRI/SPE 212 Introduction to Mass Communications **3 sh**
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. PREREQUISITE: ENG 023.

WRI 213 Copy and Line Editing **3 sh**
Students in this course will learn and practice the tasks of copy and line editing. The course moves from simple copy editing — that is, the production of clear and correct copy — through the polishing and refocusing of that copy and on to the elimination of bias and libel in both reportage and the expression of opinion. PREREQUISITE: ENG 023 and two additional writing courses or permission of the instructor.

WRI 214 Magazine Writing **3 sh**
This is a basic course that will introduce the student to American magazines. The growth and development of the medium, current state of the industry, and trends for the future will be examined. Students will write magazine articles and study the processes by which they may be sold to appropriate publications and will be introduced to internal layout and graphic design of a small periodical. PREREQUISITE: ENG 023.

WRI 216 Writing for Public Relations **3 sh**
This course focuses on the types of writing done in the field of public relations. Students will practice writing a variety of long and short pieces normally composed and distributed by the public relations professional. PREREQUISITE: ENG 023 and WRI 211.

WRI 220 Technical Writing and Communication 3 sh
The definition of technical writing has broadened in recent years to address the audience and the uses for which the writing is intended. Formerly restricted conceptually to "writing which presents technical content," technical writing today — largely focused on the description of a product and instructions in its use — may encompass any information relevant to the selection, installation, operation, and maintenance of products, presented in ways most appropriate for readers who range in technical aptitude from the scientists and engineers who design them to the people who use them. For example, a modern fighter aircraft is designed by Ph.D.'s, operated by B.S.'s, and maintained by high-school or community-college graduates. The designers, operators, and maintenance staff interact with the product's materials, design, components, and use from different perspectives, all of which must be addressed by the enormous amount of documentation such a product requires. This course in technical writing requires familiarity with the World-Wide Web and some experience with office-suite software. PREREQUISITE: WRI 207 Writing for the Workplace. Though concentrating on skills and concepts useful throughout the realm of technical-writing work, special attention is paid to areas especially appropriate to specific regional high-tech employers.

WRI 226 Desktop Publishing: Writing and Editing Newsletters 3 sh
A course in newsletter production. Students will research, write, and edit articles, and then use a page composition program to prepare a newsletter, including headlines, graphics, and some basic design elements. PREREQUISITE: ENG 023 and WRI 211.

WRI 303 Investigative Journalism 3 sh
The strategies and techniques of in-depth reporting. Students will critically analyze professional investigative and public-affairs reportage. In pursuit of their own stories, students will learn how to acquire original and electronic documentation at the local, county, state and federal levels. PREREQUISITE: ENG 023 and WRI 211 or permission of the instructor.

WRI 304 American Literary Journalism 3 sh
Study of 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. The course should be of interest to Professional Writing majors, English majors and others. PREREQUISITE: ENG 023 and WRI 211 or permission of instructor.

WRI 305 Journalism Laboratory 3 sh
Students are required to complete a core of writing, editing and production assignments based on current newswriting and editing practices. PREREQUISITE: ENG 023 and WRI 211, or SPE/WRI 212, or permission of the instructor.

WRI 306 Advanced Magazine Writing: Developing and Covering a Specialty 3 sh
This course takes a step beyond English 214s introduction to the traditional magazine story genre, and thus it assumes that to be successful in the magazine business — either in a staff position or as a freelancer — students must select and be prepared to follow a subject specialty, some area of long time interest to both magazine readers and editors. To achieve this end, the course asks participants to select one of a dozen or so conventional specialties and to follow that specialty throughout the semester. PREREQUISITE: ENG 023 and two additional writing courses or permission of the instructor.

WRI 308 Rhetoric and Writing 3 sh
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. PREREQUISITE: ENG 023.

WRI 311 Creative Writing: Short Fiction 3 sh
An advanced course in the writing of short fiction. PREREQUISITES: ENG 023, WRI 208, and two additional writing courses or permission of the instructor.

WRI 312 Creative Writing: Poetry 3 sh
An advanced course in the writing of poetry. PREREQUISITES: ENG 023, WRI 208, and two additional writing courses or permission of the instructor.

WRI 313 Creative Writing: Drama 3 sh
An advanced course in the writing of drama. PREREQUISITES: ENG 023, WRI 208, and two additional writing courses or permission of the instructor.

WRI 316 Public Relations and the Corporate Environment 3 sh
PR and the Corporate Environment will introduce students to the various roles public relations professional play in both internal and external corporate communication strategies and efforts. PREREQUISITES: ENG 023 or its equivalent and WRI 207 Business Writing, or permission of instructor.

WRI 321 Information Design: Writing and Editing for On-Line Publications 3 sh
This course will introduce students to the fundamental principles of web-based information publishing. The course will allow students to engage in the entire process of writing and designing for the Web: rhetorical analysis, strategic planning, content development, document and site design, integration of visual elements, usability testing, and assessment. Throughout, emphasis will be placed on writing strategies for on-line publications. This course will be restricted to Professional Writing majors. PREREQUISITE: WRI 209.

WRI 370 Seminar: Selected Topics in Professional Writing 3 sh
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. PREREQUISITE: Completion of any four courses in the Prerequisite Core and permission of the instructor and the department chairperson.

WRI 371 Independent Study in Professional Writing 3 sh
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. PREREQUISITE: Completion of the Prerequisite Core and permission of the instructor and the department chairperson.

WRI 380 Professional Seminar 3 sh
This course gathers Professional Writing majors — no matter what their goals in the publishing world — to consider three things of concern to them all: the function of an internship in the development of their careers, the relationship between finding an internship and the later search

for a job, and the nature of the working media world, its demands, its hierarchies, and its rewards. PREREQUISITE: The prerequisite core.

WRI 390 Writing Internship **3, 6 or 9 sh**
Supervised, practical work experience writing for a newspaper, magazine, or organizational periodical. This internship will be available to students interested in pursuing a writing career. The three-credit internship may be taken twice for credit. The six-credit internship may be taken once for credit. PREREQUISITES: ENG 023, junior or senior standing, approval of the department chairperson, approval of the Dean of the College of Liberal Arts and Sciences, and student is required to take at least the first 3 internship credits concurrent with WRI 380, Professional Seminar.

WRI 400 Creative Writing: Theory and Practice **3 sh**
This is a graduate level writing course which will focus on the production of texts of poetry, short fiction, drama and multi-genre forms of creative writing. Using the works of contemporary writers in these genres as models, students will explore various writing styles consistent with the practice of contemporary writing. Reading assignments will focus on technique and stylistic considerations. Writing assignments will focus on allowing each student to understand his/her own creative process in the development of a unique voice as he/she works toward producing an acceptable body of original work. Using models from various texts, students will be encouraged to develop their own prompts and methods of generating writing topics. This course may be appropriate for the undergraduate students who have taken all the undergraduate creative writing courses and are developing a portfolio of writing for admission to a graduate writing program.

WRI 410 Arts and Entertainment Writing **3 sh**
Students enrolled in this course will both study and practice the strategies of reviewing artistic performances and related cultural subjects for the general press. Students will learn the basic methodologies of analysis, interpretation and evaluation of artistic offerings. Emphasis will be on the duties and responsibilities of the journalist/critic. PREREQUISITE: English 211 (Newswriting) or permission of the instructor.

ENVIRONMENTAL SCIENCE

This is an interdisciplinary program, staff of which is drawn from several academic departments. The program is monitored by the Environmental Science Committee. For further information about the Environmental Science Program contact the Coordinator of Environmental Science.

ENV 100/101 Introduction to Environmental Science
Lecture and Lab **5 ch – 3 sh**
A multi-disciplinary introduction to environmental problems and their potential solutions. Lecture and laboratory work are supplemented by field trips.

ENV/GEL 210 Environmental Geology **5 ch – 3 sh**
ENV/GEL 211 Environmental Geology Laboratory
A study of the relationship between man and his geological habitat. Problems that 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. PREREQUISITE: GEL 100-101.

ENV/CHM 220 Environmental Analysis **5 ch – 3 sh**
ENV/CHM 221 Environmental Analysis Laboratory
This course provides information on modern methods of analytical chemistry utilizing as much as possible a "hands-on" approach. Attention will be paid to the operation of various pieces of analytical apparatus, their range of application, their advantages, and disadvantages, and to the physical or chemical phenomena which form the basis of the analytical method. PREREQUISITE: CHM 214-215.

ENV/BIO 222 Environmental Biology **5 ch - 3 sh**
ENV/BIO 223 Environmental Biology Laboratory
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: BIO 104, and either 106 or 108 or permission of the department chairperson.

ENV/BIO 224 Applied Environmental Microbiology **5 ch - 3 sh**
ENV/BIO 225 Applied Environmental Microbiology Laboratory
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: BIO 104 and BIO 106.

ENV 380 Senior Seminar in Environmental Science **2 sh**
An interdisciplinary seminar devoted to the analysis of selected environmental problems. PREREQUISITE: Senior standing or permission of the Environmental Science Committee.

ENV 398 Honors Supplementary Research **1 - 3 sh**
See page 139.

FINANCE

Completion of the lower division core requirements with a minimum 2.0 QPA average is a prerequisite for every 300 level College of Business course.

FIN 340 Investments **3 sh**
Survey of various financial instruments including common stocks, bonds, stock options, and futures. Overview of various security selection techniques. Introduction to risk, portfolio theory, the capital asset pricing model, and the market efficiency. The course is rigorous and approaches the subject from the point of view of investment practitioner. PREREQUISITE: FIN 350.

FIN 350 Financial Management **3 sh**
Discussion of financial managers' roles and objectives as well as their operating environment. Analysis of firm's financial statements to evaluate its performance and forecast its financial needs. Measurement of risk and its impact on the required rate of return. Use of the time value of money in making financial decisions and valuing stocks and bonds. Management of working capital including cash, credit, inventory and short-term financing. Analysis and evaluation of long-term investment decisions using various capital budgeting techniques and financing these projects with long-term sources of capital e.g. common stocks, preferred stocks, and bonds. Application of spreadsheet modeling to financial management decision-making.

FIN 351 Personal Financial Planning **3 sh**
An integrated approach to the management of financial resources. Topics include investments, insurance, estate planning, and retirement planning. The course also involves the development of financial plans. This

is an advanced course designed to prepare individuals for professional examinations in the financial services industry. PREREQUISITE: FIN 350.

FIN 355 Investment Portfolio Management **3 sh**
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: FIN 340 and MAT 122.

FIN 356 Working Capital Management **3 sh**
A course focusing on the theoretical and practical aspects of managing the short-term assets and liabilities of a wealth-maximizing firm. This course utilizes lectures, cases, and spreadsheet exercises. Topics include: cash management, credit and collections, working capital financing, and inventory management. PREREQUISITE: FIN 350.

FIN 360 Financial Markets and Institutions **3 sh**
The structure of deposit and non-deposit institutions, asset and liability management, the demand and supply of loanable funds, the government and financial markets, international financial markets. PREREQUISITE: FIN 350.

FIN 363 Intermediate Financial Management **3 sh**
Development of a comprehensive understanding of the Cost of Capital, Capital Budgeting including Capital Budgeting under risk, Capital Structure, Dividend Policy, Long Term Financing including Convertible Securities and Leasing. PREREQUISITES: FIN 350 and MAT 122.

FIN 365 Multinational Financial Management **3 sh**
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. PREREQUISITE: FIN 350.

FIN 370 Financial Institutions Management **3 sh**
The internal organization of commercial banks, asset and liability management, cost of capital, credit analysis, lending practices and policies, trust services, and international banking are topics discussed. PREREQUISITE: FIN 360.

FIN 371 Selected Topics in Finance **3 sh**
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. PREREQUISITE: FIN 350, Financial Management.

FIN 380 Senior Seminar in Finance **3 sh**
The course is designed to enhance the student's understanding of theoretical concepts of financial management. It will also enhance financial decision-making capability via in-depth research of selected topics in finance, discussion of current finance literature, more advanced case analysis, and a financial simulation game. During the course of the game, students are required to make capacity expansion, capital budgeting, stocks and bonds issuance and retirement, dividend payment, and working capital management decisions. To facilitate these decisions, students are expected to prepare spreadsheets for calculating cost of capital, doing capital budgeting and ratio analysis, and preparing pro-forma income statement, balance sheet, cash flow statement and cash budget for each period. PREREQUISITE: FIN 363. COREQUISITES: BUS 320 or ECO 345.

FINE ARTS

FAR 015 & 016 Drawing I & II **12 ch – 6 sh**
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.

FAR/MIC 021 Microcomputer Graphics **3 sh**
This course is designed to allow students to explore the graphic capability of a microcomputer. No programming experience is required. Topics will include: word processing, object-based drawing, Postscript-based drawing, scanned images, paint-based drawing and desktop publishing. This course is not applicable anywhere in Category IV of General Education. No prerequisites.

FAR 111 Introduction to Painting **6 ch – 3 sh**
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. PREREQUISITES: ART 031, ART 032, FAR 015, FAR 016 or permission of the instructor.

FAR 131 Introduction to Watercolor **6 ch – 3 sh**
A basic introduction to the materials and methods of transparent watercolor painting. PREREQUISITES: ART 031, FAR 015, FAR 016 or permission of the instructor.

FAR 141 Introduction to Printmaking **6 ch – 3 sh**
Introduction to the manipulation of materials and techniques of print–making to create or transfer visual images. Intaglio, lithographic monoprint, relief, stencil, rubbing, embossing, and printing processes will be explored. PREREQUISITES: ART 031, ART 032, FAR 015, FAR 016 or permission of the instructor.

FAR 151 Introduction to Life Drawing **6 ch – 3 sh**
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. PREREQUISITE: FAR 015, FAR 016 or permission of instructor.

FAR 161 Introduction to Photography **6 ch – 3 sh**
This course covers the fundamentals of camera work, including black and white negative and print processing and an introduction to color transparencies. Emphasis is given to the image making potential and craft of the photographic print. Adjustable camera required. PREREQUISITES: ART 031, ART 032, FAR 015, FAR 016 or permission of the instructor.

FAR 171 Introduction to Sculpture **6 ch – 3 sh**
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. PREREQUISITES: ART 031, ART 032, FAR 015, FAR 016 or permission of the instructor.

FAR/ART 182 Introduction to Digital Media 6 ch – 3 sh
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 image and audio oriented 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 electronic media and prepares students for advanced digital art courses and other courses requiring a basic familiarity with these media. PREREQUISITES: ART 031, ART 032, FAR 015, and FAR 016 or permission of the instructor.

FAR 360 Color in Photography 6 ch – 3 sh
The course will instruct in making quality color prints from color negatives. Professional techniques for the color print using dichroic colorhead 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. PREREQUISITE: FAR 161 or permission of instructor.

FAR 368 Specialized Photographic Techniques 6 ch – 3 sh
This course presents specialized skills and materials used in the photographic studio. Techniques of controlled studio lighting, large formal camera handling, studio exposure, calculation and large format film processing will be explored. PREREQUISITE: FAR 161 or permission of instructor.

FAR 370 Art Today: The Next Decade 3 sh
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. PREREQUISITE: Junior level or above.

FAR 377, 378, 379, 380 Independent Study: Art Studio I, II, III, IV 1 – 3 sh
Independent Study involves individual pursuit and self-determination in Fine Arts studio area not being offered by the University. PREREQUISITE: permission of the instructor and department head. (Repeatable up to 12 semester hours.)

FAR 383 Digital Photography 6 ch – 3 sh
This course provides students with an understanding of the technical skills and aesthetic concepts associated with digital fine art photography. Students in the class can expect to engage in the production of photographs and related digital photographic media that exhibit creative solutions to aesthetic problems through the use of digital photographic technologies. PREREQUISITE: FAR 161 or permission of the instructor.

FAR 385 Selected Topics in Studio Art 6 ch – 3 sh
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. PREREQUISITES: All foundation courses: ART 031, 032, FAR 015, FAR 016; further prerequisites may apply, depending on the topic. (Repeatable for each special topic.)

FAR 398 The Business of Art 3 sh
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.

FAR 399 Student Exhibition 0 sh
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.

FINE ART STUDIO

FAS 310, 311, 312, 313, 314, 315, 316, 317, 318, 319 Painting Studio I - X 6 ch – 3 sh
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 40 sh, no more than 8 sh in one semester). PREREQUISITE: FAR 111 or permission of instructor.

FAS 320, 321, 322, 323, 324, 325, 326, 327, 328, 329 Drawing Studio I - X 6 ch – 3 sh
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 40 hours credit; no more than 8 sh in one semester.) PREREQUISITE: FAR 015 and FAR 016.

FAS 330, 331, 332, 333, 334, 335, 336, 337, 338, 339 Watercolor Studio I - X 6 ch – 3 sh
The course is planned to further effective experience with watercolor, to gain knowledge, skill and attitudes necessary in developing visual imagery and advancing individual interests in a specialized media. (Repeatable up to 40 semester hours, not more than 8 sh per semester.) PREREQUISITE: FAR 131 or permission of instructor.

FAS 340, 341, 342, 343, 344, 345, 346, 347, 348, 349
Printmaking Studio I - X **6 ch – 3 sh**
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 40 sh, no more than 8 sh in one semester.) PREREQUISITE: FAR 141 or permission of instructor. This course is offered in both spring and fall semesters.

FAS 350, 351, 352, 353, 354, 355, 356, 357, 358, 359
Life Drawing Studio I - X **6 ch – 3 sh**
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 40 sh, not more than 8 sh per semester.) PREREQUISITE: FAR 151 or permission of instructor.

FAS 360, 361, 362, 363, 364, 365, 366, 367, 368, 369
Photography Studio I - X **6 ch – 3 sh**
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 40 hours of credit; no more than 8 sh in one semester.) PREREQUISITE: FAR 161.

FAS 370, 371, 372, 373, 374, 375, 376, 377, 378, 379
Sculpture Studio I - X **6 ch – 3 sh**
Advanced studio study, research and application of specific materials, processes and concepts in the creation of sculptural form. (Repeatable up to 40 semester hours, not more than 8 sh per semester.) PREREQUISITE: FAR 171 or permission of instructor.

FAS 380, 381, 382, 383, 384, 385, 386, 387, 388, 389
Lithography Studio I - X **6 ch – 3 sh**
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 40 sh, no more than 8 sh in one semester.) PREREQUISITE: FAR 141 or permission of the instructor.

FAS 390, 391, 392, 393, 394, 395, 396, 397, 398, 399
Abstract Drawing & Painting Studio I - X **6 ch – 3 sh**
This studio course involves the study of abstraction as an aesthetic form both from western and non-western cross-cultural perspectives. The course is essentially comprised of two-dimensional art but retains the flexibility to extend to three-dimensional space. The course includes the study of formalist aspects of visual/pictorial structure, conceptual abstract content and its materialization processes. The combined media support could be paper and canvas and also expand to other materials, media and combined media. Collage may be used as a sketching medium. When possible, the use of a life drawing figure may serve as a basis for abstract distillation, deconstruction and reconfiguration processes. Students will have the opportunity to develop and explore unique material processes in reflecting their individual ideas. (This course can be repeated up to 40 sh, not more than 8 sh per semester.) PREREQUISITES: All Foundation drawing and 2-D design courses, Introduction to Painting, or permission of instructor. (Highly recommended: ARH courses: European Modernism, Art Since 1950, any non-western offerings.)

FRENCH

FRE 011, FRE 012 Elementary French (I & II) **6 sh**
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.

FRE 013 Elementary Conversation in French **1 sh**
Intensive oral practice covering vocabulary and structures of survival situations. One hour of class. Open to students of FRE 011 and 012 or with permission of the instructor. May be repeated.

FRE 023 Intermediate Conversation in French **1 sh**
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 FRE 103 and 104 or with permission of the instructor. May be repeated.

FRE 103, FRE 104 Intermediate French (III & IV) **6 sh**
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.

FRE 138 French Culture Through Film **3 sh**
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.

FRE 211 French Composition and Conversation I **3 sh**
French 211 taught in French is designed for advanced students, French minors and/or majors as an intensive grammar review presented to assist with the writing task at hand. This course affords students the opportunity to explore their attitudes about writing as well as learn about the writing process: planning, brainstorming, generating ideas, composing, re-reading, editing and revising in the target language. Students will learn to describe a person write a letter, tell a story, explain a concept, and express an opinion on current topics from French or Francophone cultures. The purpose of this course is largely to intensify and deepen the student's capacity for oral and written expression in the target language.

FRE 212 French Composition and Conversation II **3 ch**
This course is a continuation of French Composition and Conversation level I and targets advanced students of French who are interested in focusing on the development of their reading and writing proficiencies and their critical thinking skills. FRE 212 combines writing process theory, socio-linguistic and cultural analysis, collaborative and peer work and a learner-centered approach. The conversational component consists of exchanges of ideas and opinions on current journalistic texts from French or Francophone cultures and worldview topics to engage the student's interest and to serve as a springboard to improve written self-expression in the target language. FRE 212 is designed to strengthen and refine writing and conversational skills initiated and honed in FRE 211.

FRE 224 Business French **3 sh**
Business French is the study of French business terminology and phrasing as well as the formal aspects of conducting business in francophone countries and covers such topics as banking, tourism, transportation and telecommunications. The study of aspects of the geography and sociol-

ogy of francophone regions is also included. Active skills practiced will be translation, correspondence and telecommunication. PREREQUISITE: FRE 104 or its equivalent.

FRE 225 French Phonetics and Applied Linguistics 3 sh
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

FRE/WST 226 Women and the New Québécois Novel 3 sh
This course (taught in English) studies the development of the modern novel by Quebec female novelists. In 1960, the quiet revolution brought profound changes in every facet of Quebec life. Secularization and modernization gave Quebecers a new consciousness of themselves as a collectivity within the Canadian federation and as a majority within their province. For women especially, the break with a clerical traditional patriarchal society antagonistic to their advancement has been abrupt and profound. Their desire for freedom resounded in an outburst of new feminine and feminist writings. We will read and examine the works which best illustrates their vision, the interpretation of their history and present realities. Also included is written and oral work on the unique socio-cultural context in which these women write. PREREQUISITE: None.

FRE/ENG 257 Masterpieces of French Literature in English Translation I 3 sh
This course entails an in-depth study of works from French literature selected for their humanistic character, their artistic quality and their present vitality. Primary emphasis is the appreciation of the innovative approach of each author to the universal themes of love and death, Man and Nature, Man's relation to God, war and peace, freedom and bondage. This survey will include representative works from the major literary genres: novel, essay, short story, drama and poetry (in English). The first semester (I) deals with French literature until 1800. NO PREREQUISITES.

FRE/ENG 258 Masterpieces of French Literature in English Translation II 3 sh
This course entails an in-depth study of works from French literature selected for their humanistic character, their artistic quality and their present vitality. Primary emphasis is the appreciation of the innovative approach of each author to the universal themes of love and death, Man and Nature, Man's relation to God, war and peace, freedom and bondage. This survey will include representative works from the major literary genres: novel, essay, short story, drama and poetry (in English). The second semester (II) deals with French literature until 1800 to the contemporary period. NO PREREQUISITES.

FRE 300 French Classical Drama 3 sh
The classical drama from its rise to its highest point of achievement. Masterpieces of Corneille, Moliere, and Racine. Précis written in French on the readings. PREREQUISITE: FRE 104 or its equivalent.

FRE 301 Survey of French Literature I 6 sh
FRE 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. PREREQUISITE: FRE 104 or its equivalent.

FRE 305 French Literature of the Eighteenth-Century 3 sh
A study of the great philosophical ideas of the principal writers of the Age of Enlightenment — Montesquieu, Voltaire, Rousseau and Diderot. This course also covers the phenomenon of the "salon" and women's influence in the public sphere. PREREQUISITE: FRE 104 or its equivalent.

FRE 317 French in the Global Village 3 sh
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, FRE 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. PREREQUISITE: FRE 211 or instructor's permission.

FRE 320 Development of the French Novel 3 sh
Origin and development of the novel in each of the literary periods. Précis written in French augment the readings. PREREQUISITE: FRE 140 or its equivalent.

FRE 327 Professional Translation Skills in French 3 sh
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.

FRE 340 French Culture and Civilization 3 sh
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. PREREQUISITE: FRE 104 or its equivalent.

FRE 341 Contemporary French Culture 3 sh
A study of contemporary France and francophone societies, as manifested in present-day life and culture. Consideration will be given to their place in the world, to political, economic and social structures, education and the arts. PREREQUISITE: FRE 104 or its equivalent.

FRE 342 French Canada: Past and Present 3 sh
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. PREREQUISITE: FRE 211 or permission of the instructor.

FRE 345 Modern French Drama and Theatre 3 sh
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. PREREQUISITE: FRE 104 or its equivalent.

FRE 360 Study Abroad Experience **1 – 6 ch, 1 – 6 sh**
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.

FRE 361 Women in French Literature **3 sh**
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.

FRE 370 Selected Topics in French **3 sh**
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.

FLA 380 Senior Seminar in Foreign Languages **3 sh**
This course consists of reading and discussions in the area of the individual student's interest in preparation for the comprehensive examination in Foreign Languages. Required of all Liberal Arts students concentrating in Foreign Languages.

FRE 390 International Internship in French **1 – 9 sh**
This course is designed for the student wishing to spend an extended period of time in France or a French-Speaking country; at an approved agency/organization in either an internship situation or nontraditional studies setting. Students must demonstrate that the internship or nontraditional program will be conducted in the target language of study and will be adequately supervised. They must provide a detailed written account 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 upon their return and be prepared to make a presentation about their experiences. (This course can be repeated but is not to exceed a total of 9 credit hours. PREREQUISITE: French major and/or minor and permission of department chair and advisor; junior or senior status; 2.5 minimum GPA in major and/or minor or a 2.5 GPA overall.

FRE 398 Honors Supplementary Research **1 - 3 sh**
See page 139.

FRE 495 Independent Study in French **1 – 3 ch, 1 – 3 sh**
This course, which will be taught in French, is for students who wish to study and explore, in depth, aspects of French and Francophone literatures, cultures and societies or a special topic in the French 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 an agreement with the faculty member who will guide this 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 prior approval of the majority of the French professors and of the departmental Chairperson. PREREQUISITE: Graduate status or undergraduate students with a Q.P.A. of 2.50 or better based on a minimum of 12 S.H. above FRE 104, in their major field.

GENERAL STUDIES

GEE 390 General Studies Internship **3, 6 or 12 credits**
The student is placed in a work-study situation that is relevant to the educational and vocational goals and objectives of the student. The internship experience and course credit will be determined prior to enrollment. Course credit will be established by the character and nature of the internship placement. Students in the General Studies degree program should apply to the General Studies Committee for approval one semester in advance of the internship. PREREQUISITE: Approval of General Studies Committee and Junior or Senior status.

GEE 398 Honors Supplementary Research **1 - 3 sh**
See page 139.

GEOGRAPHY

GEG 010 Elements of Physical Geography **3 sh**
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.

GEG 020 Elements of Cultural Geography **3 sh**
A study of the interaction of man and his environment and the influences of geographical factors on human culture. Population, settlement, economic activity, social and political organization will be considered.

GEG 040 Descriptive Oceanography **3 sh**
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.

GEG 101 World Regional Geography **3 sh**
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.

GEG 110 Geography of the United States and Canada **3 sh**
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.

GEG 120 Geography of Sub-Saharan Africa **3 sh**
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. PREREQUISITES: GEG 010, or GEG 020, or GEG 101, or permission of instructor.

GEG 125 Geography of South America **3 sh**
South American cultural, social, economic, and political activities will be analyzed in relation to the physical environment. Interaction within the region as well as the region's interrelationships with other political entities will be studied.

GEG 127 Geography of Central America and the Caribbean **3 sh**
A geographical analysis of the physical, cultural, and economic environments of mainland Central America and the Caribbean. Emphasis will be placed on the spatial arrangement of the diverse environmental parameters and how they influence the present geopolitical situation.

GEG 140 Geography of Europe **3 sh**
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.

GEG 170 Field Methods in Geography **4 ch – 3 sh**
The field course in geography stresses and employs various tools, skills and techniques designed to provide insight into the broad geographical concepts, processes and spatial relationships. Emphasis will be placed upon developing the ability to observe, record, describe and classify pertinent data and information valuable in land use problem solving situations.

GEG 180 The Geography of Natural Hazards **3 sh**
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.

GEG 204 Meteorology Lecture
GEG 205 Meteorology Laboratory **4 ch – 3 sh**
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.

GEG 210 Environmental Conservation **3 sh**
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.

GEG 220 Economic Geography **3 sh**
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.

GEG 223 Introduction to Transportation Geography **3 sh**
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.

GEG 225 Spaces of Globalization **3 sh**
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.

GEG 230 Map Reading and Interpretation **4 ch – 3 sh**
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. PREREQUISITE: Either GEG 010, GEL 020 or GEL 100, or permission of instructor.

GEG 240 Geography of Pennsylvania **3 sh**
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.

GEG 264 Medical Geography **3 sh**
An examination of geographical concepts and techniques as applied to medical issues. Topics to be emphasized include: disease classification and measurement; origin and spread of diseases; major types of diseases; medical maps; and variability in the quality and quantity of health care systems.

GEG 274 Introduction to GIS **4 ch – 3 sh**
GEG 275 Introduction to GIS Laboratory
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. PREREQUISITES: MAT 105 or higher; GEG 010; GEG 020; and GEG 230; or permission of instructor.

GEG 310 Urban Geography **3 sh**
Urban Geography is concerned with instilling in students a working knowledge 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. To this end, the onset of urbanization is discussed with emphasis on necessary conditions and on the locations of the earliest urban settlements. Also traced is the spread of urbanism through time and the evolution of urban form. Theories of urban/economic development are discussed to document the dynamic nature of the discourse on Urban Geography and to provide a basis upon which students may interpret subsequent issues covered in the course and to evaluate their own urban experiences. Trends in urbanization in the "Third World," or less developed countries, are compared and contrasted with those in the "First World," or advanced capitalist countries. The roles of economic conditions and patterns of investment, colonialism, and transportation are emphasized. Modern Urban Geography must also examine the environmental impacts associated with urban development. By viewing cities as points in space, students are made aware of the ways in which cities organize their tributary areas and how they are themselves arranged in space. Finally, by viewing cities as space, the overriding role of land value in the determination of land use and ultimately the internal organization of economic and housing functions and of ethnic groups is demonstrated. Each topic is examined in terms of positive and negative ramifications and with an emphasis on planning and solution identification.

GEG 311 Geography of Poverty in North America **3 sh**
This course examines both poverty and income inequality in North America, focusing on national, regional, urban-rural, and intraurban differences. Variations in poverty by age, gender, and ethnic group will also be included, causal factors (spatial, socio-economic, and institutional) will be identified, and policy alternatives will be considered. Basic measurements of poverty and inequality will be introduced.

GEG 315 Geographical Influences in American History **3 sh**
A historical geography course which examines the exploration, settlement and development of the United States within the context of environmental factors — both human and physical.

GEG 322 Climatology **3 sh**
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. PREREQUISITE: Either GEG 010 or GEG 204/205.

GEG/GEL 324 Geomorphology **4 ch – 3 sh**
GEG/GEL 325 Geomorphology Laboratory
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. PREREQUISITE: Physical Geology (only one semester required). GEG 010 or GEL100/101.

GEG 330 Cartography **4 ch – 3 sh**
This course serves as an introduction to Cartography. The course is designed to prepare students for more advanced levels of cartography such as Computer Cartography, and Geographical Information Systems (GIS), by requiring students to become adept in the basics of cartography. That is, students will become proficient in the collection, manipulation, generalization, and visual presentation of geographic data. Emphasis is placed on the proper use of the Graphic Elements and in appropriate means of data manipulation. Students study the nature of cartography, the coordinate system, map scale, map projections, map design, symbolization, data manipulation, isarithmic mapping, choropleth mapping, and map reproduction. Students are evaluated via examinations, several mapping projects, and a major final project. This course is laboratory intensive and emphasizes manual means of map production. Success is achieved through personalized instruction.

GEG 332 Computer Cartography **4 ch – 3 sh**
An examination and application of the techniques for producing maps and graphs using a microcomputer. Students will learn how to use already existing computer programs as a tool to display different types of data. No programming experience is required.

GEG 333 Advanced GIS **4 ch - 3 sh**
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: GEG 274 and GEG 330 or permission of instructor.

GEG 335 World Problems in Geography **3 sh**
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.

GEG 338 Geography of Population **3 sh**
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. PREREQUISITE: GEG 020.

GEG 341 Environmental Planning **3 sh**
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.

GEG 343 Land Use Planning **3 sh**
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.

GEG 347 Remote Sensing of the Environment **4 ch – 3 sh**
Remote Sensing of the Environment is a course devoted to the relatively new study of the earth from space. The primary focus will be on the variety of remote sensing techniques, the types and characteristics of imagery derived from the various techniques, and applications of the techniques. A lecture and laboratory format will provide ample opportunity for students to examine and interpret earth images. PREREQUISITE: Junior status and GEG 010 or GEG 020 or permission of the instructor.

GEG 371 Independent Study in Geography **3 sh**
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.

GEG 372 Selected Topics in Geography **3 sh**
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. PREREQUISITE: GEG 010 and GEG 020 and permission of the instructor.

GEG 375 Research Methods in Geography **3 sh**
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. PREREQUISITE: Junior status and twelve credits in Geography.

GEG 380 Senior Seminar in Geography **3 sh**
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. PREREQUISITES: Completion of the following Geography Program requirements: all other "Required Courses," all "Required Categories" courses, and twelve (12) credit hours in the "Geography Track" category.

GEG 394 Internship in Geography **3 sh**
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. PREREQUISITES: Junior or Senior status and the completion of a minimum of 24 hours in geography and permission of the Department of Geography.

GEG 398 Honors Supplementary Research **1 - 3 sh**
See page 139.

GEOLOGY

GEL 001 Dinosaurs **3 sh**
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.

GEL 020 Introduction to Geology Lecture **4 ch - 3 sh**
GEL 021 Introduction to Geology Laboratory
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.

GEL 031 Geology of the National Parks and Monuments **3 sh**
This course is a tool for learning geology and earth 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.

GEL 100 Physical Geology Lecture **6 ch - 4 sh**
GEL 101 Physical Geology Laboratory
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. PREREQUISITES: (Students are expected to have had adequate high school preparation in algebra, trigonometry, and chemistry). Required of majors in the Earth-Space Sciences.

GEL 102 Historical Geology Lecture **6 ch - 4 sh**
GEL 103 Historical Geology Laboratory
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. PREREQUISITE: GEL 100 or GEL 020.

GEL/MAR 110 Introduction to Oceanography **5 ch - 3 sh**
GEL/MAR 111 Introduction to Oceanography Laboratory
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.

GEL 200 Field Geology Lecture **5 ch - 3 sh**
GEL 201 Field Geology Laboratory
Methods of geological survey involving field practice, interpretation of selected areas, and preparation of maps, and reports. Lectures and laboratories. PREREQUISITE: GEL 100-101 and GEL 102-103.

GEL/ENV 210 Environmental Geology **5 ch - 3 sh**
GEL/ENV 211 Environmental Geology Laboratory
A study of the relationship between man and his geological habitat. Problems that 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. PREREQUISITE: GEL 100-101 Physical Geology.

GEL 220 Mineralogy Lecture **6 ch - 4 sh**
GEL 221 Mineralogy Laboratory
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: GEL 100 and facility with General Chemistry and Trigonometry.

GEL 230 Paleontology **5 ch - 3 sh**
GEL 231 Paleontology Laboratory
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: GEL 102 - 103.

GEL/MAR 237 Field Methods in Oceanography **5 ch - 3 sh**
GEL/MAR 238 Field Methods in Oceanography Laboratory
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. PREREQUISITE: GEL/MAR 110-111 or consent of the instructor.

GEL 304 Structural Geology Lecture **5 ch - 3 sh**
GEL 305 Structural Geology Laboratory
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. PREREQUISITE: GEL 100-101 Physical Geology and GEL 102-103 Historical Geology.

GEL 314 Igneous and Metamorphic Petrology Lecture **5 ch - 3 sh**
GEL 315 Igneous and Metamorphic Petrology Laboratory
Synthesizing an understanding of mineralogy, chemistry, and microscopy makes possible the deduction of the conditions under which igneous and metamorphic rocks formed. Understanding the environments under 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. PREREQUISITE: GEL 320-321 Optical Mineralogy.

GEL 320 Optical Mineralogy Lecture **5 ch - 3 sh**
GEL 321 Optical Mineralogy Laboratory
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. PREREQUISITE: GEL 220-221 Mineralogy.

GEL/GEG 324 Geomorphology **4 ch - 3 sh**
GEL/GEG 325 Geomorphology Laboratory
The study of the dynamic and tectonic processes that, in conjunction with the climatic and biologic forces, have shaped the earth's present form and are constantly reshaping and modifying it. The constructive forces of vulcanism and diastrophism and the activities of weathering 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. PREREQUISITE: GEL 100-101.

GEL 340 Stratigraphy Lecture **5 ch - 3 sh**
GEL 341 Stratigraphy Laboratory
The basic 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. PREREQUISITE: GEL 230-231.

GEL/MAR 350 Sedimentation Lecture **5 ch - 3 sh**
GEL/MAR 351 Sedimentation Laboratory
The basic composition, transport, diagenesis and distribution of sediments are introduced by means of lectures and laboratories. PREREQUISITES: GEL 100-101 and either GEL 102-103, GEL 366-367 or permission of instructor.

GEL/MAR 358 General Geophysics **5 ch - 3 sh**
GEL/MAR 359 General Geophysics Laboratory
The study of earthquake seismology and the basic geophysical methods such as gravity, magnetics, seismic refraction, seismic reflection, electrical resistivity, and electro-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. PREREQUISITES: GEL 100-101 or MAR/GEL 110-111, PHY 040-041, PHY 042-043 or PHY 102-103.

GEL 362 Hydrogeology **5 ch - 3 sh**
GEL 363 Hydrogeology Laboratory
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. PREREQUISITES: Two semesters of Geology/Marine Science and PHY 040-041, PHY 042-043 or PHY 100-101, PHY 102-103.

GEL/MAR 366 Marine Geology **5 ch - 3 sh**
GEL/MAR 367 Marine Geology Laboratory
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. PREREQUISITE: GEL 100-101, MAR 110-111, or consent of instructor.

GEL 370 Seminar: Selected Topics in Geology **1 - 3 sh**
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. PREREQUISITE: Advanced standing in the course related to the area of independent study. Prior to registration the student must arrange for a faculty advisor and obtain permission of the Department Chairperson.

GEL 380 Senior Seminar in Geology **2 sh**
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.

GEL 390 Internship in Geology **1 - 4 sh**
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. PREREQUISITE: Junior and Senior standing and approval of department head.

GEL 398 Honors Supplementary Research **1 - 3 sh**
See page 139.

GERMAN

GER 011 Elementary German I **6 sh**
GER 012 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.

GER 013 Elementary Conversation in German **2 ch – 1 sh**
Intensive oral practice covering vocabulary and structures of survival situations. One class hour. Open to students in GER 011 and 012 or with approval of the instructor. May be repeated.

GER 103 Intermediate German III **6 sh**
GER 104 Intermediate German IV **6 sh**
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.

GER 360 Study Abroad Experience **1 – 6 sh**
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.

GER 390 International Internship in German **1 – 9 sh**
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. PREREQUISITE: German major and permission of Department chair and advisor; junior or senior status; 2.5 GPA in major or 2.0 GPA overall.

HEALTH

HEA 020 First Aid **2 sh**
This course is designed to provide the knowledge and skills called for in most situations in which emergency first aid care is required and medical assistance is delayed. It incorporates personal safety and accident prevention information to acquaint students with many causes of accidents and sudden illness so that action can be taken to eliminate or minimize such causes. This course may not be used to satisfy the Health requirement.

HEA 105 Emergency Care and Risk Management **3 sh**
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.

HEA 301 Current Issues in Elementary School Health Education **3 sh**
The student will explore and evaluate a variety of current practices and trends in elementary and middle school health education as they relate to comprehensive school health education. Specific topics will be selected in accordance with current trends in health, and the interests of the students enrolled in the course.

HEA 320 Theory and Analysis of Movement Therapy **3 sh**
This course examines the use of movement in restoring, maintaining, and enhancing physical and psychological health. Students compare and contrast approaches to movement therapy, and examine the links among core elements of movement, mental health, and physical function. Material from movement disciplines such as Dance/Movement Therapy, Pilates exercise, and Gyrotonic® form the basis of exploration. Historical roots, basic principles, methods, goals and professional requirements of movement therapy are presented, along with representative techniques and movement experiences.

HEA 370 Selected Topics in Health **1 – 3 sh**
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. PREREQUISITE: either HPD 110, 115, 116, 120 or permission of the professor.

HEA 380 Independent Study in Health **1 – 3 sh**
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.

HEA 421 Critical Issues in Health **3 sh**
This seminar course offers in-depth exploration, critical analysis and discussion of controversial, polarizing health issues presently affecting society. Students will have an opportunity to assess opposing views, evaluate the quality and strength of "data" supporting divergent opinion, discuss the potential societal impact of opposing positions and formulate, refine and articulate personal perspectives. PREREQUISITE: None.

HEA 430 Fundamental Techniques in Health Psychology **3 sh**
This course will discuss the history, rationale, and scientific underpinnings of health psychology. Areas to be covered are: relaxation techniques (including autogenic training, diaphragmatic breathing, imaging procedures, progressive muscle relaxation and body scanning), massage (Trager, Alexander, Feldenkrais, Kripalu), exercise, hypnosis, nutrition, and lifestyle interventions. The major emphasis in the course will be on biofeedback and its role in wellness and in the mitigation of illness. PREREQUISITE: PSY 011.

HEA 436 Selected Applications of Biofeedback and Self-regulation **3 sh**
This course will focus upon the uses of biofeedback in selected aspects of health maintenance and disease prevention. Biofeedback is used to teach individuals to regulate autonomic nervous system responses to produce optimal well-being and effective functioning. Students will learn to use biofeedback instruments to monitor temperature, muscle tension, brain waves, blood volume, blood pressure, heart rate, breathing and epidermal response. Students will be required to conduct a biofeedback research project. PREREQUISITE: HEA 430 or permission of instructor.

HEALTH, PHYSICAL EDUCATION & DANCE

The following Physical Education and Dance activity courses are to be taken during the same semester with HPD 110, 115, 116, or 120 to complete the Health, Physical. Education & Dance requirements for Category I of General Education:

HPD 011	Aerobics (1 sh)
HPD 013	Aquatic Activities (1 sh)
HPD 015	Aquatic Aerobics (1 sh)
HPD 017	Aquatic Conditioning (1 sh)
HPD 020	Backpacking (1 sh)
HPD 022	Badminton (1 sh)
HPD 024	Badminton/Golf (1 sh)
HPD 026	Badminton/Tennis (1 sh)
HPD 028	Bowling (1 sh)
HPD 030	Canoeing (1 sh)
HPD 032	Conditioning/Dancers (1 sh)
HPD 034	Cycling (1 sh)
HPD 035	Fitness Walking (1 sh)
HPD 036	Foil Fencing (1 sh)
HPD 040	Golf/Racquetball (1 sh)
HPD 041	Golf/Volleyball (1 sh)
HPD 042	Golf Swings/Strokes (1 sh)
HPD 046	Handball (1 sh)
HPD 048	Hiking (1 sh)
HPD 049	Ice Skating (1 sh)
HPD 050	Ice Skating/In-line Skating (1 sh)
HPD 051	Ice Skating/Racquetball (1 sh)
HPD 052	Indoor Rock Climbing (1 sh)
HPD 053	In-line Skating (1 sh)
HPD 055	Intermediate Golf (1 sh)
HPD 056	Intermediate/Advanced Tennis (1 sh)
HPD 057	Introduction to Dance I (1 sh)
HPD 058	Introduction to Dance II (1 sh)
HPD 059	Innovative Games (1 sh)
HPD 060	Jog, Run, Race (1 sh)
HPD 062	Racquet/Paddle Sports (1 sh)
HPD 065	Orienteering (1 sh)
HPD/WST 067	Self Defense/Women (1 sh)
HPD 070	Personal Fitness (1 sh)
HPD 072	Racquetball (1 sh)
HPD 074	Racquetball/Tennis (1 sh)
HPD 076	Skiing/Snowboarding (1 sh)
HPD 078	Strength Training & Resistance Exercise (1 sh)
HPD 079	Strength Training & Resist. Exercise/Handball (1 sh)
HPD 080	Swimming (1 sh)
HPD 083	Tai Chi (1 sh)
HPD 084	Tai Chi/Personal Defense 1 sh)
HPD 086	Tennis (1 sh)
HPD 088	Volleyball (1 sh)
HPD 090	Volleyball/Tennis (1 sh)
HPD 095	Hatha Yoga (1 sh)

Those students who have already taken a portion of the Health, Physical Education & Dance requirements for Category I should consult with their Academic Advisors.

HPD/WST 067 Self Defense for Women **1 sh**
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.

HPD 110 Personal Health Management **2 sh**
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 pro-active personal health management strategies.

HPD 115 Health Maintenance/Nutrition & Exercise **3 sh**
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

HPD 116 Health Maintenance/Prevention and Early Detection of Illness **3 sh**
The etiology, nature, symptoms, detection, prevention, treatment, and prognosis of chronic and communicable diseases which rank high in recent morbidity and mortality statistics will be stressed.

HPD 120 Personal Nutrition **3 sh**
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.

HPD 170 Modern Dance Intensive **5 ch – 3 sh**
This course provides an intensive introduction to the art and practice of modern dance. Classes present instruction in basic modern dance tech-

nique, based on the Martha Graham method, but including other approaches as well. In addition to dance technique, this intensive format introduces students to all aspects of the art form, including improvisation, choreography, performance, history and current issues. Class size limited to 35.

(Students may NOT take HPD 110 IF they have already taken HEA 010,101, or 120.)

(Students may NOT take HPD 115 or HPD 116 IF they have already taken HEA 115 or 116.)

HISTORY

HIS 014 History of Civilization A **3 sh**
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.

HIS 015 History of Civilization B **3 sh**
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.

HIS 025 U.S. Formative Years And The Federal Republic **3 sh**
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.

HIS 026 History of The United States: The Emergence of Modern America **3 sh**
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.

HIS 111 Europe: From Absolutism to Revolution **3 sh**
This course is designed to study the political, economic, social, and intellectual development of Europe in the 17th and 18th centuries.

HIS 112 Nineteenth Century Europe **3 sh**
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.

HIS 120 History of Pennsylvania **3 sh**
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.

HIS 131 History of Latin America: Colonial **3 sh**
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.

HIS 150 Minorities in American History **3 sh**
This course examines the experience of various minority groups — European, Black, Indian, Puerto Rican — in America.

HIS 151 History of China and Japan to 1800 **3 sh**
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.

HIS 155 History of the Middle East **3 sh**
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.

HIS 170 Military History of the United States **3 sh**
This course will consider the evolution of the American military system, its employment in domestic and international affairs and its impact on American society.

HIS 210 History of Russia and the Soviet Union **3 sh**
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).

HIS 215 History of England **3 sh**
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.

HIS 218 The Age of Enterprise, 1865 – 1939 **3 sh**
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.

HIS 220 Ancient World **3 sh**
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.

HIS 222 Italy in Modern Times **3 sh**
This course will investigate significant political and economic movements in modern Italian history. Focusing on the nineteenth and twentieth centuries, emphasis will be placed on those developments which have had broad impact, such as the Risorgimento, Fascism, and the Italian "Economic Miracle."

HIS 225 A History of the Jewish People in Modern Times **3 sh**
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.

HIS 227 History of the Holocaust **3 sh**
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.

HIS 228 A History of Religion in America **3 sh**
This course will trace the religious history of the American people from colonial times to the modern period. It will examine American religious history within the larger frame of world history. Particular attention will be given to the diversity of American religious movements and the role of secular movements and convictions, some of which sought to supplant the churches.

HIS 229 American Urban History **3 sh**
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.

HIS 230 Topics in the History of American Popular Culture **3 sh**
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.

HIS 232 History of Latin America: Modern **3 sh**
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.

HIS 235 Europe of the World Wars **3 sh**
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.

HIS 240 African American History **3 sh**
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.

HIS 241 History of Women in America **3 sh**
This course is a study of woman's role in American life tracing her effect on the nation's history.

HIS 244 The Immigrant in American History **3 sh**
This course is a study of those ethnic groups which have become part of the American population from the colonial period to the present. Emphasis will be placed on late 19th and early 20th century immigration from Southern and Eastern Europe.

HIS 245 The United States 1900-1945 **3 sh**
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.

HIS 246 The United States Since 1945 **3 sh**
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.

HIS 247 Work and Workers in American History **3 sh**
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.

HIS 252 American Colonial History **3 sh**
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.

HIS 254 History of China and Japan since 1800 **3 sh**
This course will examine the political, social and economic factors which have contributed to the modernization of China and Japan.

HIS 256 The Modern Middle East **3 sh**
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.

HIS 257 Introduction to Public History **3 sh**
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.

HIS 274 Honors: Tudor-Stuart England **3 sh**
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.

HIS 300 Diplomatic History of the United States **3 sh**
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. PREREQUISITE: History of the United States or other evidence that the student has an adequate background in American history.

HIS 310 Constitutional History of the United States **3 sh**
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.

HIS 311 Revolutionary America **3 sh**
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.

HIS 325 The Middle Ages **3 sh**
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.

HIS 330 Renaissance and Reformation **3 sh**
The Renaissance and Reformation eras are studied, stressing those forces and developments responsible for the creation of modern Western culture: the rise of secular society, the growth of humanism, the development of new artistic and literary forms and themes, the rise of the centralized state, and the religious controversies of the thirteenth to the sixteenth centuries and their impact on society and politics.

HIS 335 Civil War and Reconstruction **3 sh**
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.

HIS 341 Problems in Slavery and Abolition **3 sh**
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.

HIS 372 Selected Topics in History **3 sh**
This course will study a selected topic in history. Students may take the course for credit no more than twice.

HIS 378 Junior Seminar in Historical Methodology **3 sh**
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.

HIS 379 Independent Study in History **3 sh**
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 and only three hours with any one faculty member. Prerequisites are twelve semester hours in history and a QPA of 3.00 in history.

HIS 380 Senior Seminar in History **3 sh**
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.

HIS 390 History Internship **3 – 15 sh**
The program is designed to give the student a supervised, work-study experience in the functions and day-to-day operations of historical agencies, archives, museums, or sites — public or private. Open to qualified juniors and seniors majoring in history or related fields, the program consists of closely-supervised periods of employment and study arranged by the campus coordinator in the Department of History in consultation with the participating agency and the University. The number of semester hours and the number of clock 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. The amount of time involved in the Internship and the number of credits allowed for it will be approved by the Department of History, and the department coordinator will inform the student of any special prerequisites for particular internships.

HIS 398 Honors Supplementary Research **1 – 3 sh**
See page 139.

HIS 423 The American West **3 sh**
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.

HIS 426 The Age of Jackson **3 sh**
The course will present the political, economic, social, intellectual and military history of the United States from 1826 through the 1850s. It will examine those factors that made this period a watershed epoch in American history. The great changes that were wrought in the United States during this period and their profound impact on the development of the nation and to what degree Andrew Jackson was responsible for these changes will be discussed.

HIS 438 United States History Since 1914 **3 sh**
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.

HIS 453 An Historical Analysis of Conflict and Revolution in Latin America **3 sh**
This course will draw upon historical, cultural, political and socio-economic materials in order to reveal the fundamental causes of the state of apparent chaos pandemic among the Latin American nations since they gained their independence. In so doing, the course challenges and counterbalances the traditional country by country approach by offering a functional alternative that will enable the student of Latin American history to understand fully the working of institutions and the nature of processes in Latin America.

HIS 456 Selected Topics in Medieval European History **3 sh**
This is an advanced study of significant topics in the history of western Europe from the collapse of the Roman Empire to the dawn of the modern era.

HIS 462 Germany in the Twentieth Century **3 sh**
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.

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 & 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. ENG 398 Honors Supplementary Research.

HUMANITIES

HUM/WST 211 Women in the Arts **3 sh**
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

ITC/LIB 125 Microcomputers in Education **3 sh**
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.

ITC 300 Instructional Media and Technology **3 sh**
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.

ITC 310 Audiovisual Technology in Communication **3 sh**
This course deals with the study of audiovisual technology in the communication process as used by business, industry, and the various medical, social and political agencies in our society.

ITC 321 Instructional Technology in Education **3 sh**
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. The course will present undergraduate education students with a basic knowledge of how to effectively utilize and integrate instructional technology in education. Microcomputer technologies utilized in the contemporary classroom will be examined. Students will be involved in "hands-on" experiences with computer operation and software programs that include desktop publishing, graphics, spreadsheets, databases, concept-processing and telecommunications. Students will also be introduced to effective strategies for integrating technology into the teaching and learning process.

ITC 326 Multimedia in Education **3 sh**
This course explores strategies and methods to effectively integrate multimedia instructional technologies into the K-12 curriculum. Teaching strategies and learning activities using multimedia resources will be studied. The planning, design, and production of multimedia projects will be stressed.

ITC 331 Media and Technology in Education **3 sh**
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. PREREQUISITE: ITC 125 or permission of the instructor.

ITC 336 Theories and Processes of Instructional Design and Technology **3 sh**
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.

ITC 340 Integrating Instructional Technology **3 sh**
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.

ITC 347 Telecomputing and the Internet in Education **3 sh**
The focus of this course is telecomputing as an instructional tool. Students examine the history, theory, communication facilities, and educational activities related to the medium. The Internet network is the primary resource examined; however, other educational network developments are appropriately explored. PREREQUISITE: ITC 125 or permission of the instructor.

ITC 348 Electronic Portfolios in Education **3 sh**
Participants will develop an electronic professional portfolio that references content and academic standards, incorporates multimedia and relevant linkages so that an effective electronic portrait of the individual's accomplishments is created. PREREQUISITE: EDU 100 or permission of the instructor.

ITC 370 Selected Topics in Audiovisual Communications & Technology **1 – 3 ch, 1 – 3 sh**
Contemporary topics in audiovisual communications and instructional micro computing will be examined. The topics studied will change each time the course is offered. Course may be repeated once.

ITC 380 Independent Study in Audiovisual Communications **1 – 3 sh**
Independent Study is based on a student's pursuit of a subject in Audiovisual Communications not covered within a regularly offered undergraduate course in Audiovisual Communications. 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 Audiovisual Communications and Technology Department is required.

ITC 425 Computer Networks for Education **3 sh**
The course is designed to introduce educators to networking topologies, infrastructure, operating platforms, hardware, evaluation techniques, research findings, and troubleshooting basics for meeting the immediate and future needs of today's schools and classrooms. Future developments will also be examined.

ITC 433 Synergetic Teaching with Technology **15 ch – 1 sh**
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.

ITC 435 Distance Learning and the K-12 Educator **3 sh**
The emphasis of the course is to prepare both pre-service and in-service educators to incorporate distance education technologies, as well as teaching and learning strategies, into a learning environment. Students, with guidance from the instructor, will construct a theoretical foundation and rationale for utilizing distance learning and develop practical, hand-on skills for effectively working within a distance learning environment. The role of technology in delivering distance learning courses is examined as well as issues related to designing, organizing and managing distance education activities.

ITC 446 Development of Multi-Image Productions **3 sh**
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: The ability to operate a 35mm camera and familiarity with basic photography techniques.

INTERNATIONAL STUDIES

INT 010 Introduction to International Studies **3 sh**
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.

INT 101 Intercultural Communication **3 sh**
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.

INT 111 International Environmental Issues **3 sh**
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.

INT 201 Selected Topics in International Studies **3 sh**
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. PREREQUISITE: INT 010 or permission of the instructor.

INT 310 European Union Simulation **3 sh**
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. PREREQUISITE: INT 010 or permission of instructor.

INT 375 Independent Study in International Studies **1 – 3 sh**
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. PREREQUISITE: INT 010, plus one additional, INT course (six semester hours of INT completed).

INT 380 Seminar in International Studies **3 sh**
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. PREREQUISITE: Completion or current enrollment in all other requirements for the minor in International Studies.

INT 390 International Studies Internship **3 – 6 sh**
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.

LIBRARY SCIENCE

LIB 011 Information Needs and Services **3 sh**
The methods and materials of the librarian and his role as a resource specialist organizing and administering the specialized reference services of the library. Selection, critical examination, and development of skills in

interpreting and using general reference aids, such as indexes, encyclopedias, atlases, dictionaries, yearbooks, handbooks, directories, etc.

LIB 018 Materials and Search Strategies: Humanities, Science, Social Science 3 sh
The primary purposes of Materials and Search Strategies will be 1) to teach the use of the basic information resources of a broad discipline and 2) to develop an awareness of a search strategy to be used in seeking information. Content will be based on general and specific information needs of the student in a curriculum area. Not open to Library Science majors.

LIB 121 Resources for Children 3 sh
Introduction to the basic principles, practices and resources needed for the selection and development of a library collection for children (print and non-print) in the school media center and public library. Survey and critical evaluation of children's literature as well as techniques for using materials in library and curricular settings.

LIB/ITC 125 Microcomputers in Education 3 sh
The course will present undergraduate education students with a basic knowledge of how to effectively utilize microcomputers in education. Students will be 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 will be examined. No previous knowledge or experience with microcomputers is necessary.

LIB 130 Folk Literature and Storytelling 3 sh
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.

LIB 313 Cataloging and Classification 3 sh
An introduction to the methods of cataloging and classifying library materials for effective use. It includes supervised laboratory periods in the preparation of unit cards, analytics, and other added entries, the purchase and adapting of printed cards, the use of a printed list of subject headings and assigning subject headings, the arrangement of the dictionary catalog and the use of computerized catalogs.

LIB 315 Collection Development 3 sh
This course covers the principles of collection development and management with an emphasis on administrative concerns. It provides the student with the processes and procedures associated with developing, maintaining and evaluating a library collection. The prospective librarian is taught to view the collection as an active system, responsive to its environment and needs of the users.

LIB 320 Library Administration 3 sh
An overview of the forms of organization and management of libraries. The librarian is viewed as both an educator and administrator. The course of study emphasizes the fundamental principles and practices of librarian-ship and includes the study of the library in regard to patterns of service, management of personnel, planning and equipping libraries, and selection of materials — all in relation to modern educational practices.

LIB 322 Resources for Young Adults 3 sh
Survey and critical evaluation of adolescent literature and related media. An introduction to the principles and resources utilized in the selection and development of a young adult collection.

LIB 326 Microcomputer Based Systems for the Library 3 sh
This course introduces the primary hardware and software elements of microcomputer based library systems. Students will explore the installation and operation of circulation systems, on-line catalogs, CD-ROM reference tools, and linked learning stations. The Department of Library Science microcomputer classroom will be utilized to provide hands-on experience with representative software.

LIB 330 The Educational Program of the School Library Media Center 3 sh
This course is designed to explore the school library media center and its relationship to the school curriculum. Students will learn curriculum design, lesson planning, teaching strategies. PREREQUISITES: Information Needs and Services I, Cataloging.

LIB 375 Field Work 1 – 9 sh
Practical application of library routines and procedures in a school library media center (or a public library) under the supervision of a qualified librarian. Admission to this course is by permission of the University field work supervisor, or to students who are certified as teachers and wish to extend certification to include Library Science K-12, and to Liberal Arts majors preparing to qualify as Provisional Public Librarians. For the latter, fieldwork is performed in a public library not a school library. Variable credit up to 9 sh acceptable (6 sh per semester).

LIB 380 Independent Study in Library Science 1 - 3 sh
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. PREREQUISITES: Permission of the faculty of the Library Science Department is required.

LIBRARY PRACTICE AND PROFESSIONAL PRACTICUM
Provides for the prospective school librarian the opportunity to observe and participate in the total school library program under the guidance of a certified professional librarian. This experience is designed in two phases (LIB 390 and LIB 391) within one semester. Concurrent with each phase is a Practicum which serves as the forum for discussion and evaluation of techniques observed and used in each experience.

LIB 390 Library Practice and Professional Practicum I 7 sh
Emphasis is placed on establishing a proper working relationship with students and faculty, reading guidance, development of teaching skills, applying library theory and technical skills, and becoming aware of the various functions of the school curriculum.

LIB 391 Library Practice and Professional Practicum II 7 sh
An extension of the first phase with emphasis on those aspects of librarian-ship where the student has had little experience or in which he has demonstrated a weakness. It is recommended that the activities in this phase be on a different level (elementary or secondary) from the previous experience and preferably in a different school district. A greater degree of competence and professional maturity is expected of the student during this phase.

LIB 431 Oral Tradition in the Library 3 sh
A study of the theory and techniques of book talking, preschool story times, storytelling and creative dramatics as they apply to the library setting. Emphasis will be placed on the student preparing and delivering each of these types of oral presentation. PREREQUISITE: Permission of the instructor.

LIB 440 Selected Topics in Library Science **3 sh**
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. PREREQUISITE: Permission of the instructor.

LIB 471 Information Analysis and Retrieval **3 sh**
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. PREREQUISITE: LIB 011.

MANAGEMENT

Completion of the lower division core requirements with a minimum 2.0 QPA average is a prerequisite for every 300 level College of Business course.

MGM 300 Principles of Management **3 sh**
An introduction to the field of management to give a basic understanding of the process of reaching organizational goals efficiently by working with and through people and other organizational resources. The activities related to the managerial functions of planning, organizing, leading and controlling are examined.

MGM 315 Management Science **3 sh**
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. PREREQUISITE: MGM 300 and BUS 120.

MGM 318 Women in Management **3 sh**
This course examines issues which women face in the workplace particularly in managerial careers. Issues include stereotyping, sexual harassment, mentoring, mobility, compensation, employee relations, child care, and dual careers. The course emphasizes issue awareness and development of potential strategies which would facilitate change and promote equality in the workplace. Cases and experiential exercises are an integral part of the course. PREREQUISITE: MGM 300.

MGM 327 Small Business Management **3 sh**
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. PREREQUISITES: MKT 310, MGM 300.

MGM 328 Entrepreneurship: From Concept to Launch **3 sh**
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. PREREQUISITE: MGM 327.

MGM 335 Human Resource Management **3 sh**
In this course, students study the concepts, issues, methods and procedures involved in building and maintaining an effective workforce in an organization. Specific topics include recruitment, selection, appraisal, compensation, benefits, training/development, labor-management relations, discipline, workforce planning and similar functions. The focus will be on the staff human resource management unit of an organization as a way of organizing the study, but applications for every supervisor and manager will be readily apparent. Knowledge of this staff specialty is particularly useful in understanding overall business operations of the organization. PREREQUISITE: MGM 300 or permission of the instructor.

MGM 336 Human Resource Management and Organizational Strategy **3 sh**
This course will examine the various roles of human resource management in organizations, especially the role in strategic planning. Students study the advisory, service, control and change agent roles played by human resources generalists and specialists in different organizational contexts and industries and how human resources policies, procedures and functions are integrated and coordinated within such organizations and industries. PREREQUISITE: MGM 300 or permission of instructor.

MGM 337 Management of Labor Relations **3 sh**
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. PREREQUISITE: MGM 300 or permission of instructor.

MGM 338 Management of Compensation and Benefits **3 sh**
This course will examine the total compensation philosophy, strategy and policy of organizations and the economic factors affecting compensation. Students will learn how jobs are analyzed and how job descriptions and specifications are derived from such analysis. Job evaluations methods, job pricing, pay structures and pay rate administration are also scrutinized along with employee benefit programs and the philosophy, objectives, characteristics and types of such programs. PREREQUISITE: MGM 300 or permission of instructor.

MGM 339 Management of Employee Relations, Health, Safety and Security **3 sh**
Emphasis is placed on managing the union-management relationship through the administration of the collective bargaining agreement and the grievance and arbitration process. Employee policies and practices, including employee rights, performance appraisals and employee attitudes, opinions and satisfaction are examined. Issues and legalities relating to health, safety and security will also be studied. PREREQUISITE: MGM 300 or permission of instructor.

MGM 340 Management of Staffing, Training and Development **3 sh**
This course will examine how to determine recruitment needs and objectives and the internal and external sources of applicants. The various aspects of the selection process will be studied along with the legal ramifications associated with that process. Training and development needs will be analyzed in light of an organization's goals, objectives, and strategies as well as federal legislation such as the Americans with Disabilities Act. PREREQUISITE: MGM 300 or permission of instructor.

MGM 341 Labor Relations and the Law **3 sh**
A detailed description of not only the principle and rule of labor law but also of its historical and political context. The course takes a social science approach to labor law so that students who have little or no background in law will be able to appreciate and thereby understand its complexity. It emphasizes public labor policy and discusses how it operates rather than simply explaining the rules of law. PREREQUISITE: MGM 300 or permission of instructor.

MGM 344 Research Methods for Managerial Decision-Making **3 sh**
An introduction to research concepts and methods as applied to the analysis of management problems. Topics include problem development, research design, collection of data, sampling, data analysis, evaluation, and presentation of research reports. Particular emphasis is given to techniques that contribute to research findings in management and their value in enabling managers to evaluate various types of research. PREREQUISITE: MGM 300.

MGM 345 Organizational Theory and Design **3 sh**
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. PREREQUISITE: MGM 300.

MGM 350 Organizational Behavior in Management **3 sh**
This course examines the interaction and interdependence between the formal organization and the human being, 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. PREREQUISITE: MGM 300.

MGM 351 Operations Management **3 sh**
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. Areas covered will include operation planning and control, product development, inventory control, allocation of resources (linear programming), line sequencing and network programming (PERT). PREREQUISITES: MGM 300 and BUS 120.

MGM 352 International Management **3 sh**
An analysis of the unique managerial problems encountered by the 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. PREREQUISITE: MGM 300.

MGM 356 Management of Energy **3 sh**
A study of energy management in organizations. Coal, oil, natural gas, nuclear, solar, geothermal, and other sources are studied. Managerial options in production and consumption of each type of energy are considered, with particular emphasis on consumption. Attention is also paid to conservation, technology development, and public utilities. Estimation is made of future energy scenarios and their impacts upon management actions. The role of government in production, consumption and technology development is examined. PREREQUISITE: MGM 300.

MGM 360 Business and Social Environment **3 sh**
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. PREREQUISITES: MGM 300, MKT 310.

MGM 361 Principles of Business Logistics **3 sh**
This course give 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. PREREQUISITE: MGM 300.

MGM 362 Supply Chain Design, Planning, and Operation **3 sh**
This course is an examination of the strategic importance and practical application of supply chain design, planning, and operation for every firm. It addresses the value of supply chain management as a source of competitive advantage for the firm. The course considers the value of information in the supply chain; risk pooling, and strategic partnering; and the role of centralized decision making. The course emphasizes current practice and trends in developing and managing information and material flows throughout the supply chain. PREREQUISITE: MGM 361.

MGM 371 Selected Topics in Management **3 sh**
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. PREREQUISITE: MGM 300.

MGM 377 Business Strategy and Policy **3 sh**
A study of the determination and implementation of strategies by top management level. Emphasis is placed on the integration of the major strategies, managerial functions, and functional divisions of modern business organizations. PREREQUISITES: Senior standing.

MGM 380 Senior Seminar in Management **3 sh**
The course serves as a capstone experience for students majoring in Management. The course consists of two components. The first is the students' participation in a computer- based simulation game which integrates the major functional areas of business: accounting, finance, production, marketing and economics. The game allows the student to enter the dynamic world of business within a simulated environment and make decisions as if they were a manager. The second component of the course are seminar activities focusing upon advanced special topics of concern to the world of management as selected and determined by the particular instructor. PREREQUISITE: Senior Status.

MGM 463 Transportation Management **3 sh**
This course is a study of the systems used to move goods and people and their role in business and the 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: ECO 012, MGM 300, and Senior standing, or permission of the instructor.

MARINE SCIENCE

MAR/GEL 110 Introduction to Oceanography 5 ch – 3 sh
MAR/GEL 111 Introduction to Oceanography Laboratory
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 student's attention on the inter-relationship and unity of oceanography, and its relation to other environmental sciences.

MAR/BIO 226 Marine Biology 5 ch – 3 sh
MAR/BIO 227 Marine Biology Laboratory
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. PREREQUISITE: One year of Biology or permission of the instructor.

MAR/GEL 237 Field Methods in Oceanography 5 ch – 3 sh
MAR/GEL 238 Field Methods in Oceanography Laboratory
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. PREREQUISITE: MAR 110-111 or consent of instructor.

MAR 250 Wetland Ecology 5 ch – 3 sh
MAR 251 Wetland Ecology Laboratory
The ecology and management of wetland wildlife, particularly of freshwater marshes and saltwater marshes. Special emphasis on ecosystem approach.

MAR/BIO 260 Marine Invertebrates 5 ch – 3 sh
MAR/BIO 261 Marine Invertebrates Laboratory
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. PREREQUISITE: One year of biology or consent of the instructor.

MAR 280 Field Biology 5 ch – 3 sh
MAR 281 Field Biology Laboratory
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.

MAR 298 Selected Topics in Marine Science 1 – 3 sh
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.

MAR/BIO 320 Physiological Ecology of Animals 5 ch – 3 sh
MAR/BIO 321 Physiological Ecology of Animals Laboratory
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, thermo-regulation, 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: One semester of organic chemistry, and zoology, or permission of the instructor.

MAR/BIO 326 Marine Ecology 5 ch – 3 sh
MAR/BIO 327 Marine Ecology Laboratory
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. PREREQUISITE: One year of college biology and MAR 110 recommended or consent of instructor.

MAR 331 Chemical Oceanography 5 ch – 3 sh
MAR 332 Chemical Oceanography Laboratory
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: CHM 100, CHM 102, MAR 110 or consent of the instructor.

MAR/BIO 338 Ecology of Marine Plankton Lecture 5 ch – 3 sh
MAR/BIO 339 Ecology of Marine Plankton Laboratory
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, VA. PREREQUISITE: One year of college biology.

MAR/BIO 340 Marine Mammals 5 ch – 3 sh
MAR/BIO 341 Marine Mammals Laboratory
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. PREREQUISITES: Five courses in biology, and at least Junior class standing prior to the start of the course or permission of the instructor.

MAR 342 Ichthyology 5 ch – 3 sh
MAR 343 Ichthyology Laboratory
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. PREREQUISITE: General Biology and/or Zoology, or consent of the instructor.

MAR/BIO 344 Marine Botany **5 ch – 3 sh**
MAR/BIO 345 Marine Botany Laboratory
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 micro-biology will be included. PREREQUISITE: A course in general Biology and/or one semester of Botany or consent of the instructor.

MAR/BIO 348 Biological Oceanography Lecture **5 ch – 3 sh**
MAR/BIO 349 Biological Oceanography Laboratory
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 near-shore and inter-tidal environments. This course will be offered summers at the Marine Science Consortium, Wallops Island, VA. PREREQUISITES: One year of college biology. RECOMMENDED: Introduction to Oceanography.

MAR/GEL 350 Sedimentation Lecture **5 ch – 3 sh**
MAR/GEL 351 Sedimentation Laboratory
The basic composition, transport, diagenesis and distribution of sediments are introduced by means of lectures and laboratories. PREREQUISITES: GEL 100-101 and either GEL 102-103, GEL 366-367 or permission of instructor.

MAR/BIO 352 Coral Reef Ecology **5 ch – 3 sh**
MAR/BIO 353 Coral Reef Ecology Laboratory
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. PREREQUISITES: 4 courses in biology designated for science majors and SCUBA certification required.

MAR/GEL 358 General Geophysics **5 ch – 3 sh**
MAR/GEL 359 General Geophysics Laboratory
The study of earthquake seismology and the basic geophysical methods such as gravity, magnetics, seismic refraction, seismic reflection, electrical resistivity, and electro-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. PREREQUISITES: GEL 100-101 or MAR/GEL 100-111, PHY 040-041, PHY 042-043 or PHY 100-101, PHY 102-103.

MAR/BIO 360 Anatomy of Marine Chordates **5 ch – 3 sh**
MAR/BIO 361 Anatomy of Marine Chordates Laboratory
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 to a reasonably thorough dissection of representative marine vertebrates particularly those collected live on field trips. PREREQUISITE: Six semester hours of biology including general zoology.

MAR 364 Physical Oceanography **3 sh**
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. PREREQUISITE: MAR 110-111, one year Physics, Algebra and Trigonometry and one semester Calculus or consent of the instructor.

MAR/GEL 366 Marine Geology **5 ch – 3 sh**
MAR/GEL 367 Marine Geology Laboratory
A study of the structural and sedimentary environments of the continental shelf, slope, and ocean basin. The crustal structure of the earth and its relation to the sedimentary record and geologic history of the oceans is examined. Sampling and laboratory procedures used by the marine geologist are introduced to the students. PREREQUISITE: MAR 110-111 and GEL 100-101 or consent of the instructor.

MAR 370 Independent Research in Marine Science **1 – 3 sh**
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. PREREQUISITE: Senior level with an emphasis in Marine Science having completed at least 20 credit hours in Marine Science Courses.

MAR 380 Senior Seminar in Marine Science **2 sh**
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.

MAR 390 Internship in Marine Science **1 – 4 sh**
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. PREREQUISITE: Junior and Senior standing and approval of department head.

MAR 398 Honors Supplemental Research **1 - 3 sh**
See page 139.

MARKETING

Completion of the lower division core requirements with a minimum 2.0 QPA average is a prerequisite for every 300 level College of Business course.

MKT 310 Principles of Marketing **3 sh**
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.

MKT 312 Consumer Behavior **3 sh**
This course is a study of the processes of planning, purchasing and the consumption of goods and services by consumers. The course shall demonstrate the link between behavioral concepts and marketing strategy.

The process of consumer decision making will be investigated. The influence of both intra-personal and inter-personal variables on decision-making will be emphasized. The application of consumer behavior to the elements of strategic marketing – including market segmentation, product positioning, product development, marketing communications, in-store stimuli, distribution and pricing will be illustrated. Social and ethical considerations of marketing responsibility to consumers will also be addressed. PREREQUISITE: MKT 310 Principles of Marketing.

MKT 315 Marketing Ethics in Society **3 sh**
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. PREREQUISITE: MKT 310 Principles of Marketing.

MKT 320 Marketing Management **3 sh**
This course emphasizes managerial decision-making and problem-solving in such areas as product development, pricing, promotion and distribution. Focus is upon the concepts and techniques a firm must employ to anticipate and satisfy consumer needs. It will utilize text, case situations and readings to give experience in managing the components of the marketing mix. PREREQUISITES: MKT 310 Principles of Marketing and MGM 300 Principles of Management.

MKT 325 Sports Marketing **3 sh**
This course will examine the marketing of athletes, teams, leagues, and special events. The increase in sports sponsorships, using athletes as endorsers and segmenting the sports market will be explored. The activities involved in marketing to participants of sports will also be discussed. A framework of the strategic marketing process as applied to the sports industry will be presented, as will concepts and theories unique to sports marketing. PREREQUISITE: MKT 310 Principles of Marketing or permission of the instructor.

MKT 330 Personal Selling **3 sh**
The course approach is personal selling with emphasis on developing techniques of professional selling in areas involving personal sales positions. Personal Selling focuses on basic theory, functions, principles, practices, techniques, applications, sales demonstrations and presentations. PREREQUISITE: MKT 310 Principles of Marketing.

MKT 332 Sales Management **3 sh**
Sales Management examines the strategic planning and tactical implementation of sales force: organization, recruitment, selection, training, compensation, motivation, supervision, territories, quotas, budgets and performance evaluation. PREREQUISITE: MKT 310 Principles of Marketing and MGM 300 Principles of Management.

MKT 340 Retail Management **3 sh**
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. PREREQUISITE: MKT 310 Principles of Marketing.

MKT 347 New Product Management **3 sh**
New Product Management examines the search for new product and service ideas and their development and evaluation. The course shall take a conceptual approach to the marketing management problems, techniques and strategies necessary to implement and manage new and existing product offerings. Social and environmental issues and their relationship to the product planning process will be examined along with the assessment of the product mix and its relation to the strategic marketing plan. PREREQUISITES: MKT 310 Principles of Marketing and MGM 300 Principles of Management.

MKT 350 Advertising Management **3 sh**
This course emphasizes planning, implementation and control of promotional communications. The primary focus is directed towards providing the student with practical experiences and knowledge to develop effective promotions. Areas of concentration include the marketing communication process, basic media choices and strategy, target markets, creation of advertising, creative strategy audience analysis and buyer behavior, developing advertising campaigns and social, ethical and legal aspects. PREREQUISITE: MKT 310 Principles of Marketing.

MKT 351 Media Concepts and Planning **3 sh**
Media Concepts and Planning is developed and designed to increase the student's ability to analyze media problems and to solve those problems via media solutions. Emphasis of this course will be on media planning although major media concepts will also be covered. In addition, media "math" and media research will be addressed. Media and culture will also be explored as will controversial issues in media and promotion. PREREQUISITE: MKT 350 Advertising Management.

MKT 355 Services Marketing **3 sh**
Services are derived from many sectors of the economy including: government, private nonprofit, commercial and institutional business. This course will provide students with an understanding of the nature and variety of services as well as how their major characteristics affect their marketing. The course will examine the service marketing environment, positioning strategy, customer mix and demand, service policy, pricing policy, communication and promotion policy, and channels of distribution. Other topics to be covered include how firms can develop growth opportunities, increase quality and productivity, and manage customer support services effectively in a highly competitive market. PREREQUISITE: MKT 310 Principles of Marketing.

MKT 357 Advertising Campaigns **3 sh**
This will be an upper-division advanced advertising course. The course will be based on theoretical and pragmatic approaches to developing effective advertising campaigns. In general, the student will gain a theoretical background on advertising campaigns, and develop and implement an actual campaign. The course will culminate with an entry into the American Advertising Federation's (AAF) National Student Advertising competition. There are more than 140 colleges and universities involved in this competition. The AAF is the only advertising organization that has a branch involved in student education. PREREQUISITE: MKT 350 Advertising Management (or concurrent enrollment) or permission of the instructor.

MKT 360 Marketing Research **3 sh**
Marketing Research is the systematic and objective search for and analysis of information relevant to the identification and solution of any problem 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 goals, objectives, and strategies; for identifying problem areas; and for providing feedback for management control. This course concentrates on the process of information provision for decision making. This process utilizes both project-type and ongoing marketing information as they are needed for decision making. PREREQUISITES: MKT 310 Principles of Marketing and BUS 120 Business Statistics.

MKT 370 International Marketing **3 sh**
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: MKT 310 Principles of Marketing.

MKT 371 Selected Topics in Marketing **3 sh**
This course will permit the exploration of specialized subjects that are not covered in depth in 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. PREREQUISITE: MKT 310 Principles of Marketing.

MKT 375 Export Marketing **3 sh**
This course deals with formulating strategies and developing marketing skills necessary to succeed in global markets through exporting. The course content includes such topics as the assessment of company readiness to export, export market potential analysis, national and international regulations, export marketing plans and programs, logistics and payments. PREREQUISITES: MKT 310 Principles of Marketing.

MKT 380 Senior Seminar in Marketing **3 sh**
This course is a capstone course which emphasizes acquired student knowledge in accounting, economics, finance, law, statistics, management, and marketing through a computer simulation. The course is also designed to focus on current marketing issues through discussions, presentations and class exercises. PREREQUISITES: Second semester senior standing or permission of the instructor.

MKT 411 Marketing Communications Management **3 sh**
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: Graduate student or Undergraduate Senior Status with MKT 357 Advertising Campaigns or permission of instructor.

MKT 415 Problem Solving in Marketing **3 sh**
This course will explore the concepts associated with problem solving and critical thinking using case study analysis in marketing problem-based situations. Critical thinking has been a mainstream issue within a myriad of institutions. Case study analysis represents one of the most comprehensive and beneficial critical thinking and analytical tools to apply towards institutional problems and distinct opportunities. PREREQUISISTE: MKT 310 Principles of Marketing.

MATHEMATICS

MAT 005 Mathematics For Nurses **1 ch – 1 sh**
This course is an introduction to computing techniques used by nurses in hospitals and other clinical situations. Topics include a review of arithmetic and basic computational techniques, standard and apothecary measurement systems, dimensional analysis, and one-factor and multi-factor medication problems. These topics will be examined in depth with a focus placed on understanding the underlying computational techniques. Prerequisite: None.

MAT 017 Introduction to Mathematics **3 sh**
This General Education introductory-level course is intended to acquaint the student with the nature and spirit of mathematics. Topics include set theory, logic, counting methods, probability, statistics, and algebra-based problem-solving with graphical and analytic solutions.

MAT 021 Fundamentals of Mathematics I **3 sh**
This is the first course in a two-course sequence that is required for all Elementary Education and Special Education majors. It is not open to other majors. 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. MAT 021 is a prerequisite for MAT 022 and ELU 308.

MAT 022 Fundamentals of Mathematics II **3 sh**
This is the second course in a two-course sequence that is required for all Elementary Education and Special Education majors. It is not open to other majors. Topics include informal geometry; measurement; probability; statistics; and computer applications. MAT 021 is a prerequisite for MAT 022. MAT 021 and MAT 022 are prerequisites for ELU 308.

MAT 030 Survey of Mathematics **3 sh**
Sets and logic; number systems; relations and functions; introduction to matrices; linear systems; counting and probability; sequences and limits; introduction to differential and integral calculus.

MAT 040 Geometry **3 sh**
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.

MAT/WST 045 Women in Mathematics **3 sh**
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. PREREQUISITE: 2 years of high school algebra.

MAT 105 College Algebra **3 sh**
This course is intended for students with an elementary knowledge of algebra who need more work in algebraic topics before taking more advanced mathematics courses. 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. It is not open to anyone who already has received credit for MAT 115. Two years of algebra at the high school level is the prerequisite for MAT 105.

MAT 106 Trigonometry **3 sh**
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. A graphing calculator is required for this course. It is not open to anyone who already has received credit for MAT 115. MAT 105 or its equivalent is the prerequisite for MAT 106.

MAT 115 Precalculus Mathematics **3 sh**
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 MAT 105 and MAT 106. A graphing calculator is required for this course. It is not open to anyone who already has received credit for either MAT 105 or MAT 106. Three years of high school mathematics in algebra and trigonometry is the prerequisite for MAT 115.

MAT 121 Mathematics for Business and Information Science 3 sh
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 a review of algebraic concepts and problem solving, systems of linear equations, matrix algebra, linear programming with graphical and simplex method solutions, and probability. A graphing calculator is required for this course. MAT 105 or two years of high school algebra is the prerequisite for MAT 121.

MAT 122 Calculus for Business and Information Science 3 sh
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 differential and integral calculus; applying derivatives, differentials, and integrals to problem-solving; and maximizing and minimizing functions. A graphing calculator is required for this course. The prerequisite is MAT 121.

MAT 125 Discrete Mathematics for Computer Science I 3 sh
This course is the first in a two-course discrete mathematics sequence designed to ensure that the computer student reaches the level of mathematical maturity necessary for the study of computer science. This course encompasses a study of logic, sets, functions, algorithms, integers, matrices, mathematical reasoning, counting techniques, and relations. Three years of high school mathematics in algebra and trigonometry is the prerequisite for MAT 125. This course is a prerequisite for all CIS courses at the 200 level or above.

MAT 126 Discrete Mathematics for Computer Science II 3 sh
This is the second course in the discrete mathematics sequence designed to ensure that the computer student reaches the level of mathematical maturity necessary for the study of computer science. Topics include graphs, trees, Boolean algebra, and the modeling of computation. MAT 126 is a prerequisite for all CIS courses at the 300 level or above.

MAT 140 Applied Statistical Methods 3 sh
An introduction to quantitative methods in the behavioral sciences. Techniques for obtaining, analyzing and presenting data in numerical form; measures of central tendency and dispersion; normal distribution curve; standard scores; applicability of probability and sampling theory to research in the behavioral sciences; interpretation of confidence intervals; hypothesis testing; correlation; linear regression. A graphing calculator is required for this course. The prerequisite for MAT 140 is MAT 105 or two years of high school algebra.

MAT 171 Calculus I 3 sh
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 trigonometric functions, the application of derivatives to graphing, ant derivatives, and the introduction of the definite integral. A graphing calculator is required for this course. PREREQUISITE: Three years of high school mathematics in algebra and trigonometry.

MAT 172 Calculus II 3 sh
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; and techniques of integration. A graphing calculator is required for this course. PREREQUISITE: Completion of MAT 171 with a grade of "C" or higher.

MAT 175 Mathematical Investigations 3 sh
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. PREREQUISITES: at least three years of high school academic mathematics, including trigonometry, or permission of the department chair.

MAT 220 History of Mathematics 3 sh
A study of mathematics as it has developed through the centuries and the mathematicians who have contributed to its growth. Mathematics of early Babylonian and Egyptian civilizations; mathematics under Greek influence; Chinese, Hindu and Arabic contributions; the Renaissance period; Seventeenth and Eighteenth Century mathematics; the liberation of geometry and arithmetization of analysis of the Nineteenth Century; Twentieth Century mathematics. Not applicable toward the Arts and Sciences Mathematics major. PREREQUISITES: a grade of "C" or higher in MAT 171.

MAT 224 Foundations of Higher Mathematics 3 sh
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. PREREQUISITE: a grade of "C" or higher in MAT 171.

MAT 240 Synthetic Geometry 3 sh
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. PREREQUISITE: a grade of "C" or higher in MAT 224.

MAT 260 Linear Algebra 3 sh
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. A study of the properties of vector spaces; matrix theory with applications using systems or equations and determinants; linear transformations and invariants under such mappings. PREREQUISITE: a grade of "C" or higher in MAT 224.

MAT 273 Calculus III 3 sh
This course is one of a series intended the sciences, or engineering. The topics include indeterminate forms and improper integrals; sequences, series, and convergence tests; differentiation and integration of power series; conic sections; polar coordinates and polar integrals; vectors in two and three dimensions; operations on vectors; limits, derivatives and integrals of vector functions. A graphing calculator is required for this course. PREREQUISITES: MAT 272.

MAT 274 Calculus IV **3 sh**
This course is one of a series intended for students who major in mathematics, the sciences, or engineering. The topics include three-dimensional surfaces; the definition, properties, and partial differentiation of functions in more than one variable with applications; finding the extrema of functions in two variables; Lagrange 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 is required for this course. PREREQUISITE: MAT 273.

MAT 280 Cooperative Internship in Mathematics **3 – 6 sh**
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. PREREQUISITE: Substantial completion of the required and concomitant courses in the Mathematics major with an above-average grade-point average. Approval by the department chair is required.

MAT 301 Probability and Statistics I **3 sh**
Elementary probability spaces; conditional probability; general probability spaces; random variables; expectation; variance; multivariant distributions; the algebra of expectation. PREREQUISITE: MAT 273 and MAT 224.

MAT 302 Probability and Statistics II **3 sh**
Probability distributions; sampling; estimation of parameters; Central Limit Theorem; confidence intervals; correlation and regression; sampling from a normal population; testing hypotheses; Markov chains. PREREQUISITE: MAT 301.

MAT 311 Abstract Algebra I **3 sh**
Sets, relations, and functions; groups; rings; integral domains; fields; elementary theory of groups. PREREQUISITE: a grade of "C" or higher in MAT 224.

MAT 312 Abstract Algebra II **3 sh**
Extension of Abstract Algebra I topics; permutation groups; normal subgroups and quotient groups; rings and ideals; ring homomorphisms; quotient rings, integral domains and their fields of quotients; fields; polynomial rings. PREREQUISITE: MAT 311.

MAT 332 Numerical Analysis **3 sh**
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. PREREQUISITES: MAT 260 and MAT 273.

MAT 340 Differential Equations **3 sh**
Theory and methods of solving ordinary differential equations are investigated — equations include first order, linear and systems; methods of solutions include exact, substitution, reduction, undetermined coefficients and variation of parameters. Consideration is given to application to the physical and natural sciences. PREREQUISITE: MAT 273.

MAT 351 Advanced Calculus I **3 sh**
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: a grade of "C" or higher in MAT 224 and 273.

MAT 352 Advanced Calculus II **3 sh**
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. PREREQUISITE: MAT 351.

MAT 361 Mathematical Methods in Operations Research **3 sh**
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; mathematical programming; graph theory and network analysis; and queuing theory. PREREQUISITE: MAT 260 or permission of the instructor.

MAT 370 Selected Topics in Mathematics **3 sh**
This course involves individual or small group independent study in some area of mathematics under the direction of a mathematics staff member. This study can be made in any area of mathematics or mathematical application. A student may register for this course more than once up to a maximum of six semester hours of credit. PREREQUISITES: Consent of the student's advisor, instructor and department head and their approval of the project.

MAT 380 Senior Seminar in Mathematics **3 sh**
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.

MAT 398 Honors Supplementary Research **1 – 3 sh**
See page 139.

MAT 431 Topology I **3 sh**
Set theory; functions; metric spaces; basic topological concepts; topologies and neighborhood systems; open and closed sets; accumulation points and closures; bases and sub bases for a topology; separation and connectedness; nets; continuity and homeomorphisms; compactness; product and quotient spaces. PREREQUISITES: MAT 272 and MAT 311.

MATHEMATICS EDUCATION

MAU 415 Learning and Teaching Mathematics **3 sh**
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.

MAU 425 Middle School Mathematics **3 sh**
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.

MEDICAL TECHNOLOGY

The following courses are offered specifically, and only, to Medical Technology students who have been accepted for a year of clinical experience in a hospital program that has been approved by the National Accrediting Agency for Clinical Laboratory Sciences. These courses are offered only in the hospital-clinic setting. The students, upon successful completion of the program, will receive a combined total of 30 credit hours.

MED 320 Clinical Microbiology **6 – 10 sh**
Identification and clinical pathology of bacteria, fungi, viruses and parasites. Techniques to isolate, stain, culture and determine antimicrobial susceptibility. Instrumentation; quality control.

MED 330 Clinical Chemistry **6 – 10 sh**
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.

MED 340 Clinical Hematology/Coagulation **5 – 10 sh**
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.

MED 350 Clinical Immunohematology **3 – 6 sh**
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.

MED 360 Clinical Immunology/Serology **2 – 4 sh**
Immune response, immunoglobulins, autoimmunity and complement and related tests and diseases. Survey and demonstration of serological diagnostic tests.

MED 370 Clinical Seminar **1 – 6 sh**
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.

MICROCOMPUTERS

MIC/FAR 021 Microcomputer Graphics **3 sh**
This course is designed to allow students to explore the graphic capability of a microcomputer. No programming experience is required. Topics will include: word processing, object-based drawing, Postscript-based drawing, scanned images, paint-based drawing and desktop publishing. This course is not applicable anywhere in Category IV of General Education. PREREQUISITE: None.

MILITARY SCIENCE

Only credits earned in MIL 102 and MIL 113 will count toward a KU degree (6 hours total).

MIL 013 The Soldier in Modern Times **1 sh**
Examination of U.S. Army as an institution. Army's history, customs, traditions. Highlights role and function of the Reserve Officers Training Corps.

MIL 014 Leadership and Group Dynamics **1 sh**
Examines the role of the individual within the military group in an organizational context, and in terms of his/her contribution to group goal accomplishment. Provides the basis for understanding: group dynamics; the relationship of individual differences to group performance; the necessity for effective communications; society's influence on military group and individual behavior; and formal organizational constraints on the leadership process.

MIL 021 Topographical Analysis and Land Navigation **2 sh**
Examines the use of topographic maps used for terrain analysis and land navigation. Emphasis is on application and field exercises at individual and small group levels. Basic concepts of geography are taught to provide an overview of the major topographical land features and their military application.

MIL 022 Leadership Theory and Development **2 sh**
Examines the contemporary theories of leadership to include leadership traits, indicators and principles. Analyzes the philosophies of leadership so as to emphasize the interpersonal and managerial skills requisite of a commissioned officer. The Leadership Assessment Program is taught to all students.

MIL 070 Military Science Leadership Lab I **2 ch – 0 sh**
Basic Military Science leadership lab. Exposes student to a variety of opportunities for development both as an individual and as a member of a small group. Adventure/"hands on" type activities emphasized. One-two hour period per week, location dictated by type activity being conducted. Required enrollment for students in any one/combination of the following courses: MIL 013, 014, 021, 022.

MIL 101 Advanced Military Skills **3 sh**
The course reinforces previously taught leadership principles and teaches the individual and collective skills required for leading a small unit in a tactical situation. Principles of war, small unit tactical planning, tactical techniques of the soldier, team leading techniques, oral communications, and trainer skills are introduced in the classroom and practiced in a field learning environment. Students are required to demonstrate an ability to plan, organize, and execute small unit tactical operations. PREREQUISITE: Permission of Department Chairperson.

MIL 102 Advanced Leadership **3 sh**
The course examines leadership qualities, traits and principles with emphasis on the military environment. Students are confronted with situations, case studies of leadership problems under physical and mental stress and leadership assessment exercises. Self, peer and instructor leadership evaluations are conducted to develop personal awareness and realistic expectations about personal leadership skills. Advanced military skills, specifically an ability to recognize terrain and navigate across country are reinforced and Army career options are presented. PREREQUISITE: Permission of Department Chairperson.

MIL 113 Military Command and Staff **3 sh**
Examines the role, authority, and responsibility of military commanders and staff officers in the managerial areas of personnel, logistics, and training; military law; and planning and operations. Staff procedures, problem solving techniques, decision making methods, and training methodologies used in military organizations are discussed. Written and oral communicative methods are emphasized. PREREQUISITE: Permission of Department Chairperson.

MIL 114 War, Morality, Ethics and Military Professionalism **3 sh**
Examines the development of the profession of arms. Analyzes the profession's fundamental values and institutions, special moral principles and ethical responsibilities in contemporary American society. Examines the moral dimensions of war, just war theory, and international law of war. Develops an understanding of decision-making techniques in ethical problem solving. PREREQUISITE: Permission of Department Chairperson.

MIL 170 Military Science Leadership Lab II **2 ch – 0 sh**
Advanced Military Science Leadership Lab. Provides upper level students with opportunities to practice/refine leadership and instructional techniques developed in class. One one-and-a-half hour period per week, location dictated by type of activity being conducted. Required enrollment for students in any of the following courses: MIL 101, 102, 113, 114. PREREQUISITE: Permission of Department Chairperson.

MODERN LANGUAGES

Beginning Fall '05

MLS 011 Self-Instructional Language Course
MLS 012 Self-Instructional Language Course
MLS 021 Self-Instructional Language Course
MLS 022 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.

MLS 380 Senior Seminar in Modern Languages **3 sh**
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.

MLS 390 International Internship **1 – 9 sh**
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.

MLS/EDU 433 Cultural Awareness/Sensitivity for ESL/ELL Program Specialists **3 sh**
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.

MLS/EDU 434 Instructional Methods, Materials, and Assessments for ELL/ESL Populations **3 sh**
This course if 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.

MLS/EDU 435 English Language Acquisition and Awareness for ELL/ESL Populations **3 sh**
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 English language, including grammar, pronunciation, and lexical, morphological, syntax and phonological components, for use in the ESL classroom. Students will learn about first and second language acquisition and the process of literacy development. Additional focus will be placed on non-verbal communication in English-speaking communities. Students will learn appropriate assessment methods for evaluating the effectiveness of instruction.

MULTICULTURAL STUDIES

MSC 010 Introduction to Multicultural Studies **3 sh**
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.

MUSIC

MUS 010 Introduction to Music Literature **3 sh**
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.

MUS 020 Basic Concepts and Skills of Music **3 sh**
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.

MUS 024 Class Piano I **2 ch – 1 sh**
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.

MUS 079 Voice Class I **2 ch – 1 sh**
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.

MUS 100 Experiencing Contemporary Music **3 sh**
A perusal of contemporary practices in musical composition and performance as well as the socio-economic forces which determine these practices. Various musical media, styles and historic periods of music will be included to the extent that they impact upon investigations and

discussions of current musical events and performances. The course will include visits to the classroom by various artists as well as visits by the class to local and urban cultural centers.

MUS 101 Aural Skills I **3 ch – 2 sh**
The aural, visual and theoretical aspects of music reading will be learned and developed. 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. It is recommended that these courses be taken concurrently.

MUS 102 Harmony and Theory I **3 sh**
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 will be emphasized along with related skills in melodic analysis and composition. This course should be taken concurrently with MUS 101. PREREQUISITE: MUS 020 or its equivalent.

MUS 124 Class Piano II **2 ch – 1 sh**
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.

MUS 179 Voice Class II **2 ch – 1 sh**
This course is a continuation of vocal technique developed in Voice Class I. It includes interpretation, stage deportment, programming and song literature. PREREQUISITE: MUS 079 or permission of the instructor.

MUS 201 Aural Skills II **3 ch – 2 sh**
This course is a continuation of MUS 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 MUS 202; it is recommended that these courses be taken concurrently. PREREQUISITE: MUS 101 and MUS 102 or permission of instructor.

MUS 202 Harmony and Theory II **3 sh**
This course is designed to follow the foundation course in harmony and music theory, extending to chromatic harmony and modulation. The study of secondary dominants and seventh chords and their inversions will begin the study of modulation, along with harmonic sequences, pivot chords, direct change of key, borrowed chords, and other elements of chromatic harmony. This course should be taken with MUS 201. PREREQUISITE: MUS 101 and MUS 102.

MUS 205 The Physical Properties of Sound: Music and Music Reproduction **3 sh**
A non-mathematical music-based study of sound; its properties, production, storage, and reproduction. It will include the study of acoustical properties of the voice and musical instruments and the electronic devices used to record and reproduce their sounds. The course is designed to provide experiences in the practical uses of the fundamentals of musical acoustics.

MUS 207 British Music **3 sh**
A study of the music of England, Ireland, Scotland and Wales, including an analysis of its structure, styles, and aesthetic concepts. Major composers of all historical periods will be considered and their contributions in the various genres will be presented within the context of the social and historical background of the British Isles.

MUS/WST 209 Women in Music **3 sh**
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.

MUS 210 Russian Musical Culture **3 sh**
A survey of Russian music with emphasis on developments leading composers and representative works of the nineteenth and twentieth centuries. Consideration will be given to the effects of folk elements and influences of the Communist philosophy on Russian music. PREREQUISITE: MUS 010 or permission of instructor.

MUS 211 Music from Ancient Times to 1825 **3 sh**
This course is a study of music history and literature from ancient times to 1825. The course includes an analysis of musical structure, styles, forms, aesthetic concepts, and practices in their historical context.

MUS 212 Music from 1825 to the present **3 sh**
This course is an examination of the history of western music as developed after 1825. Innovative composers of instrumental and vocal music are discussed and illustrated with scores, as well as audio and video recordings. These developments are placed in perspective with social, cultural, technological and political changes during the 19th and 20th centuries.

MUS 213 Aural Skills III **3 ch – 2 sh**
This course is a continuation of MUS 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 MUS 214; it is recommended that these courses be taken concurrently. PREREQUISITE: MUS 201, MUS 202 or permission of instructor.

MUS 214 Harmony and Theory III **3 sh**
This course is designed as a continuation of Harmony and Theory II. It emphasizes the study of advanced chromatic harmony, with borrowed chords, augmented sixth chords, ninth/eleventh/thirteenth chords, and other late nineteenth century harmonic devices. PREREQUISITE: MUS 202, MUS 201. To be taken concurrently with MUS 213.

MUS 215 American Music **3 sh**
A study of American Music from the Pre-Colombian period to the present. The influence of the personalities of composers and performers on the evolution of music in America. Ethnic and folk music, opera and musical comedy, symphonic and choral music as well as jazz will be studied. PREREQUISITE: MUS 010 or permission of instructor.

MUS/SPE 217 The Music of Poetry **3 sh**
This course is designed to develop and intensify the student's intellectual, emotional and aesthetic responses to the aural qualities of poetry and music through an examination of the similarities and differences between them. Emphasis will be placed upon those poems that particularly convey their meaning(s) through aural and temporal devices. Specific attention will be given to structural aspects common to both poetry

and music, such as meter, rhythm, tonality and form. Analogies to be drawn between music and poetry will provide the student with provocative frames of references for study. PREREQUISITES: MUS 010 and one basic Literature course.

MUS 220 Twentieth Century Music **3 sh**
An examination of the trends and stylistic concepts developed in Europe and America beginning with Post-Wagnerian Romanticism. Along the trends and styles to be considered are impressionism, neo-classicism twentieth-century nationalism, the twelve-tone school, jazz and electronic music. PREREQUISITE: MUS 010 or permission of instructor.

MUS 223 Development of the Child Voice **2 ch – 1 sh**
The study of the nature of the child voice, its potential and development. Concentration on techniques which are appropriate to the context of the elementary school: classroom, vocal ensemble, operettas and special programs. Identification and help for the uncertain and atypical singer.

MUS 224 Class Piano III **2 ch – 1 sh**
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.

MUS 225 Jazz: Its History and Influence **3 sh**
A study that explores the logical musical derivatives and developments in jazz and how these developments affected and continue to affect individual jazz styles. PREREQUISITE: MUS 010 or permission of instructor.

MUS 226 Jazz Improvisation **2 ch – 2 sh**
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 be bop era of jazz history. PREREQUISITE: MUS 102.

MUS 227 Creative Keyboard **2 ch – 1 sh**
This course provides an opportunity for students who need additional keyboard skills related to the classroom teaching to expand their usage of the keyboard as a teaching vehicle. It is designed to meet the needs of the classroom teacher while presenting the harmonic and improvisational skills for independent and creative pedagogy. PREREQUISITE: Basic Keyboard Skills.

MUS/THE 228 The History of American Musical Theatre **3 sh**
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. PREREQUISITE: MUS 010 and THE 015 or permission of the instructor.

MUS 229 Music in Childhood Education **3 sh**
An advanced course in music education for classroom teachers. It includes a major study of several major song book series and music listening series. Orff and Kodaly methods of music education, development of song repertoire and creative experiences in music are also studied. Each student will have frequent opportunities to present demonstration lessons to the class. PREREQUISITE: MUS 010.

MUS 230 Introduction to Music Technology **3 sh**
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. PREREQUISITE: MUS 102, or permission of the instructor.

MUS 291 Selected Topics in Music **3 sh**
Topics in the field of Music will be selected for thorough study. For example, topics may include music literature courses such as genres, stylistic periods, ethnic musics, performers and composers, or music theory courses such as analysis of selected works, counterpoint, and Twentieth Century compositional technics. The course may be repeated for credit provided that the same topic is not repeated. Prerequisites will be determined by the topic selected.

MUS 303 Electronic Music Composition **3 sh**
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. PREREQUISITE: MUS 102 or permission of the instructor.

MUS 310 Composition and Arranging **3 sh**
An investigation into the creative process of music composition and the craft of adapting compositions to various vocal and instrumental media. PREREQUISITE: MUS 102 or permission of the instructor.

MUS 320 Keyboard Harmony **3 sh**
This course presents an opportunity for the student of harmony to apply to the keyboard in a vital and creative manner the essentials of basic harmony, including chord progressions, approaches to cadences, transposition, modulation, harmonization of melodies, improvisation, analysis, and the use of the figured bass. PREREQUISITES: MUS 020 and MUS 024 or equivalent.

MUS 324 Class Piano IV **2 ch – 1 sh**
This course will serve as a continuation of Class Piano I, II, and III, and will complete the cycle of four semesters of basic piano study. Students with more fluent reading and playing skills than are required for Class Piano III may progress to Class Piano IV. Other students without previous Class Piano study may take a placement examination to enroll in the course.

MUS 325 Conducting (Vocal and Instrumental) **3 sh**
The course is a study of the principles of conducting: technique of the baton; methods of adapting to musical organizations of various sizes and abilities; transpositions; reading and memorization of scores and program building. Skills will be developed through practice with choral and instrumental recordings and/or live groups. Video tapes of students will be made and studied for self-evaluation. PREREQUISITES: MUS 101, MUS 102, MUS 201, MUS 202 or permission of the instructor.

MUS 327 Aesthetics and Music Criticism **3 sh**
This course covers the philosophical basis of expression as a foundation for understanding the nature, function and modes of musical art. The consideration of criteria for music as a component of human life experience is included.

MUS 330 Analysis of Music Stylistic and Structural **3 sh**
The survey and analytical study of tonal and structural materials of music. It includes the critical analysis of the various musical styles and forms that have been developed in Western Civilization from Pre-Renaissance to the present day. PREREQUISITE: MUS 010.

MUS 379 Directed Studies in Music **1 – 3 sh**
An individualized approach to the needs and interests of select students through guided research, readings, discussion, and papers. Admission is by permission of the instructor.

MUS 380 Senior Seminar in Music **2 ch – 2 sh**
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.

Field Experience in Music
MUS 391 **3 credits**
MUS 392 **6 credits**
MUS 393 **9 credits**
MUS 394 **12 credits**
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. PREREQUISITES: Senior status and recommendation of the Department of Music. The course may be scheduled for a variable number of s.h. credits.

MUSIC PERFORMANCE

INSTRUCTION IN APPLIED MUSIC **1 sh each**

Ensemble Instruction: 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.

MUP 231 String Ensemble
MUP 232 Woodwind Ensemble
MUP 233 Brass Ensemble
MUP 234 Percussion Ensemble
MUP 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. May be repeated for credit.

MUP 236 Applied Music: French Horn (Pr)
MUP 237 Applied Music: Piano (Pr)
MUP 238 Applied Music: Organ (Pr)
MUP 239 Applied Music: Voice (Pr)
MUP 240 Applied Music: Viola (Pr)
MUP 241 Applied Music: Cello (Pr)
MUP 242 Applied Music: String Bass (Pr)
MUP 243 Applied Music: Flute (Pr)
MUP 244 Applied Music: Oboe (Pr)
MUP 245 Applied Music: Clarinet (Pr)
MUP 246 Applied Music: Bassoon (Pr)
MUP 247 Applied Music: Saxophone (Pr)
MUP 248 Applied Music: Trumpet (Pr)
MUP 249 Applied Music: Violin (Pr)
MUP 250 Applied Music: Baritone Horn/Trombone (Pr)
MUP 252 Applied Music: Tuba (Pr)
MUP 253 Applied Music: Percussion (Pr)
MUP 254 Applied Music: Guitar (Pr)

MUP 281 University Band **3 ch – 1 sh**
The University Band program is comprised of a Marching Band and a Concert Band during the fall semester; a Symphonic Band and Wind Ensemble during the spring semester. The Symphonic Band performs a wide variety of Wind band literature: standard repertoire, recently 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. The spring semester includes one concert by the Symphonic Band and two concerts by the Wind Ensemble. The Marching Unit performs a diversified musical repertoire with coordinated drill design at all home and selected away football games. The schedule also includes performance at parades, and other special events. Repeatable up to 8 s.h.

MUP 283 University Choir **3 ch – 1 sh**
University Choir is a study through rehearsal and performance of the mechanism and aesthetic of choral vocal production, providing experience in the various styles of choral music throughout all periods of music history. Repeatable up to 8 s.h. PREREQUISITE: Permission of the instructor.

MUP 285 University Orchestra **3 ch – 1 sh**
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. Repeatable up to 8 s.h.

MUP 289 Jazz Orchestra **3 ch – 1 sh**
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.

MUP 399 Senior Recital **.5 ch - 1 sh**
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. PREREQUISITES: Successful completion of a pre-recital hearing, and permission granted by the Department of Music faculty.

MUSIC EDUCATION

MUU 220 Elementary Music Methods **3 sh**
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.

MUU 222 Secondary Music Methods **3 sh**
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.

MUU 231 String Techniques **2 ch – 1 sh**
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.

MUU 232 Woodwind Techniques **2 ch – 1 sh**
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.

MUU 233 Brass Techniques **2 ch – 1 sh**
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.

MUU 234 Percussion Techniques **2 ch – 1 sh**
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.

MUU 320 Instrumental Music Methods **3 sh**
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. PREREQUISITE: MUS 325.

MUU 322 Choral Music Methods **3 sh**
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. PREREQUISITE: MUS 325.

MUU 390/391 Music Student Teaching and Practicum **6 sh**
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: Permission of the Department of Music faculty.

NURSING

NUR/WST 111 Women's Wellness **3 sh**
This course permits the learner to study the wide variety of issues affecting the lives of women in today's society. The course will emphasize women and what women can do for themselves and for one another to deal with these issues effectively. The course will enable learners to focus on how women can take charge of their own wellness and their lives, deal with existing medical system, and utilize strategies to create change and improvement. Investigation of current research on women's wellness and strategies will be utilized to assist women to deal with these issues. This course is not open to nursing majors. PREREQUISITES: None.

NUR 116 Achieving Wellness: A Multicultural Perspective in the United States **3 sh**
This course will allow the student to study various cultural and religious groups with a focus on specific cultural beliefs and values in relation to health care and how these affect the achievement of wellness in these groups. This course meets criteria set forth for General Education Goal #9 (diversity). This course is open to all students.

NUR 299 Adaptation of the Nurse, as a Professional Person **3 sh**
This course serves as an introduction to the nursing program at Kutztown University. The student is introduced to the philosophy and organizing framework of the nursing program for the purpose of applying it to professional nursing practice. In this course, the student begins to evaluate the nurse as a professional person within the four modes. The course examines the environmental stimuli confronting the nurse and the strategies used to manage these stimuli in order to promote integrity within the profession.

NUR 308 Adaptation of the Nurse to the School Health Environment **12 ch – 6 sh**
NUR 309 Adaptation of the Nurse to the School Health Environment Laboratory
This course provides the nurse with the knowledge and skills necessary to meet the health needs of school-aged children and families within the school setting. The topics presented will utilize the Adaptation Model and other pertinent theories as they relate to provision of direct care to children, management of the school health environment and provision of a multidisciplinary approach to meet the health needs of children and their families. This course promotes critical thinking and decision-making skills that are essential to school health nurse practice. This course will include clinical experiences within a school health setting emphasizing health promotion and health education. A student shall not be placed for his/her clinical experience in an agency in which they are currently employed. PREREQUISITES: NUR 299 Adaptation of the Nurse as a Professional Person, NUR 312 Adaptation of the Individual and the Family or by permission of the instructor.

NUR 311 Adaptation of Women in Today's Society **3 sh**
This course permits the learner to study simple, moderate and complex stimuli such as legal, moral, ethical, and political that affect the adaptation of women in today's society. Physical, psychological, social, and legal, moral, ethical, and political factors which act as stimuli throughout a woman's life will be emphasized as well as their impact on her adaptation. Technological advancements which assist today's women in adapting as well as research in the area of women's health issues will be incorporated throughout. PREREQUISITES: NUR 299 Adaptation of the Nurse, as a Professional Person; NUR 312 Adaptation of the Individual and Family or by permission of the instructor.

NUR 312 Adaptation of the Individual and Family 3 sh
This course introduces nursing theory as it relates to the adaptation of the individual and the family across the life cycle. Theories related to health assessment, problem-solving, and individual and family development are utilized with the Adaptation Model as the framework. The learner will apply the nursing process and the associated processes to promote effective adaptation of the individual and the family experiencing minimal adaptive responses. PREREQUISITES: BIO 120/121 Anatomy and Physiology I; BIO 122/123 Anatomy and Physiology II; PSY 110 Child Psychology or PSY 125 Life Span Development. CO-REQUISITE: NUR 299 Adaptation of the Nurse as a Professional Person.

NUR 314 Adaptation of the Nurse to the Multicultural Client 3 sh
This course will allow the student to study various cultural and religious groups focusing on specific behaviors and belief systems which act as stimuli affecting the adaptation of the nurse to the multicultural client. PREREQUISITES: NUR 299, 312, or by permission of the instructor.

NUR 316 Nursing Perspectives on Death and Grief: Assisting with Adaptation 3 sh
This course will provide participants with the opportunity to examine the multi-dimensions that make up the death experiences. Socio-cultural, role functioning, psychological, self-concept, spiritual and the physiological impact of death will be explained. Participants will analyze selected readings, research findings, films and personal experience within the context of their nursing practice.

NUR/SWK 320 Case Management — an Interdisciplinary Approach 3 sh
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. PREREQUISITES: SWK 250 or NUR 299 and NUR 312 or by permission of the instructor.

NUR 322 Adaptation of Groups Within the Health Care Environment 3 sh
This course explores the leader and manager role of the professional nurse when promoting effective adaptation of groups. Through the utilization of the Adaptation Model, the learner will examine the leader/manager component of the professional role and use the skills necessary to fulfill the leader/manager role in the health care environment. The learner will also study contributing focal, contextual, and residual stimuli that affect the nurse leader/manager and the group. In addition, the learner will examine health care environments in order to understand minimal and moderate adaptive responses experienced by the individual, family, and group. PREREQUISITES: NUR 299 Adaptation of the Nurse, as a Professional Person.

NUR 332 Adaptation of the Community and Its Members 9 ch – 5 sh

NUR 333 Adaptation of the Community and Its Members Laboratory
This course introduces nursing theory as it relates to the adaptation of the community and its members (individuals, families, and groups). Theories associated with community assessment, epidemiology, and mobilization of community resources and health education will be applied in order to promote effective adaptation of the community and its members. The learner uses the nursing process and the associated process to promote effective adaptation of the community and its members. Clinical experiences will focus on communities and their members who are experiencing minimal, moderate, and complex adaptive responses to stimuli. PREREQUISITES: NUR 312, BIO 160-161 or BIO 224-225 or BIO 304-305. CO-REQUISITE: NUR 322.

NUR 342 Complex Adaptive Responses by Clients to Stimuli 3 sh
This course permits the learner to synthesize nursing knowledge and apply the adaptation model in order to promote effective adaptation of the client experiencing complex adaptive responses to multiple environmental stimuli. The focus is on the dynamic interaction of the four modes of the person experiencing complex adaptive responses. This course will explore environmental stimuli affecting adaptation; i.e., clients, acuity level, technological advances, health promotion and maintenance, and societal trends and issues influencing health. This course encourages critical thinking, decision making, and independent judgment within nursing. Clinical experiences will provide opportunities to apply theory and to promote effective adaptation of clients experiencing complex adaptive responses. PREREQUISITES: NUR 322. CO-REQUISITE: NUR 332-333 or permission of instructor.

NUR 370 Independent Study ch TBA, 1 – 3 sh
With the approval of the professor and the approval of specific objectives in advance, the nurse may pursue for credit special areas of professional interest in depth. The study may be either clinical, theoretical, or a simple research project. PREREQUISITE: NUR 299, NUR 312.

NUR 371 Selected Topics in Nursing 3 sh
This course will provide an analytic study of a selected topic in nursing. Topics will vary depending upon interests of students and faculty or timeliness of the subject matter. The topic to be presented will be approached by utilizing the Adaptation Model which incorporates the concepts of person, environment, health and nursing. In addition the legal, social, ethical, political, economic, historical and philosophical aspects of the topic will be incorporated within the course. The course may be repeated for credit, provided that the same topic is not repeated. PREREQUISITE: NUR 299, NUR 312 or permission of instructor.

NUR 375 Introduction to Nursing Research 3 sh
This course provides an introduction to nursing research with the focus on the use of the research process in nursing practice and the critical evaluation of nursing research. The formulation of a nursing research problem and the related investigational skills are included. The Adaptation Model and related nursing theories serve as a foundation for investigation of the nursing research problem. COREQUISITE: MAT 140 or PSY/SOC 200 or permission of the instructor.

NUR/BUS 400 Health Care Management 3 sh
This course explores major issues, trends and changes occurring within the health care industry. An applied understanding of the specialized organizations such as health maintenance organization, clinics, long-term care institutions, home care services, laboratories, and outpatient units will be explored. The learner will examine the environment, changes in governmental regulations and societal change of the respective health care industry and the impact of those on the consumer. In addition, a study of the internal organizational issues, more specifically the clinical/operating activities unique to specific organizations, will be examined. Emphasis will be placed on identifying managerial functions and issues in order to assist the health care system to adapt effectively. The management of human resources, and major managerial responsibilities will be studied. PREREQUISITE: Graduate level: Admission to MBA Program and completion of MGM 300 or a minimum of Senior Level Status plus completion of NUR 322.

PA GERMAN STUDIES

PAG 010 Introduction to Pennsylvania German Studies 3 sh
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.

PAG 011, 012 Introduction to Pennsylvania German Language 3 sh
These are 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.

PAG 251 Pennsylvania German Literature in English and Translation 3 sh
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.

PAG 301 Pennsylvania German Literature 3 sh
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. PREREQUISITE: PAG 001, knowledge of Pennsylvania German, or permission of instructor. Cannot be counted for credit with PAG 251.

PAG 360 Pennsylvania German Studies Abroad 1 – 6 sh
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.

PAG 370 Readings in Pennsylvania German Life 3 sh
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: PAG 010, and 12 semester hours of Pennsylvania German Studies courses, or permission of the instructor. Paper, exhibition, portfolio or tangible project is expected at end of course.

PAG 390 Internship in Pennsylvania German Studies 3 sh
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. PREREQUISITE: Junior or Senior status.

PARALEGAL STUDIES

The following courses in Paralegal Studies are taken through Lehigh-Carbon Community College as part of special cooperative programs for students majoring in Criminal Justice, History, Political Science, Psychology, Public Administration, and Sociology. Paralegal Studies courses (PLG prefix) may only be transferred to KU by students who are enrolled in and complete one of these special KU-LCCC programs. Contact the departments for further details.

PLG 120 Paralegalism 3 sh
The paralegal profession is introduced. The student will be exposed to the court systems of both the Federal government and individual states as well as various legal concepts and terminology. Ethics and limitations of paralegals are explored. Legal research, manually and computer assisted, time and billing software, and docket-control software are also course components.

PLG 125 Worker's Compensation Practice for Paralegals 3 ch – 1 sh
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.

PLG 130 Social Security Disability Practice 3 ch – 1 sh
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.

PLG 135 Interviewing for Paralegals 3 ch – 1 sh
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.

PLG 150 Torts and Personal Injury Law 3 sh
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. COREQUISITE or PREREQUISITE: PLG 120 or the permission of the instructor.

PLG 200 Civil Litigation and Procedures 3 sh
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. COREQUISITE or PREREQUISITE: PLG 150 or the permission of the instructor.

PLG 215 Law Office Management 3 sh
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.

PLG 220 Business Law for Paralegals **3 sh**
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.

PLG 230 Estates and Trusts **3 sh**
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.

PLG 235 Family Law **3 sh**
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. COREQUISITE or PREREQUISITE: ENG 105, PLG 120 or the permission of the instructor.

PLG 240 Bankruptcy Law **3 sh**
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.

PLG 245 Legal Research and Writing **3 sh**
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. PREREQUISITE: ENG 105, 106, PLG 120, 150 and 200 or the permission of the instructor.

PLG 250 Legal Internship **3 sh**
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. PREREQUISITE: PLG 120, 150, 200 and 245 or the permission of the instructor. COREQUISITE: PLG 215.

PLG 255 Legal Writing **3 sh**
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. PREREQUISITE: PLG 120, 200 and 245 or the permission of the instructor.

PHILOSOPHY

Any Philosophy course may be used to satisfy the humanities requirement.

PHI 015 Critical Thinking **3 sh**
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.

PHI 020 Introduction to Logic **3 sh**
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.

PHI 030 Introduction to Philosophy **3 sh**
A course designed to introduce the student to philosophic thought and terminology. Topical survey of the main branches of philosophy; epistemology; metaphysics, value theory.

PHI 040 Introduction to Ethics **3 sh**
A study of the development of major ethical concepts and problems from the theories of the early Greeks to those of 20th Century philosophers.

PHI 080 Business Ethics **3 sh**
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.

PHI 105 Medieval Philosophy **3 sh**
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.

PHI 110 Comparative Study of Religion **3 sh**
The course will involve an attempt to apprehend the essence of religious claims and to subject them to critical analysis. Emphasis will be placed on the nature, scope, adequacy and limitations of methods of investigation and evaluation. Specific traditions will be examined in an attempt to ascertain such things as their fundamental claims, what is presupposed by and what follows from such claims, the requirements for religious commitment, and the sanctions for their claims.

PHI 116 Ancient Philosophy **3 sh**
This course exams the major figures and problems of ancient Greek philosophers.

PHI 121 Modern Philosophy: Rationalists and Empiricists **3 sh**
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.

PHI 125 Philosophical Aspects of Death and Dying **3 sh**
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.

PHI 130 Oriental Philosophy **3 sh**
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.

PHI 136 Kant to Hegel **3 sh**
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.

PHI 140 Symbolic Logic **3 sh**
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.

PHI 150 History of Scientific Ideas **3 sh**
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.

PHI 170 Philosophy of Religion **3 sh**
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.

PHI 202 HON: Two Philosophers Worth Knowing Well **3 sh**
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.

PHI 210 Bioethics **3 sh**
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.

PHI 230 Philosophy of History **3 sh**
An examination of various philosophic theories which deal with the description and correlation of historical events.

PHI 240 Philosophy of the Social Sciences **3 sh**
An introduction to the scientific methods and techniques as they are applied to 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.

PHI 241 Philosophy of Mind **3 sh**
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.

PHI 245 Human Love and Sexual Morality **3 sh**
This course addresses the perennial philosophical questions of what love is and what it means, and how we should behave sexually. It surveys classical, modern and contemporary philosophical writings on these metaphysical and ethical issues. It has two contemporary themes: the historical development of major philosophical traditions concerning love and sexuality, and the pressing contemporary ethical issues concerning sexual behavior.

PHI 260 Philosophy of Art **3 sh**
An investigation into major problems of art from a definition of art to the relation between aesthetic judgment and knowledge in general.

PHI 265 Social and Political Philosophy **3 sh**
The 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.

PHI 280 American Philosophy **3 sh**
An examination of the development of philosophy in America from the Colonial period to the present, with special emphasis on pragmatism.

PHI 310 Theory of Knowledge **3 sh**
A study of the nature and sources of knowledge, including an investigation of theories of truth and meaning. Considers the construction of theories of knowledge based on sense perception down to modern theories based on the analysis of language. Such topics as faith, certainty, probability and skepticism will also be considered.

PHI 330 Philosophy of Science **3 sh**
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.

PHI 345 Metaphysics **3 sh**
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.

PHI 350, 351, 352, 353, 354 Selected Topics in Philosophy **3 sh**
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.

PHI 355 Existentialism and Phenomenology **3 sh**
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.

PHI 375 Philosophy of Language **3 sh**
A study of logical atomism, Viennese positivism and contemporary British and American analytic philosophy. This course is intended to give the student a historical perspective of this twentieth century philosophic trend as well as to bring him abreast of current discussion in various phases of analysis.

PHI 379 Independent Study **1 – 3 sh**
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.

PHI 380 Senior Seminar in Philosophy **3 sh**
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.

PHI 398 Honors Supplemental Research **1 – 3 sh**
See page 139.

PHI 470 Selected Topics in Philosophy **3 sh**
Topics in philosophy that deal with a specific problem, area or philosopher will be selected for advanced study in depth. The course may be repeated provided that it does not cover the same topic.

PHYSICAL EDUCATION

All Physical Education activity courses for General Education (Category I) are listed in the "Health, Physical Education and Dance" section with a new HPD prefix.

PED 003 – 004 Dance Repertory I & II **2 ch – 1 sh**
Dance Repertory gives serious dancers the opportunity to participate directly in all aspects of dance performance, including participation in Kutztown University's dance company, The Performing Dance Portmanteau (PDP). Students gain hands-on experience in all phases of the creative process, beginning with selection of thematic material, creating choreography, conducting and participating in dance rehearsals, and continuing through each stage of the production process culminating in public performance. Class members deal directly with members of the production team to develop creative strategies appropriate to performance themes, and experience a variety of performance styles and settings. PREREQUISITE: Acceptance into PDP via university-wide auditions in Spring and Fall semesters. Class size is limited to 25.

PED 101 Scientific Bases for Human Movement **3 sh**
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. This course should, if possible, be taken before other concentration courses.

PED 111 The American Woman in Sport **3 sh**
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.

PED 115 – 116 Dance Repertory III & IV **2 ch – 1 sh**
Dance Repertory gives serious dancers the opportunity to participate directly in all aspects of dance performance, including participation in Kutztown University's dance company, The Performing Dance Portmanteau (PDP). Students gain hands-on experience in all phases of the creative process, beginning with selection of thematic material, creating choreography, conducting and participating in dance rehearsals, and continuing through each stage of the production process culminating in public performance. Class members deal directly with members of the production team to develop creative strategies appropriate to performance themes, and experience a variety of performance styles and settings. PREREQUISITE: Acceptance into PDP via university-wide auditions in Spring and Fall semesters. Class size is limited to 25.

PED 121 Movement Education for Children **3 ch – 2 sh**
The varied issues and concepts of individual developmental movement are considered. Published curricula in movement are investigated and programs are developed. Practical application of developmental movement is acquired through laboratory experiences.

PED 145 Lifeguard Training **4 ch – 3 sh**
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. This course does not satisfy the physical education requirement.

PED 150 Methods, Techniques, and Problems of Athletic Coaching **3 sh**
This class will introduce students to the field of coaching. 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, National Federation Interscholastic Coaching Certifications may be earned by meeting course requirements and achieving an 80% on the American Sport Education Program Examinations.

PED 153 The Dances and Rhythms of Africa **3 sh**
This course will provide the student with an overview of the dance, ritual, and rhythms of Africa; specifically the Saharan and Northern Sahelian Zones, West Africa, Central and East Africa, and South Africa. The social, cultural, and historical implications of the dance and rhythms for each area and its contribution to the development of Dunham technique will also be explored. Exposure to rhythmic experiences and choreography of simple routines will be provided.

PED 160 Introduction to Sports Management **3 sh**
This course is designed to provide an introduction to the field of sports management. Additionally, it is intended to provide a theoretical foundation and experiential opportunities for development and refinement of basic "process" competencies necessary for successful planning and implementation of sport and recreational activities. Emphasis will be given to the basic operational competencies of successful event and venue operations.

PED 210 Physical Education Activities For Early Childhood **3 sh**
This course is designed to develop the knowledge and methodology required to safely teach young children (ages 4 - 8) the basics of movement skills and concepts. Motor development, social and societal expectations of the young child engaged in physical play and creative movement will be addressed as well as the practical application of instructing younger children using movement education. This course includes both a lecture and lab component that will utilize a variety of early children

sites (example: the Kutztown University Early Learning Center Nursery School and Kindergarten classes).

PED 211 Physical Education Activities for Children in the Intermediate/Middle Elementary Grades 3 sh
This course is designed to develop the knowledge, skill and appreciation of individual, group and rhythmic activities and the value of those activities to the intellectual, social-emotional and physical growth of children in the intermediate/middle elementary school, grades 4-6. Students are expected to participate actively and to teach activities in conjunction with this course.

PED 214 – 215 Dance Repertory V & VI 2 ch – 1 sh
Dance Repertory gives serious dancers the opportunity to participate directly in all aspects of dance performance, including participation in Kutztown University's dance company, The Performing Dance Portmanteau (PDP). Students gain hands-on experience in all phases of the creative process, beginning with selection of thematic material, creating choreography, conducting and participating in dance rehearsals, and continuing through each stage of the production process culminating in public performance. Class members deal directly with members of the production team to develop creative strategies appropriate to performance themes, and experience a variety of performance styles and settings. PREREQUISITE: Acceptance into PDP via university-wide auditions in Spring and Fall semesters. Class size is limited to 25.

PED 216 Exercise Physiology 3 sh
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: 3 credits of Biology and PED 101 or permission of the instructor.

PED 217 Adapted Physical Education and Health Issues for Elementary School Children with Disabilities 3 sh
Adapted Physical Education and Health Issues for Elementary School Children is a specialized program of developmental activities, games, sports, rhythms and health issues of exceptional children. This methods of teaching course is focused on the interests, specific abilities and challenges of students with disabilities who may not safely or successfully engage in un-restricted participation in the vigorous activities of the general physical education program. The unique health concerns, health issues and modifications of activities for specific disabilities are emphasized. The value of the adapted physical education program as it relates to the total education process is identified.

PED 219 Psychosocial Foundations of Athletic Coaching 3 sh
This course is designed to introduce students to the sociological and psychological aspects of sport. Students will examine the sport experience as it relates to the individual, as well as relationships between sport and the family, education, politics, the economy, religion and the media. A special emphasis will be placed upon research findings related to youth sport with implications drawn for the delivery of youth sport experiences.

PED 226 History of Sport 3 sh
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.

PED 231 Adapted Physical Education 3 sh
Adapted Physical Education is a diversified program of development activities, games, sports, and rhythms. This course is directed toward identification and solution of psychomotor problems. Suited to the interests, capacities, and specific abilities of students with disabilities who may not safely or successfully engage in unrestricted participation in the vigorous activities of the general physical education program. The value of the adapted program as it relates to the total education process is identified. Discussion of the varied conditions, modifications of activities and program development for specific disabilities will be emphasized. Assessment of present programs are reviewed and consideration is given to the future directions of Adapted Physical Education.

PED 245 Water Safety Instructor 3 ch – 2 sh
Water Safety Instructor is designed to train instructor candidates to teach the American Red Cross Water Safety courses. Students will plan and organize courses and practice teach swimming progressive skills. The American Red Cross's Water Safety instructor certification will be awarded to students who successfully complete the course requirements. PREREQUISITE: Current certificate for the American Red Cross Emergency Water Safety Course or the American Red Cross Lifeguard Training Course. This course may not be used to satisfy the requirements for the HPD activity courses.

PED 266 Personal Fitness Trainer 3 sh
This course is intended to prepare the prospective student with knowledge and skills basic to several personal fitness trainer certification programs. A student who successfully completes this training and obtains certification 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. The academic requirements of the course will provide the student with an experiential introduction to the field of personal training. Areas of educational development will include basic human anatomy, physiology, risk management, legal liability and fitness program evaluation. This course will provide an introduction to the business of personal training and is designed to create an awareness of basic anatomy and physiology, potential legal obligations, legal liabilities, emergency preparation, client concerns, and safe and effective individualized program development.

PED 280 Event and Facility Management 3 sh
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. PREREQUISITE: PED 160 or permission of instructor.

PED 301 Current Issues in Elementary School Physical Education 3 sh
This course is designed to enhance the knowledge base and attitudes of elementary classroom teachers interested in teaching physical education topics and subject matter. While it is not intended to take the place of professional preparation as an elementary physical education specialist, it does cover all of the most recent research in elementary physical education. Students will be expected to read and analyze research articles, curriculum materials and excerpts from current written works to gain insights into the advances and unique concerns currently experienced in elementary physical education. PREREQUISITE: ELU 207.

PED 315 Prevention and Care of Athletic Injuries 3 sh
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. PREREQUISITE: HEA 020 or Current Standard First Aid certification (Red Cross).

PED 317 – 318 Dance Repertory VII & VIII 2 ch – 1 sh
Dance Repertory gives serious dancers the opportunity to participate directly in all aspects of dance performance, including participation in Kutztown University's dance company, The Performing Dance Portmanteau (PDP). Students gain hands-on experience in all phases of the creative process, beginning with selection of thematic material, creating choreography, conducting and participating in dance rehearsals, and continuing through each stage of the production process culminating in public performance. Class members deal directly with members of the production team to develop creative strategies appropriate to performance themes, and experience a variety of performance styles and settings. PREREQUISITE: Acceptance into PDP via university-wide auditions in Spring and Fall semesters. Class size is limited to 25.

PED 340 Internship — Sport Techniques and Skill Analysis 3 sh
This course is designed to provide students with a practical coaching field experience under the supervision of a school or community professional. Students will apply their knowledge and skills of coaching while working with a sport team for a minimum of sixty hours. An in-depth coaching research project which encompasses practical, theoretical and methodological principles and analyses of sport is required. PREREQUISITES: HEA 020 or HEA 105, PED 101 and PED 219 or permission of the instructor.

PED 350 Internship in Sports Management 6 – 12 ch, 6 – 12 sh
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. PREREQUISITES: HEA 105, PED 160, PED 280, or senior status.

PED 370 Selected Topics in Physical Education & Sports Studies 3 sh
This course provides students with an opportunity for in-depth study of topics of current interest in the fields of Sport and Physical Education. The format for the course will vary to best address the 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. PREREQUISITE: Any combination of four (4) three-credit PED courses with a course prefix number of 100 or higher and/or permission of the instructor.

PED 380 Independent Study in Physical Education 1 – 3 sh
Independent Study provides an opportunity for individuals to pursue scholarly activity in an area pertinent to the discipline of Physical Education not covered within a regularly offered undergraduate course in Physical Education. 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.

PHYSICS

PHY 020 Introduction to Physics 4 ch – 3 sh
PHY 021 Introduction to Physics Laboratory
An introduction to the principles of physics including mechanics, thermal energy, wave motion, electricity, magnetism, atomic theory and nuclear science. 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.

PHY 040 General Physics I 6 ch – 4 sh
PHY 041 General Physics Laboratory
A non-calculus, college level physics course. Topics covered include kinetics, Newton's Laws, energy, power, momentum, heat and sound. PREREQUISITE: a working knowledge of algebra. Does not meet the program requirements of physics, chemistry and math majors.

PHY 042 General Physics II 6 ch – 4 sh
PHY 043 General Physics II Laboratory
This course is a continuation of Physics 040 with an introduction to light, magnetism, electricity, atomic and nuclear physics. PREREQUISITES: Physics 040 or its equivalent as approved by the Physical Science Department. Does not meet the requirements for chemistry, physics and math majors.

PHY 100 Physics I 6 ch – 4 sh
PHY 101 Physics I Laboratory
This is a calculus based introductory course in physics that will cover the area of mechanics, heat and sound. It is designed for students of science and pre-engineering. PREREQUISITES: successful completion or concurrent enrollment in Calculus (MAT 271).

PHY 102 Physics II 6 ch – 4 sh
PHY 103 Physics II Laboratory
This is a continuation of Physics 100-101. It will therefore be assumed that the student has taken Physics 100-101 or its equivalent. The areas to be covered include light, magnetism, electricity, electronics, and an introduction to atomic and nuclear physics. PREREQUISITES: PHY 100-101 or its equivalent.

PHY 110 Modern Physics 3 sh
This course provides a brief history of modern physics and the development of the Theory of Relativity and Quantum Physics. Topics include relativity, blackbody radiation, photoelectric effect, Compton effect, x-rays, wave-particle duality, old quantum theory, and the Bohr Model of atomic structure. PREREQUISITE: PHY 102.

PHY 210 Heat and Thermodynamics 3 sh
This course provides a study of the equations of state of a system and the fundamental laws and principles governing energy transformations and exchanges between a system and its near-surroundings and between one part of a system and another. Thermometry, heat thermodynamics and physical relations and applications are developed. PREREQUISITES: PHY 100, CHM 100, MAT 273 or 274.

PHY 220 Electronics 5 ch – 3 sh
PHY 221 Electronics Laboratory
This course covers DC and AC circuit theory, the characteristics and theory of solid state electronic control elements and the applications of these elements leading to the design and analysis of amplifiers. Extensive laboratory work is involved. PREREQUISITES: PHY 042-043 or PHY 102-103.

PHY 230 Optics **5 ch – 3 sh**
PHY 231 Optics Laboratory
This course provides a thorough study in the fundamental aspects of geometrical, physical and quantum optics. Some topics studied are plane and spherical surfaces, thin and thick lenses, spherical mirrors, lens aberrations and optical instruments. Further study in physical optics comprises phenomena bearing on the nature of light. Topics included in this phase are interference, Fraunhofer diffraction, the diffraction grating, the velocity of light, absorption and scattering, the polarization of light. PREREQUISITE: PHY 100-101, PHY 102-103; MAT 273 or 274.

PHY 290 Introduction to Nanotechnology **3 sh**
Nanotechnology deals with the various structures of matter, both man-made and natural, having dimensions of the order of a billionth of a meter or less. During the course, students will become familiar with the basic concepts and ideas that are used in this field of science. The course covers an overview of the various material and properties of nanotechnological materials, various instruments and measuring techniques, studies of various nanoparticles and nanostructures that are commonly used in the field. PREREQUISITES: PHY 100 and 102, or PHY 040 and 042 or permission by instructor.

PHY 312 Mechanics **4 sh**
This course offers a comprehensive study of the statics, kinematics and dynamics of particles and rigid bodies. Theories relating to potential and motion in force fields are developed and the topics of Lagrangian and Hamiltonian mechanics are introduced. PREREQUISITES: PHY 100, PHY 102, MAT 273 or 274.

PHY 315 Advanced Physics Laboratory I **4 ch – 2 sh**
This is an advanced level undergraduate laboratory physics course in Mechanics and Heat and Thermodynamics. The experiments are closely related to the subject matter in the two theoretical physics courses; i.e., PHY 312 Mechanics, and Heat and PHY 210 Thermodynamics. Extensive use of microcomputers is used to analyze collected data and some laboratory exercises are computer simulated. PREREQUISITE: PHY 210, PHY 312 and one semester of a CIS course above the 100 level or permission of the instructor.

PHY 316 Electricity and Magnetism **3 sh**
This course studies the fundamental principles of electricity and magnetism, and the extension of these principles to Maxwell's Equations. Topics include vector analysis, electrostatics, magnetostatics, time-varying fields and electromagnetic wave propagation through space. PREREQUISITES: PHY 100, PHY 102 and MAT 273 or 274.

PHY 319 Advanced Physics Laboratory II **4 ch – 2 sh**
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. PREREQUISITE: PHY 100, PHY 316 and one semester of a CIS course above the 100 level or permission of the instructor.

PHY 345 Mathematical Physics **3 sh**
This course will be used to do an in depth study of problem solving and modeling as it applies to various physical situations in nature. During this course, students will become familiar with several different equations and techniques used to analyze various physical systems. They will become comfortable with the language and the tools necessary to study and model such problems. This course will be a first step in making students familiar with the concepts and ideas that they will see in the upper level courses that follow, such as Lagrange's equation used in mechanics or Laplace's equation used in electromagnetism and thermodynamics. PREREQUISITES: MAT 171, 172, 273, PHY 100, 102, 110.

PHY 360 Quantum Mechanics **3 sh**
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. PREREQUISITE: PHY 100 and PHY 312.

PHY 362 Solid State Physics **3 sh**
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. PREREQUISITE: PHY 360.

PHY 364 Nuclear Physics **3 sh**
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. PREREQUISITE: PHY 360.

PHY 370 Research in Physics **1 – 4 sh**
This is a laboratory course which will involve individual research on a specialized problem in the physical sciences under the direction of a faculty member. It is expected that the results of such work may be published. PREREQUISITES: Consent of the staff members and their approval of the project. Clock hours as required.

PHY 372 - 375 Selected Topics in Physics **1 – 3 sh**
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. PREREQUISITES: PHY 100, 102, 110, MAT 271, 272, and 273.

PHY 380 Senior Seminar in Physics **2 sh**
This course consists of readings and discussions in the area of the individual student's interest in physics. Required of all Liberal Arts students concentrating in physics.

PHY 390 Internship in Physics **1 – 4 sh**
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. PREREQUISITE: Junior and Senior standing and approval of department head.

PHY 398 Honors Supplementary Research **1 – 3 sh**
See page 139.

PHY 465 Selected Topics: Advanced Physics Laboratory II **4 ch – 2 sh**
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 PHY 319. A student may not enroll in this course if she/he has successfully completed PHY 319. PREREQUISITE: PHY 110, PHY 316.

PHY 470 Selected Topics: Quantum Mechanics **3 sh**
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 PHY 360. A student may not enroll in this course if she/he has successfully completed PHY 360. PREREQUISITES: PHY 312.

PHY 472 Selected Topics: Solid State Physics **3 sh**
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, super-conductivity, magnetic properties, and crystal defects. This course will cover topics at a more in-depth level than PHY 362. A student may not enroll in this course if she/he has successfully completed PHY 362. PREREQUISITE: PHY 360 or PHY 470.

PHY 474 Selected Topics: Nuclear Physics **3 sh**
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 PHY 364. A student may not enroll in this course if she/he has successfully completed PHY 364. PREREQUISITE: PHY 360 or PHY 470.

POLITICAL SCIENCE

POL 010 American Government **3 sh**
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.

POL 020 International Relations **3 sh**
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.

POL 030 Introduction to Comparative Politics **3 sh**
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.

POL 050 State and Local Government **3 sh**
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.

POL 121 Introduction to Political Theory **3 sh**
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.

POL 131 The Politics of Latin America **3 sh**
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.

POL/SOC 150 Law and Society **3 sh**
A 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.

POL/CRJ 181 Criminal Law **3 sh**
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.

POL/CRJ 182 Criminal Procedures **3 sh**
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.

POL/PSY/SOC 200 Statistics for the Social and Behavioral Sciences **3 sh**
This course considers the application of statistical procedures for the purposes of description and inference in the social sciences. Such topics as measures of central tendency variability, correlation, prediction and the normal curve are considered. Inferential techniques such as tests, analyses of variances, trend analysis, and multiple comparisons are also considered. PREREQUISITE: PSY 011 and MAT 017 or its equivalent.

POL 215 Public Administration **3 sh**
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.

POL 220 Public Opinion and Propaganda **3 sh**
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.

POL 223 Modern Western Political Theory **3 sh**
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.

POL 225 Planning and Decision-Making Theory **3 sh**
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.

POL 226 Empirical Political Analysis **3 sh**
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. PREREQUISITE: Six (6) hours of Political Science.

POL 230 American Political Parties **3 sh**
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.

POL 240 American Foreign Policy **3 sh**
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.

POL 250 International Law and Organization **3 sh**
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.

POL 253 Politics of the Middle East **3 sh**
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.

POL 255 Global Issues in International Relations: Arms, Economy and Environment **3 sh**
This course will focus on three issues that are very important in the contemporary international system. The issues are the global economy, global environmental problems, and arms control. Each of these issues is a matter of global concern in that they all have impacts and aspects that can affect all nations and their populations.

POL 258 The Administration of U.S. Environmental Law **3 sh**
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 prerequisites, although it is preferred Introduction to ENV 100 Environmental Science or POL 010 American Government be taken first.

POL/CRJ 260 The Judicial Processes **3 sh**
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.

POL 305 Western European Governments **3 sh**
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.

POL 311 Constitutional Law I: Institutions and Functions **3 sh**
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.

POL/CRJ 312 Constitutional Law II: Civil Liberties **3 sh**
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.

POL 316 Law and Sex-Based Discrimination **3 sh**
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.

POL 320 The American Presidency **3 sh**
A study of the development, dynamics, politics, and impact of the American Presidency.

POL 323 American Political Thought **3 sh**
A critical examination of the essence and development of the American political culture. Contemporary trends in American political thought will be considered.

POL 325 The American Legislative Process: National and State **3 sh**
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.

POL 340 Municipal Government **3 sh**
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.

POL 346 Public Budgeting and Fiscal Management **3 sh**
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.

POL 347 Human Resource Management in the Public Sector **3 sh**
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 manage-

ment 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 constitutional, legal and political constraints and requirements which are unique to public sector management.

POL 360 Russia and the Commonwealth of Independent States **3 sh**
A critical analysis of the basis, development, structure, and political dynamics of Russia and the Commonwealth of Independent States. Emphasis will be on the reasons for the disintegration of the Soviet Union, politics and emerging political structures, and new Russian roles in European and international politics.

POL 361 Russian Foreign Policy **3 sh**
A survey and analysis of the policy motivation of an important nation — state actor as it continues its difficult adjustments following the demise of the former Soviet Union. Special emphasis is devoted to its evolving relationships with its neighbors, including Ukraine, Kazakstan, Belarus, the Baltic states, as well as Eastern and Western Europe, China, Japan and the U.S. Topics covered include arms control/disarmament, Russia's interests in the Middle East, its approach to the United Nations, and involvement in international economic organizations. No prerequisites, although it is preferred International Relations (POL 020) be taken first.

POL 370 Independent Study in Political Science **3 sh**
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. PREREQUISITE: Twelve hours in political science with a Q.P.A. of at least 3.0 in political science, and approval of the faculty member and the departmental chairperson.

POL 371 Selected Topics in Political Science **3 sh**
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.

POL 380 Senior Seminar in Political Science **3 sh**
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.

POL 381 Senior Seminar in Public Administration **3 sh**
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. PREREQUISITE: Senior standing, Public Administration major.

POL 390 Federal, State, and/or Local Government Internship **12 sh**
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.

POL 398 Honors Supplementary Research **1 – 3 sh**
See page 139.

POL 425 Public Policy Making **3 sh**
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: Undergraduate — POL 010 American Government.

POL 435 Technology and Contemporary Politics and Society **3 sh**
An examination of the impact of technology on contemporary politics and political and social structures. Attention is focused on the computer revolution in information processing and on techniques of genetic manipulation. The course also includes discussion of public policy issues related to these technologies and questions of technology assessment and control. Permission of instructor for undergraduate credit.

POL 465 Administrative Law **3 sh**
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.

PSYCHOLOGY

PSY 011 General Psychology **3 sh**
An introduction to the psychological bases of behavior in motivation, learning, memory, development, personality, perception, abnormal behavior, psychotherapy, attitude change, and group behavior.

PSY 110 Child Psychology **3 sh**
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. PREREQUISITE: PSY 011. May not be taken for credit if a student has already taken PSY 120 and PSY 125.

PSY 120 Adolescent Psychology **3 sh**
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. PREREQUISITE: PSY 011. May not be taken for credit if a student has already taken PSY 110 and PSY 125.

PSY 125 Life Span Development **3 sh**
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. PREREQUISITE: PSY 011. May not be taken for credit if a student has already taken PSY 110 and PSY 120.

PSY 140 Educational Psychology **3 sh**
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. PREREQUISITE: PSY 011.

PSY 160 Human Exceptionalities **3 sh**
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. PREREQUISITE: PSY 011.

PSY/SOC/POL 200 Statistics for the Social and Behavioral Sciences **3 sh**
This course considers the application of statistical procedures for the purposes of description and inference in the Social Sciences. Such topics as measures of central tendency variability, correlation, prediction and the normal curve are considered. Inferential techniques such as analyses of variances, t-tests, and multiple comparisons are also considered. PREREQUISITE: PSY 011 & MAT 017 or its equivalent.

PSY 202 Psychology of Personality **3 sh**
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. PREREQUISITE: PSY 011.

PSY 215 Psychology of Prejudice **3 sh**
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. PREREQUISITE: PSY 011.

PSY 217 Psychology and the Law **3 sh**
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. PREREQUISITE: PSY 011.

PSY 220 Industrial/Organizational Psychology **3 sh**
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. PREREQUISITE: PSY 011.

PSY 240 Social Psychology **3 sh**
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. PREREQUISITE: PSY 011.

PSY 245 Conflict and Conflict Resolution **3 sh**
This course will primarily focus on the critical issues in interpersonal, intragroup, and intergroup conflict. The course will present a balanced and integrated overview of theory and research on the psychological underpinnings of conflict, the roots of conflict in schools and organizations, and the social, cultural, and ethnic causes of international conflict. The dynamics and complex nature of conflict resolution will also be addressed. This course will be of particular relevance to students interested in organizational behavior, social psychology, issues of diversity, and international affairs. PREREQUISITE: PSY 011.

PSY 250 Abnormal Psychology **3 sh**
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. PREREQUISITE: PSY 011.

PSY 255 Environmental Psychology **3 sh**
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. PREREQUISITE: PSY 011.

PSY 260 Psychology of Human Communication **3 sh**
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. PREREQUISITE: PSY 011.

PSY 265 Human Sexual Behavior **3 sh**
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. PREREQUISITE: Permission of instructor.

PSY 270 Experimental Psychology **3 sh**
This course is designed to acquaint the student with experimental procedures in psychology. Experience is gained in the structuring, conducting, and interpretation of simple psychological experiments. The collecting of data, analyzing the data, and the writing of the research reports are stressed. PREREQUISITES: PSY 011 and PSY 200 or permission of the instructor.

PSY 280, 281, 282, 283, 284, 285, 286, 287, 288, 289 Selected Topics in Psychology **3 sh**
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. PREREQUISITE: PSY 011.

PSY/ANT 290 Culture and Personality **3 sh**
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. PREREQUISITES: Either ANT 010 or PSY 011.

PSY 305 Practicum in Psychology **3 – 9 ch, 1 – 3 sh**
This is a supervised practicum in an approved research or applied setting that may be on or off-campus. Experiences might include, but are not limited to, working as a research assistant in a laboratory or other facility, volunteer work for a service organization or government agency, or work with a school district. This practicum is not designed for activities related to the provision of clinical/counseling or I/O services to agencies and businesses. Early in the semester prior to the practicum, the student, with the help of the faculty supervisor, must contact the site and develop a proposal outlining the work location and the anticipated practicum activities. The proposal must be approved before the student can register for the course. PREREQUISITES: PSY 011, junior or senior standing, 12 or more credits of PSY, QPA of 2.5 or permission of instructor, approval of the Department Chair and the Dean of the College of Liberal Arts and Sciences. Course may be repeated for credit, up to a maximum of 6 credits.

PSY 310 Principles of Psychological Measurement **3 sh**
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 practical clinical, industrial, educational, and research situations. PREREQUISITE: PSY 200.

PSY 311 Psychology of Learning, Motivation and Emotion 3 sh
A study of the basic processes in the areas of learning, motivation, and emotion as viewed through the major theoretical systems and empirical research. PREREQUISITE: PSY 011.

PSY 312 Sensation and Perception 3 sh
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. PREREQUISITE: PSY 011.

PSY 325 Physiological Psychology 3 sh
This course is designed to explore the relationships 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 psycho-pathology. Normal as well as abnormal functions are examined. PREREQUISITE: PSY 011.

PSY 331 Health Psychology: Biopsychosocial Factors in Health and Illness 3 sh
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. PREREQUISITE: PSY 011.

PSY 333 The Psychology of Leadership in Organizations 3 sh
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: PSY 011 or permission of instructor.

PSY 340 Cognitive Psychology 3 sh
This course is a study of mental activities and the mind. Topics include human learning, memory, imagery, reasoning, concept formation, problem-solving, and creativity. PREREQUISITES: PSY 011, PSY 200.

PSY 350 Personnel Psychology 3 sh
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 subfield within the broader applied discipline of industrial and organizational psychology. Personnel psychology overlaps with human resources management (HRM). Topic areas examined in this course include applied psychometrics, job analysis and criteria development, testing, personnel selection, performance management systems, training and develop, and HRM. This course will be particularly relevant for students seeking employment in the human resources or general business fields following graduation or for those pursuing an advanced degree in industrial/organizational psychology, human resource management, organization development, or organizational behavior. PREREQUISITE: PSY 011.

PSY 355 Organization Development and Change 3 sh
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. The course will be structured around lectures, group discussions, case studies, and the instructor's own experience consulting to organizations. This course will be particularly relevant for students seeking employment in the human resources or general business fields following graduation or for those pursuing an advanced degree in industrial/organizational psychology, human resource management, organization development, or organizational behavior. PREREQUISITE: PSY 011.

PSY 360 Introduction to Clinical Psychology 3 sh
This course is designed to acquaint the student with the field of clinical psychology, its professional problems, the treatment methods used, and the identification of areas in which clinical psychologists apply techniques for helping others. Students will be given rudimentary background knowledge in testing techniques, interviewing, and psychotherapy. PREREQUISITES: PSY 011 and PSY 250 or permission of the instructor.

PSY 362 Internship in Industrial/Organizational Psychology 8 – 16 ch, 3 – 6 sh
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. This experience will provide not only career focus but also increased self-confidence and maturity. PREREQUISITES: PSY 011 and PSY 220.

PSY 363 Clinical Internship: Fieldwork 16 ch – 3 sh
One semester supervised internship at agencies and organizations offering clinical/counseling services. Students spend 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. The course must be taken concurrently with PSY 364 Clinical Internship: Seminar or with permission from the instructor. PREREQUISITES: PSY 250 and PSY 360.

PSY 364 Clinical Internship: Seminar 3 sh
This course is designed to supplement the clinical internship fieldwork. The students will have the opportunity to discuss issues relevant to their internship experience and to present cases. The course must be taken concurrently with PSY 363 Clinical Internship: Fieldwork or with permission from the instructor. PREREQUISITES: PSY 250 and PSY 360.

PSY 370 Selected Research Topics in Psychology 1, 2, or 3 sh
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: PSY 011, PSY 200 and PSY 270. May be repeated for credit.

PSY 375 Psychotherapy: Theory, Research and Practice 3 sh
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. PREREQUISITE: PSY 202 or PSY 250 or permission of the instructor.

PSY 379 History and Systems of Psychology 3 sh
An historical introduction to the various points of view in contemporary theories of behavior. PREREQUISITE: PSY 011.

PSY 380 Senior Seminar in Psychology **3 sh**
Readings and discussions centered about the significant issues within the discipline. This course should be taken during the school year of expected graduation. Required of Psychology majors.

PSY 398 Honors Supplementary Research **1 - 3 sh**
See page 139.

PSY 429 Behavior Modification **3 sh**
A survey of procedures used for behavior modification and behavior therapy. Practical application of these procedures to various populations will be stressed. PREREQUISITE: Permission of instructor required.

PSY 432 Human Neuropsychology **3 sh**
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 fore-brain commissurotomy and (3) the neuropsychological investigation of subjects without neurological impairment. Relevant experimental literature concerned with animals other than humans will also be considered. PREREQUISITE: PSY 011 or permission of instructor.

RELATED ARTS

RAR 015 Encounters with the Visual and Performing Arts **3 sh**
This interdisciplinary course is designed to provide the student with 1) an understanding of general principles which can be applied to various arts, 2) basic viewer/audience member skills and attitudes, 3) an appreciation of both the relatedness and distinctiveness of the various visual and performing arts, and 4) some basic concepts in art, music, theatre, and dance. Required attendance at specified arts events provides shared experience upon which some lectures and discussions are based. A field trip to New York or Philadelphia may be required. The course may be used in Humanities b, d, General Education V, as well as in Free Electives.

RAR 105 Aesthetic Experience in the Arts **3 sh**
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.

RAR 200 Visual Culture: Critical Theory **3 sh**
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.

RAR 300 Visual Culture: Critical Practice **3 sh**
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.

RAR 342 Criticism in Art **3 sh**
This course is an advanced criticism course based on the fundamental principles introduced in RAR 105 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.

RAR 375 Selected Topics in Related Arts **1 – 3 sh**
This course will provide opportunities for students to focus upon examples, theoretical concepts, and issues associated with a particular area in which the arts intersect. Activities will include extensive readings, attendance at arts events, critical evaluations, presentations, and preparation of papers on selected research and theory relating to issues in the interrelationships among the arts. The course may be repeated more than once, to a maximum of 6 credits, providing that the same topic is not repeated.

RAR 380 Related Arts Seminar **3 sh**
Students with Senior standing will examine the interrelationships between the visual arts, music, literature, writing, theatre, and dance in preparation for individually developed projects.

RAR 381 Related Arts Workshop **3 sh**
Through appropriate research the Senior Related Arts student will integrate two or more of the fine arts in the development of an individual presentation. PREREQUISITES: RAR 105 and RAR 380.

SECONDARY EDUCATION

SEU 210 Secondary School Curriculum **3 sh**
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.

SEU 310 Problems of Secondary Education **3 sh**
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.

SEU 320 Appraisal and Evaluation in Secondary Education **3 sh**
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.

Methods of Teaching Secondary School Subjects **4 ch – 3 sh each**
SEU 321 Communication
SEU 322 Foreign Languages
SEU 323 Mathematics
SEU 324 Science
SEU 325 Social Studies

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."

SEU 340 Teaching Reading in Secondary School Academic Subjects 3 sh
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.

SEU 380 Independent Study in Secondary Education 1 – 3 sh
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.

SEU 390 Student Teaching and Practicum I — (Secondary) 6 sh
SEU 391 Student Teaching and Practicum II — (Secondary) 6 sh
Both SEU 390 & SEU 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.

SEU 410 Science Instructional Methods for Middle and High School 3 sh
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 State 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.

SOCIAL WORK

SWK 100 Introduction to Social Work and Social Welfare 3 sh
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. PREREQUISITE: None.

SWK 130 Poverty and Social Welfare 3 sh
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. PREREQUISITE: None.

SWK 160 Human Behavior and Social Environment 3 sh
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: SWK 100, SWK 130, ANT 010, ENG 023, PHI 015, PSY 011, PSY 125, SOC 010, BIO 010, BIO 140 or by permission of the instructor.

SWK 200 The Professional Context of Social Work Practice 3 sh
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 SWK 250. PREREQUISITES: Students must complete SWK 160, and its' prerequisites, or take it concurrently with SWK 160, only with permission of the instructor.

SWK 250 Social Work With Individuals: Practice I 3 sh
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 SWK 265. PREREQUISITE: SWK 200.

SWK 255 Social Welfare Policy 3 sh
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: SWK 100, SWK 130, POL 010 and or permission of instructor.

SWK 265 Social Work Practice With Groups and Families: Practice II 3 sh
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 discus-

sions, 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. PREREQUISITE: SWK 250.

SWK 280 Social Work Practice With Communities and Organizations: Practice III 3 sh

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 SWK 381 and SWK 382. PREREQUISITE: SWK 250.

SWK 285 Essential Skills for Helping People 3 sh

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 SWK 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. PREREQUISITE: SWK 200 and its prerequisites of permission of the instructor.

SWK/SOC 290 Social Gerontology and Social Welfare 3 sh

This course analyzes the process of aging from a sociological perspective and studying the resources that our society provides for the aging population through social welfare measures. There is a double emphasis: one placed upon various social problems confronting older people 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. PREREQUISITE: SOC 010 or SWK 100. Prerequisite for Social Work majors: SWK 250.

SWK/NUR 320 Case Management — an Interdisciplinary Approach 3 sh

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. PREREQUISITES: SWK 250 or NUR 299 and NUR 312 or by permission of the instructor.

SWK 328 Child Welfare and Social Work Practice 3 sh

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: SWK 250 or by permission of the instructor.

SWK 360 Methods and Practice of Social Work Research 3 sh

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 SWK 382 or with permission of the instructor. PREREQUISITES: PSY/POL/SOC 200 or MAT 140, or with permission of instructor.

SWK 370 - 378 Selected Topics in Social Work and Social Welfare 3 sh

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. PREREQUISITE: SWK 250.

SWK 379 Independent Study 1 – 3 sh

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.

SWK 381 Field Instruction in Social Work I 3 sh

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 SWK 383. Must be taken concurrently with SWK 382. Offered in fall only. PREREQUISITES: SWK 250 and its prerequisites.

SWK 382 Professional Seminar in Social Work I 3 sh

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 val-

ues, 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 SWK 384. Must be taken with SWK 381. Offered in Spring only. PREREQUISITE: SWK 280 and its prerequisites.

SWK 383 Field Instruction in Social Work II **3 sh**
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 SWK 384. Offered in Spring only. PREREQUISITES: SWK 381 and SWK 382 and their prerequisites.

SWK 384 Professional Seminar in Social Work II **3 sh**
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 SWK 383. Offered in Spring only. PREREQUISITES: SWK 381 and SWK 382.

SWK 398 Honors Supplementary Research **1 – 3 sh**
See page 139.

SWK 400 Foundations in Human Behavior in the Social Environment **3 sh**
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.

SWK 450 Foundations in Social Work Practice with Individuals **3 sh**
Students will learn a problem-solving 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 contemporary practice. Students will be expected to participate in a laboratory experience involving a helping relationship project. Knowledge and skills relevant to practice with populations at risk including women, people of color, people who are gay and lesbian, and people who are economically impoverished will be emphasized. Issues of oppression, diversity, social justice, values, and ethics will be integrated throughout the course. This course is required of all Master's of Social Work students.

SWK 455 Foundations of Social Welfare Policies **3 sh**
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.

SWK 460 Foundations of Social Work Research Methods **3 sh**
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.

SWK 465 Foundations of Social Work Practice with Groups and Families **3 sh**
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.

SWK 480 Foundations of Social Work Practice with Organizations and Communities **3 sh**
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.

SWK 481 Foundation Internship I **4 sh**

This internship is the first of two foundation-level, graduate 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 foundational 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, as is development of professional identity. A grade of "C" or better is required in this course to enter SWK 483, Foundation Internship II. Must be taken concurrently with SWK 482, Integrated Professional Generalist Social Work Practice Seminar I. PREREQUISITES: SWK 400, SWK 450, SWK 460 (or can be taken concurrently).

SWK 482 Integrated Generalist Social Work Practice Seminar I **3 sh**

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 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 SWK 481.

SWK 483 Foundation Internship II **4 sh**

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. Must be taken concurrently with SWK 484, Integrated Social Work Practice Seminar II. PREREQUISITES: SWK 481 and SWK 482.

SWK 484 Integrated Generalist Social Work Practice Seminar II **3 sh**

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 SWK 483.

SWK 491 Internship for Advanced Standing I **3 sh**

This internship is the first of two graduate semesters (total 480 hours) of field instruction in social welfare agency settings which are offered to students entering the graduate social work program under advanced standing status under the supervision of a professional social worker prior to their advanced-year studies. Students re-visit and apply foundation knowledge, skills, values, and ethics of professional generalist practice. Trough 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 review the unique values, functions and roles of professional social work practice and further 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, as is development of professional identity. Must be taken concurrently with SWK 492.

SWK 492 Generalist Social Work Practice for Advanced Standing I **3 sh**

This seminar, the first of two for incoming MSW students with advanced standing status, begins an effective bridge to align the beginning generalist practice expected of graduate-level students and the advanced level family□in□environment content. The following concepts will be 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 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 SWK 491.

SWK 493 Internship for Advanced Standing II **3 sh**

This is the second semester of field instruction (a total of 480 hours) in social welfare agency settings for students with advanced standing status, which is required under the supervision of a professional social worker prior to advanced-year studies. 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. Must be taken concurrently with SWK 494, Advanced Generalist Social Work Theory and Practice II. PREREQUISITES: SWK 491 and SWK 492.

SWK 494 Generalist Social Work Practice for Advanced Standing II **3 sh**

This seminar, the second of two for incoming MSW students with advanced standing status, continues to align the beginning generalist practice expected of 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 SWK 493.

SOCIOLOGY

SOC 010 Principles of Sociology **3 sh**

The concepts, theories and methods that form the core of the sociological perspective on human behavior. This course is a prerequisite for all other SOC courses.

SOC 110 Contemporary Social Problems **3 sh**

Current problems of urbanization, personal pathology, family interaction, poverty and race are viewed within the context of social theory. PREREQUISITE: SOC 010 or permission of the instructor.

SOC 120 Marriage and the Family **3 sh**

An intensive analysis of contemporary marriage and family patterns and interactive processes in the United States viewed from historical and cross-cultural perspectives.

SOC 122 Intimate Relationships **3 sh**

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.

SOC 128 Domestic Conflict and Violence in Cross-Societal Perspective **3 sh**

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.

SOC/ANT 130 Marriage and the Family in Cross-Cultural Perspective **3 sh**

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? PREREQUISITE: SOC 010 or ANT 010.

SOC 140 Racial and Ethnic Minorities **3 sh**

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.

SOC/POL 150 Law and Society **3 sh**

A 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.

SOC 180 Sociology of Leisure **3 sh**

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.

SOC 185 Society and Technology **3 sh**

The course examines the relationship between society and technology. Issues that will receive special attention include technology and the use of leisure time, gender, race, class and technology, cyber communication, and the rise of "digital democracy." The focus will be on the United States of America.

SOC/PSY/POL 200 Statistics for Social and Behavioral Sciences **3 sh**

This course considers the application of statistical procedures for the purposes of description and inference in the social sciences. Such topics as measures of central tendency variability, correlation, prediction and the normal curve are considered. Inferential techniques such as analyses of variances, trend analysis, and multiple comparisons are also considered. PREREQUISITE: PSY 011 and MAT 017 or its equivalent.

SOC 205 The Sociology of Sport **3 sh**

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.

SOC 210 Religion and Contemporary Society **3 sh**

The structure and function of religion as a sociological phenomenon with emphasis on the institutionalization process and types of denominational organization.

SOC/CRJ 220 Juvenile Delinquency **3 sh**

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 of social agencies, and trends in delinquency.

SOC 230 Urban Sociology **3 sh**

Analysis of contemporary urban society in the United States with emphasis on patterns of city growth, social ecology and urbanism as a way of life.

SOC 235 Sociology of Sex Roles **3 sh**

The course will deal with the implication of sociological perspective on sex role differences in contemporary society. More specifically, discussion will be focused on such aspects of the topic as sexual inequality as an aspect of social stratification, origins of sex roles, sex role socialization, sex roles and social policy, sex roles and personal relationships, and the future of the sex roles.

SOC 240 Population Problems **3 sh**

An exploration of the causes and consequences of population pressures with special attention to the impact of population growth on resources and environment.

SOC 245 Sociology of Deviance **3 sh**
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. PREREQUISITE: SOC 010.

SOC/ANT 246 Third World Development **3 sh**
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). PREREQUISITE: ANT 010 or SOC 010.

SOC/CRJ 250 Criminology **3 sh**
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.

SOC 255 Treatment of Offenders **3 sh**
A study of the major components of the criminal justice system involved in the treatment of offenders with accent upon innovative programs, experimental methods, and current treatment ideology.

SOC 260 Social Stratification **3 sh**
Theories of social class and mobility with a discussion of problems of measurement and differential levels of wealth, prestige and authority.

SOC 270 Complex Organizations **3 sh**
The study of modern man's interactions to and within large-scale organizations with emphasis on the characteristics and structure of bureaucracy.

SOC 271 White Collar Crime **3 sh**
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. PREREQUISITE: SOC 010 or permission of the instructor.

SOC 275 Social Foundations of Human Behavior **3 sh**
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. PREREQUISITE: 6 s.h. in Sociology or permission of the instructor. Open to juniors and seniors only.

SOC 280 Collective Behavior **3 sh**
This course is a comparative analysis of the major contemporary forms of behavior which are relatively unstructured and not institutionalized. Major emphasis will be placed upon the causes, mechanisms, and processed by which collective actions unfold, and the consequences of such actions. Special attention will be devoted to the theoretical perspectives in collective behavior, as well as riots, disasters, and social movements.

SOC/SWK 290 Social Gerontology and Social Welfare **3 sh**
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. PREREQUISITE: SOC 010 or SWK 100. Prerequisite for Social Work majors: SWK 250.

SOC 310 Foundations of Sociological Theory **3 sh**
Consideration of the significant developments in sociological thought. Special emphasis will be placed on the contributions of Marx, Weber, Simmel, Pareto, and Durkheim.

SOC 350 Methods of Social Research **3 sh**
An introduction to sociological research covering research design, data collection, processing, and analysis, sampling, evaluation of research studies.

SOC 370-378 Selected Topics in Sociology **3 sh**
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.

SOC 379 Independent Study **1 – 3 sh**
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.

SOC 380 Senior Seminar in Sociology **3 sh**
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.

SOC 390 Internship in Sociology **6 sh**
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. PREREQUISITE: Junior or Senior status.

SOC 398 Honors Supplementary Research **1 – 3 sh**
See page 139.

SOC 450 The Sociology of Education: School and Modern Society **3 sh**
The educational system in the United States as viewed from a sociological perspective, focusing upon social forces that shape the schools and the internal social structure and processes which influence its mission in society.

SPANISH

SPA 011, SPA 012 Intensive Elementary Spanish (I & II) **6 sh**
This semester long course is the Beginning Spanish 011-012 sequence in intensive form for students with minimal or no experience in the language. Emphasis is on oral aspects of the language with substantial work on reading and writing skills and an introduction to Spanish culture. This intensive Spanish course is designed to be taken in one semester (five days a week, six hours of class per week) and requires considerable work and commitment on the part of the student.

SPA 011, SPA 012 Elementary Spanish (I & II) **3 sh each**
These two courses constitute the first year of Spanish language study. SPA 011 is designed as an introductory level course for students with no previous or minimal experience in the language. SPA 012 is the sequence to SPA 011 and is designed for students with one semester of college Spanish or one year of high school Spanish. Emphasis is on the oral aspects of the language with substantial work on reading and writing skills and an introduction to Hispanic culture.

SPA 013 Elementary Conversation in Spanish 1 sh
Intensive oral practice covering vocabulary and structures of survival situations. One hour of class. Open to students in SPA 011 and 012 or with permission of the instructor. May be repeated.

SPA 023 Intermediate Conversation in Spanish 1 sh
Intensive oral practice covering topics that prepare the student for foreign travel and the encounter of Hispanic people. One hour of class. Open to students in SPA 103 and 104 or with permission of the instructor. May be repeated.

SPA 103, SPA 104 Intensive Spanish (III & IV) 6 sh
This semester long course is the SPA 103-104 sequence in intensive form for students who have completed SPA 012 or at least 2 years of Spanish in high school. Students continue development of the basic skills of aural comprehension, speaking and writing. In addition, emphasis is place on independent readings. This intensive Spanish course is designed to be taken in one semester (five days a week, six hours of class per week) and requires considerable work and commitment on the part of the student.

SPA 103, SPA 104 Intermediate Spanish (III & IV) 3 sh each
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. Offered in two semesters of three hours each.

SPA 212 Spanish Composition 3 sh
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. PREREQUISITE: SPA 104 or equivalent.

SPA 213 Advanced Conversation in Spanish 3 sh
This course is designed for students who have successfully completed the intermediate level of Spanish (104 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. PREREQUISITE: SPA 104 or permission of instructor.

SPA 220 Applied Linguistics in Spanish 3 sh
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 principals of phonology, morphology, syntax, semantics, language acquisition, foreign language acquisition, foreign language methodology, sociolinguistics and neurolinguistics. (In Spanish.) PREREQUISITE: SPA 212 or permission of instructor.

SPA/ENG 247 Modern Latin American Literature in Translation 3 sh
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.

SPA 251 Survey of Spanish Literature in Translation I 3 sh
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).

SPA 252 Survey of Spanish Literature in Translation II 3 sh
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). NO PREREQUISITES.

SPA 290 Commercial Spanish 3 sh
Commercial Spanish 290 provides the students with practical and useful information regarding a variety of business communications used in the Spanish-speaking countries. The student will develop an understanding of how business people in the Hispanic world communicate with one another, and study the type of business communications commonly used by companies and institutions in Latin America, Spain and other Spanish-speaking areas. The emphasis is on acquiring the skills necessary to write correct, concise and clear messages, and on mastering the various approaches to effective written communications. (In Spanish.) PREREQUISITE: SPA 104 or permission of instructor.

SPA 301 Survey of Spanish Literature I 3 sh
The development of Spanish literature from its origins through the end of the eighteenth century. Representative readings of the major literary types. (In Spanish.) PREREQUISITE: SPA 212 or permission of instructor.

SPA 302 Survey of Spanish Literature II 3 sh
A survey of the literature of Spain of the nineteenth century to the present. Representative readings of varied literary types. (In Spanish.) PREREQUISITE: SPA 212 or permission of instructor.

SPA 311 Spanish American Literature to 1910 3 sh
SPA 311 will survey the development of Spanish American Literature from its origins to 1910. Representative readings of the major literary types. (In Spanish.) PREREQUISITE: SPA 212 or permission of instructor.

SPA 312 Spanish American Literature of the 20th Century 3 sh
SPA 312 is a continuation of SPA 311 and will survey the development of Spanish American Literature from 1910 to the present day. (In Spanish.) PREREQUISITE: SPA 212 or permission of instructor.

SPA 320 Contemporary Spanish Novel 3 sh
SPA 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.) PREREQUISITE: SPA 212 or permission of instructor.

SPA 325 Advanced Syntax and Stylistics 3 sh
This course is designed for those who have successfully completed SPA 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.) PREREQUISITE: SPA 212 or permission of instructor.

SPA 330 Contemporary Spanish Drama 3 sh
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. PREREQUISITE: SPA 212 or permission of instructor.

SPA 340 Spanish Culture and Civilization 3 sh
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.) PREREQUISITE: SPA 212 or permission of instructor.

SPA 341 Modern Spain 1898 - Present **3 sh**
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.) PREREQUISITE: SPA 212 or permission of instructor.

SPA 345 Latin American Culture and Civilization to the Nineteenth Century **3 sh**
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.) PREREQUISITE: SPA 212 or permission of instructor.

SPA 346 Latin American Culture and Civilization from the Nineteenth Century to the Present **3 sh**
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.) PREREQUISITE: SPA 212 or permission of instructor.

SPA 348 Mexican Culture and Civilization **3 sh**
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. PREREQUISITE: SPA 212 or permission of the instructor.

SPA 350 Spanish Drama of the Golden Age **3 sh**
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.) SPA 212 or permission of instructor.

SPA 355 Spanish Literature of the Golden Age **3 sh**
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.) PREREQUISITE: SPA 212 or permission of instructor.

SPA 358 Voices of Central America **3 sh**
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. PREREQUISITE: SPA 212.

SPA 360 Study Abroad Experience **1 – 6 sh**
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.

SPA 370 Selected Topics in Spanish **3 sh**
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.) PREREQUISITE: SPA 212 or permission of instructor.

SPA 380 Senior Seminar in Spanish **3 sh**
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. PREREQUISITE: To be taken in senior year and after student has completed 21 credits in advanced course work. (In Spanish.) B.S. Ed. students must take this course prior to Student Teaching.

SPA 390 International Internship in Spanish **1 – 9 sh**
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). PREREQUISITES: Spanish major and permission of Department chair and advisor, junior or senior status; 2.5 GPA in major or 2.0 GPA overall.

SPA 398 Honors Supplementary Research **1 – 3 sh**
See page 139.

400 level courses are for Graduate students; advanced undergraduates may take with instructor's permission.

SPA 413 Major Spanish American Novelists of the "New Narrative Period" **3 sh**
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)

SPA 414 Major Spanish American Short Story Writers of the "New Narrative Period" 3 sh
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)

SPA 415 Mexican Literature: Voices of a Nation 3 sh
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)

SPA 425 Advanced Spanish Grammar and Composition 3 sh
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)

SPA 431 Modern Spain through Literature and Film 3 sh
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)

SPA 435 Modern Latin American Drama 3 sh
An intensive study of representative theatre works by major Spanish American, Central American, Mexican and Caribbean dramaturgs 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)

SPA 447 Mexican Culture and Civilization 3 sh
This course is an intensive 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 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)

SPA 460 Hispanic Literature in the USA 3 sh
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)

SPA 461 Spanish for Urban Educators 3 sh
This course is designed to introduce to urban educators the language and the culture of the different groups that make up the Spanish-speaking community in Berks County. Students will learn the basics of the Spanish language, which will allow them to better communicate in Spanish with parents and students of Hispanic background. In addition to introducing the Spanish language, this course will include a selection of readings written by Hispanic authors dealing with the Hispanic experience in the USA. (In Spanish.)

SPA 470 Selected Topics in Spanish 3 sh
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.

SPA 495 Independent Study in Spanish 1 – 3 ch, 1 – 3 sh
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. PREREQUISITE: Graduate status or under-graduate students with a QPA of 2.50 or better based on a minimum of 12 s.h. above SPA 104, in their major field.

SPECIAL EDUCATION

SPU 040 Survey of Speech Problems 3 sh
A survey of speech and hearing disorders such as delayed language development, articulation disorders, voice problems, hearing loss and stuttering. Attention is given to the recognition of these difficulties, causal factors, and a knowledge of school and community facilities for aiding these individuals.

SPU 100 Introduction to Special Education 3 sh
This course, designed for prospective classroom teachers, surveys the development and provision of special education services to exceptional individuals classified as mentally/physically handicapped, sensory impaired, communication disordered, and gifted and talented.

SPU 110 Early Intervention for Students with Visual Impairments, including Deafblindness 3 sh
This course provides strategies for working with young children who have visual impairment, including students who are deafblind or have multiple disabilities and their families. It provides a history of the field of visual impairment and the impact history has played in the provision of early intervention services. This course will provide students with an under-standing of the differences in working with students who are visually impaired and students who are deafblind.

SPU 140 Phonetics **3 sh**
A study of phonetic systems leading to the understanding of the science of speech sounds as elements of language, auditory training through dictation, and transcription of the student's own speech and that of others. The broad and narrow symbols of the International Phonetic Association alphabet are used.

SPU 142 Normal Speech & Language Development **3 sh**
A study of speech and language acquisition in the "normal" child.

SPU 144 Anatomy & Physiology of the Speech Mechanism **3 sh**
A study of the anatomy and physiology of the speech mechanism dealing with the specific anatomy involved and its function in relation to speech production.

SPU 200 Reading, Writing, and Teaching Literary Braille **4 ch – 3 sh**
This course provides knowledge and skills in reading and writing Braille 1 and 2 in the literary 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 ink-printing Braille material, basic textbook formatting, methods of teaching Braille reading, and an introduction to computer systems used to produce Braille.

SPU 202 Orientation and Mobility for Teachers of Students with Visual Impairment, including Deafblindness **3 sh**
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.

SPU 204 Anatomy of the Eye and Related Assessment of Students with Visual Impairments **4 ch – 3 sh**
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.

SPU 240 Language Disorders **3 sh**
This course is designed to provide students with an understanding of language disorders in children. Diagnostic tests and therapeutic techniques will be presented. PREREQUISITE: SPU 142.

SPU 242 Hearing Problems and Audiometry **3 sh**
A study of anatomy and physiology of the auditory mechanism and different types of hearing difficulties, basic hearing tests and evaluation procedures.

SPU 244 Aural Rehabilitation **3 sh**
Special techniques for the habilitation and rehabilitation of the hearing impaired individual. PREREQUISITE: SPU 242.

SPU/EDU 245 Communication Disorders and the Classroom Teacher **3 sh**
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.

SPU 246 Articulation and Stuttering **3 sh**
The etiology, diagnosis and treatment of articulation and stuttering disorders. PREREQUISITES: SPU 142 and SPU 144.

SPU 247 Augmentative and Alternative Communication **3 sh**
Disabling conditions that may require increased reliance on augmentative and alternative communication will be presented. Interaction will be emphasized. Methods of communication for those persons without functional speech and/or a writing system will be studied. PREREQUISITE: SPU 240 or permission of instructor.

SPU 248 Organic Disorders **3 sh**
The etiology, diagnosis and treatment of speech disorders associated with organic abnormalities. PREREQUISITE: SPU 142 and SPU 144.

SPU 300 Reading, Writing and Teaching Literary Braille, Nemeth Mathematics Code, and Other Braille Codes **4 ch – 3 sh**
This course provides knowledge and skills in Nemeth braille, grade 3 braille, and extended experiences in reading and writing grade 2 braille. This course includes the use of slate and stylus in preparing drills, assignments, and in taking notes. Advanced methods of teaching braille are emphasized. Braille music and foreign language braille is introduced. Other forms of computer braille are introduced and used in assignments. PREREQUISITES: SPU 200.

SPU 302 Adapting Materials and Methods of Instruction and Evaluation for Teaching Students with Visual Impairments **4 ch – 3 sh**
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 frame-work for the concept of teacher as lifelong learner, assessment strategies for learning medium and reading medium, writing IEP's, and research applications. PREREQUISITES: SPU 110, 200, 204, 300.

SPU 316 Reading and Other Language Arts for Exceptional Children **3 sh**
An in-depth study in the teaching of reading and language arts for special education majors. The course will present a brief historical overview of language arts and reading. A sequence of language/reading developmental skills will be presented in oral and written form. An emphasis on instructional tools, guidelines for instruction, testing and evaluative procedures, organizational and teaching strategies, remedial methods and techniques, prevocational and vocational language skill for the exceptional child in preschool through secondary education will be introduced in this course. PREREQUISITE: SPU 100 or permission of instructor.

SPU 318 Special Class Methods **3 sh**
A study of purposes of atypical classes, curricular content and its organization, child-case study techniques, classroom management and the vari-

ous methods of teaching the atypical child. PREREQUISITE: SPU 100 or permission of instructor.

SPU 320 Curriculum Development for the Mentally and Physically Handicapped 3 sh
This course relates to the nature of curriculum design, the application of curriculum construction, analysis and evaluation of curriculum materials and methods for the exceptional children on the elementary, junior and senior high levels. PREREQUISITE: SPU 318 or permission of the professor.

SPU 322 Learning Disabilities 3 sh
The course will provide a survey of the historical and educational bases for the development of programs for learning disabled children and youth. Students will be introduced to definitions, etiologies, and theoretical approaches to learning disabilities, as well as specific types of learning disabilities, classroom diagnostic procedures, and remediation techniques. PREREQUISITE: SPU 100 or permission of instructor.

SPU 326 Mental Retardation 3 sh
The course will address the developmental characteristics of individuals possessing varying levels of mental retardation. Included will be a study of etiologies, curricular intent, related services, and instructional techniques related to the education and habilitation of mildly, moderately, severely, and profoundly retarded populations. PREREQUISITE: SPU 100 or permission of instructor.

SPU 328 Behavior Disorders 3 sh
The course will address the education of children and youth possessing significant behavior disorders. Included will be a study of causal theories, characteristics, assessment procedures, and multi-disciplinary services, with the focus being on educational intervention strategies appropriate for behavior disordered individuals. PREREQUISITE: SPU 100 or permission of instructor.

SPU/ARU 329 Arts and Crafts for the Atypical 6 ch - 3 sh
Field experiences, research and art production analysis provide an orientation to the understanding of the art of atypical individuals. Implications which handicapping conditions have for the art learning process are examined through art studio experiences.

SPU 330 Physically/Multiply Handicapping Conditions 3 sh
The course will address medical, physical, and psychological aspects of physically/multiply handicapping conditions. Included will be an examination of intervention strategies relevant to the education, training, and habilitation of physically/multiply handicapped individuals. PREREQUISITE: SPU 100 or permission of instructor.

SPU 340 Psychology of Speech and Hearing 3 sh
A study of the correlates of human communication with special emphasis on the psychology of communication and the psychology of learning and behavior. PREREQUISITE: SPU 240.

SPU 342 Clinical Methods and Materials 3 sh
This course will emphasize additional techniques used to assess and remediate language, articulation and stuttering disorders. Students will gain exposure to materials relevant to the speech-language field. PREREQUISITE: SPU 240 and SPU 246.

SPU 344 Seminar in Speech and Language Pathology 3 sh
A seminar consisting of readings, discussions and research concerning issues central to the speech-language pathology discipline. This seminar will enable students to obtain additional information in an area of interest. PREREQUISITE: Permission of professor.

SPU 350 Clinic & Practicum I 3 sh
Participation in clinical practice with speech, language, and hearing problems, observations of clinical procedures, and writing of clinical reports. Minimum of 75 accrued clock hours necessary for completion of the course. Travel to off-campus clinic sites will be required. PREREQUISITE: Permission of the professor.

SPU 352 Speech, Language, Hearing Clinical & Advanced Practicum II 3 sh
Participation in clinical practice with speech, language, and hearing problems and writing of reports. A higher level of functioning than that exhibited in SPU 350 is expected. Minimum of 75 accrued clock hours are necessary for course completion. Travel to off-campus clinic sites will be required. PREREQUISITE: SPU 350.

SPU 380 Independent Study 3 sh
Qualified students will be permitted to conduct independent investigations, under supervision, in specific areas.

SPU 390 Student Teaching and Practicum: Visual Impairment I 7 sh
SPU 391 Student Teaching and Practicum: Visual Impairment II 7 sh
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.

SPU 392 Student Teaching and Practicum: Mentally/Physically Handicapped I 7 sh
SPU 393 Student Teaching and Practicum: Mentally/Physically Handicapped II 7 sh
An opportunity is provided for observation and student teaching with special populations. Discussion periods are provided for classification techniques, methods and approaches.

SPU 394 Student Teaching and Practicum: Speech-Language Pathology I 7 sh
SPU 395 Student Teaching and Practicum: Speech-Language Pathology II 7 sh
Student teaching provides opportunities for observation and participation. Students will perform all the duties of a speech-language clinician in two different settings for a semester. The settings will be either two different schools or one school and one agency depending on the student's preference as well as availability of placements. The practicum concurrent with student teaching provides an opportunity to share knowledge and discuss problems relevant to student teaching and the profession.

SPEECH

SPE 010 Fundamentals of Speech * 3 sh
The course concerns the entire process of oral communication. The emphasis falls on the development and delivery of speeches to inform and to persuade. However, the course also includes an introduction to aspects of interpersonal communication and group discussion. Offered each semester.

* SPE 010 fulfills the oral communication requirement.

SPE 051 Voice and Diction **3 sh**
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.

SPE 052 Voice and Diction Workshop **1 sh**
Maintenance and development of effective vocal quality, audibility, expressiveness and articulation through selection and supervised practice of exercises. Course is repeatable to a maximum of three semester hours. PREREQUISITE: SPE 051 Voice and Diction.

SPE 101 Introduction to Speech Communication Theory and Research **3 sh**
This course will provide a basic introduction/orientation to the field of Speech Communication. Specifically, the course will examine the basic research process, major divisions of Speech Communication studies, types of communication research, major theories and concepts, and the professional journals and publications in the field.

SPE 110 Small Group Discussion **3 sh**
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 involving outside of class meetings. It is suggested that this course be taken prior to SPE 325. PREREQUISITE: SPE 010.

SPE 120 Oral Interpretation I **3 sh**
Development of proficiency in reading non-fictional prose, poetry and fiction aloud. Performance will be evaluated in terms of its harmony with content.

SPE 121 Introduction to Listening **3 sh**
The course is designed to develop the student's understanding of the listening process through the study of relevant theory and research and to provide an opportunity to apply the theory to a variety of communication contexts through communication exercises and presentations.

SPE 125 Non-Therapeutic Interviewing: Communication Principles and Practices **3 ch**
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.

SPE 130 Interpersonal Communication **3 sh**
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.

SPE 145 Nonverbal Communication **3 sh**
Students will explore some facets, principles, implications, and effects of non-verbal communication. The course will focus on non-verbal dimensions such as kinesics (body movement), para-language (vocalic communication), facial expression and visual interaction, proxemics (space), haptics (touch), and chronemics (time). Students will apply the principles through communication exercises and presentations.

SPE 170 An Introduction to Public Relations **3 sh**
This course is designed as an introduction to Public Relations as conducted in business, industry, public institutions and by political figures today. Students will examine the functions of public relations and its place within organizations and society.

SPE 201 Storytelling I **3 sh**
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.

SPE 205 Argumentation and Debate **3 sh**
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.

SPE 210 Persuasive Speaking: Theory and Practice **3 sh**
Students will make advanced expository and persuasive speeches. Emphasis will be on the study and practice of various kinds of effective appeals and proofs.

SPE/WRI 212 Introduction to Mass Communication **3 sh**
A study of the method and philosophy of mass communication. 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. PREREQUISITE: ENG 023.

SPE 213 Communication in a Multi-Cultural World **3 sh**
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.

SPE/MUS 217 The Music of Poetry **3 sh**
This course is designed to develop and intensify the student's intellectual, emotional and aesthetic responses to the aural qualities of poetry and music through an examination of the similarities and differences between them. Emphasis will be placed upon those poems that particularly convey their meaning(s) through aural and temporal devices. Specific attention will be given to structural aspects common to both poetry and music, such as meter, rhythm, tonality and form. Analogies to be drawn between music and poetry will provide the student with provocative frames of references for study. PREREQUISITES: MUS 010 and one basic Literature course. (May be repeated once.)

SPE 220 Group Performance of Literature **3 sh**
The course provides theory and practice in choosing, editing, casting and rehearsing a group dramatic reading, in a style harmonious to the particular literature, as well as to the audience and occasion. PREREQUISITE: SPE 120.

SPE 225 Advanced Solo Performance of Texts I **3 sh**
Each student will choose a writer or theme developed into a 15 – 20 minute solo performance. Applying insight drawn from a study of par-

ticular selections themselves, as well as from cultural and aesthetic and postmodern criticism, the students will prepare a solo performance representing a writer or theme. Repeatable up to 6 hours, not more than 3 ch. per semester. PREREQUISITE: SPE 120, or permission from the instructor.

SPE 226 Advanced Solo Performance of Texts II 3 sh
Each student will choose a writer or theme developed into a 15 – 20 minute solo performance. Applying insight drawn from a study of particular selections themselves, as well as from cultural and aesthetic and postmodern criticism, the students will prepare a solo performance representing a writer or theme. Repeatable up to 6 hours, not more than 3 ch. per semester. PREREQUISITE: SPE 120, or permission from the instructor.

SPE 235 Public Relations Cases and Campaigns 3 sh
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. PREREQUISITE: SPE 170.

SPE 241 Public Relations: Processes and Techniques 3 sh
This course will build on the basic understanding of public relations and its place in society that was gained from Introduction to Public Relations, to explore practical application of the theory as carried out in modern PR operations. Public Relations professionals from various specialties and visits to public relations, printing and media production facilities will serve to give students an insight into the real-world application of the skills and techniques they are learning. Exercises, in which students will produce working PR tools, will put a further practical perspective on the profession. PREREQUISITE: SPE 170.

SPE 274 Organizational Communication 3 sh
This course will focus on the nature and dynamics of communication in organizational settings. Specifically, the course will examine the nature and structure of organizations, communication systems and channels, relationships of communication to organizational functions, applications of communication systems and techniques, and methods for diagnosing, identifying and remediating organizational communication problems.

SPE 299 Communication Theory 3 sh
This course is designed to explore humanistic and scientific approaches to communication studies that have lead to its current status as an intellectually vibrant, socially relevant area of study and practice. Students learn about theorizing and specific theories of communication, leading them to gain an enlarged appreciation of the complex, multifaceted process of communication. PREREQUISITE: SPE 101 and 60+ credits or permission of instructor.

SPE 311 Crisis Communication in Public Relations 3 sh
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. PREREQUISITES: SPE 170, SPE 235, or permission of instructor.

SPE 325 The Communication Dynamics of Group Interaction 3 sh
The course will focus on the dynamics of communication interaction related to task-oriented, decision-making groups (e.g., commissions, boards, councils, task-forces, committees, project and volunteer groups). Students will be required to integrate an examination of current research and theory with case-studies and analysis of ongoing task-oriented groups. PREREQUISITE: SPE 010.

SPE 327 Rhetorical Theory and Criticism 3 sh
This course will present an overview of the history of rhetorical theory and methods of rhetorical criticism.

SPE 332 American Speakers and Their Impact 3 sh
A comprehensive study of the development of American rhetorical theory and criticism, and the public speakers who have reflected these trends. Course will include analysis of the speakers, issues, and the times.

SPE/ENG 335 The Rhetoric of Literature 3 sh
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. PREREQUISITE: ENG 023.

SPE 336 On-Campus Public Relations Workshop 3 sh
Students in this course will be assigned to selected on-campus departments, events and offices as staff public relations practitioners. They will bear the responsibility, under the guidance of the instructor, of developing a comprehensive public relations and/or promotional program for the activity to which they are assigned. This can include, but is not limited to, news releases, advertising, news media contact, promotional publications, programs and posters. Examples of departments/activities to which students could be assigned are Performing Dance Portmanteau, Theatre, Music, Student Activities, Cultural Affairs, Affirmative Action Committee, etc. Students' work will be guided and graded on the basis of regular meetings with the instructor. All work will be closely coordinated with and released through the University Public Relations Office. Where graphic design requirements are encountered, the student would be responsible for seeking out the necessary resources for artwork on campus with the help of the instructor. If a student from CDE 362 Campus Graphics is assigned to the same activity, the ENG/SPE 336 student will be held responsible for establishing maximum rapport and coordination with his/her colleague. PREREQUISITE: ENG 023.

SPE 341 Voices of American Women 3 sh
A study of woman's role as speaker in America's development, past and present. Course will include in-depth analysis of specific issues, women and speeches in light of the principles of rhetorical criticism.

SPE 370 Selected Topics in Speech Communication 1 – 3 sh
This course will encompass extensive readings, critical evaluations and papers on selected research and theory relating to issues in Speech Communication. 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. PREREQUISITE: Permission of instructor and major advisor.

SPE 379 Independent Study in Speech Communication 3 sh
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.

SPE/THE 380 Senior Seminar: Issues from Dramatic/ Rhetorical Perspectives 3 sh
Required of all Seniors majoring in Speech Communication and Theatre, the course consists of a weekly three-hour session in which the students will prepare and discuss contemporary issues related to their individual field of study, and present a series of "position papers" for Departmental evaluation.

SPE 390 Speech Communication Internship 3 – 12 sh
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 12 credits in the major and 6 credits in the minor. PREREQUISITES: Senior standing, departmental approval. Majors may take the Internship for 3 or 6 or 9 or 12 s.h. (It should be noted that only 6 credits may be applied to the Degree Program.) Minors may take the Internship for 3 or 6 s.h.

THEATRE

THE 015 Introduction to Theatre * 3 sh
An orientation to the organic nature of the theatre, studying such elements as architecture, stage design, lighting, costume, makeup, acting, and direction.

* THE 015 may be taken concurrently with THE 031, but is a prerequisite for all other theatre courses except THE 195.

THE 031 Introduction to Acting 3 sh
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. COREQUISITE: THE 015.

THE 125 Theatre Makeup 4 ch – 3 sh
This course provides an intensive study of the theory and practice of make-up for the theatre: anatomy, color and equipment. Both two-dimensional and three-dimensional techniques are covered. In addition, arrangements and styles of hair will be included. Students must take a leadership role in applying makeup for current productions. PREREQUISITE: THE 015.

THE 131 Fundamentals of Acting I 4 ch – 3 sh
Preparation of theatre pieces by means of study and improvisation leading to ensemble refinement. Vocal and movement exercises are included. Practical experience beyond class hours is encouraged as an important part of the learning experience. PREREQUISITE: THE 015 and THE 031.

THE 140 Play Production 3 sh
A survey of the non-acting and non-directing aspects of theatre. Scenery, lighting, make-up, costumes, properties, sound, and business will be among the subjects considered. Practical work, in addition to class meetings, on current theatrical productions is an important part of the course work. PREREQUISITE: THE 015.

THE 150 Unarmed Combat for the Stage 2 ch – 1 sh
A course in specialized stage movement, stage combat is designed primarily for actors and directors. THE 150 exclusively focuses on unarmed combat the for the stage. PREREQUISITE: THE 131 Fundamentals of Acting.

THE 151 Armed Combat for the Stage 2 ch – 1 sh
A course in specialized stage movement, stage combat is designed primarily for actors and directors. THE 151 examines, on a rotating basis, a variety of weapons utilized on the stage. The course is repeatable to a maximum of two semester hours as the topic changes. PREREQUISITE: THE 131 Fundamentals of Acting and THE 150 Unarmed Combat for the Stage, or instructor permission.

THE 152 Rapier and Dagger for the Stage 2 ch – 1 sh
A specialized stage movement course, stage combat is designed primarily for actors and directors. THE 152 takes as its exclusive topic the study of rapier and dagger technique for the stage. PREREQUISITE: THE 131 Fundamentals of Acting; THE 150 Unarmed Combat for the Stage; THE 151 Armed Combat for the Stage or with the instructor's permission.

THE 195 Theatre Practicum .5 ch
The study, through preparation and performance, of the processes and skills necessary for theatrical production. These include, but are not limited to acting, directing, costuming, makeup, construction, lighting, and management. This course is open to all students. BFA Related Arts Theatre students and BA Theatre students must accumulate 3 credits of Theatre Practicum as part of their degree requirements. No prerequisite. Offered each semester. May be repeated to a cumulative total of 3 credits.

THE 200 Voice and Movement for the Actor 3 sh
Voice and Movement for the Actor will be a process oriented course with two distinctly different yet integrated goals: (1) to introduce the student to the vocal mechanism while increasing vocal flexibility (range), standard (pronunciation and articulation), tone (vocal production), and resonance (volume and vocal quality) — in essence, to train the actor's voice so as to be an organically integrated and healthy instrument, responsive to what-ever demands the role may place upon the actor; (2) to train the actor's body so as to be equally responsive to the varying demands of physical characterization. This will be accomplished through a variety of exercises designed to increase strength, flexibility, stamina, coordination, and non-verbal communicative skills. PREREQUISITE: THE 015 and THE 131.

THE 203 Script Analysis or Theatre Production 4 ch – 3 sh
This course is designed to help the student analyze playscripts in order to prepare a playscript for production. PREREQUISITES: THE 015 and THE 131.

THE 205 Costuming For The Stage 4 ch – 3 sh
The study of designing and constructing a costume appropriate not only to the character wearing it, but also to the style and the period of the play itself. Topics will include play analysis for costume design requirements, materials needed, estimated cost, drawing patterns, history of costumes, use of the sewing machines, and costume shop safety. Students will be required to take primary responsibilities in costuming areas (designing and construction) for a current production. PREREQUISITE: THE 015 and THE 140 or permission of the instructor.

THE 210 Production and Performance for Young Audiences 3 sh
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. PREREQUISITE: THE 015.

THE 215 Scenic Production 4 ch – 3 sh
The theory and practice of the process by which a scenic design is converted into a finished setting with emphasis on the traditional hard and soft scenery that would be found in a single set production. Topics will include technical analysis of design, scenic materials, estimating cost, drawing for the production shop, and safety. Students will be required to take primary responsibilities in various technical areas for a current production. PREREQUISITES: THE 015 and THE 140 or permission of the instructor.

THE 220 Intermediate Acting 4 ch – 3 sh
This course is designed to develop depth and breadth of techniques introduced in Fundamentals of Acting while introducing more advanced

skills as well. Emphasis will be placed on Constantin Stanislavski's (and subsequent Stanislavskian based teachers) second tier principles such as communion and adaptation, physicalizing the given circumstances, imagery, tactics and strategies, antecedent action, affective memory, internalization versus externalization, and a variety script/character analysis techniques. Monologue and scene work will be drawn from Modern Masters such as Ibsen, Chekhov, and Strindberg. PREREQUISITE: THE 015 and THE 131.

THE/MUS 228 The History of American Musical Theatre 3 sh
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. PREREQUISITE: MUS 010 and THE 015 or permission of the instructor.

THE 231 Acting Studio 4 ch – 3 sh
Study and preparation for character portrayals in modern and/or classical plays. The course permits the study of various styles: realistic, expressionistic, absurd, or classical. Repetition of the course allows for the cumulative maturation of the student actor to a more professional level. PREREQUISITES: THE 015 and THE 131. Repeatable to 9 sh credit.

THE 240 Directing 3 sh
Principles and practices of directing plays are examined in-depth: dramatic structure, style of compositions, rehearsal techniques, design, evaluation, and human relations. Scenes are prepared for classroom evaluation. PREREQUISITES: THE 015 and THE 131.

THE 246 Stage and Theatre Management 3 sh
The course is a comprehensive study of the principles, structures, styles, responsibilities, and processes associated with the management of both the stage production and the theatre institution for the various types of theatre operations in the United States. PREREQUISITE: THE 015 and THE 140 or permission of the instructor.

THE 248 Scenic Design 4 ch – 3 sh
The course will show how to design scenery that is appropriate for a given play and for the conditions under which the play must be presented. Topics include styles of design, drafting and perspective drawing for the stage, script analysis, and scene painting procedures. Participation in actual productions at KU is an integral part of the course. A working knowledge of theatre crafts is assumed. PREREQUISITE: THE 015 and THE 140 or permission of the instructor.

THE 250 Theatrical Lighting Practice 3 sh
A survey of techniques and equipment used to light proscenium, arena, and thrust stages. Principles of electric circuits, optics and color will be examined as they relate to the Theatre. Students are assumed to have a basic knowledge of theatre production practice. Practical work, in addition to class meetings, is a required part of the course work. PREREQUISITE: THE 015.

THE 260 Theatre Workshop in England 3 sh
This course is designed as an intensive and practical study of English theatre as conducted by leading theatre practitioners. It involves travel to London as well as to other theatre centres to work directly with leading National Theatre Associations. Experiential workshops, seminars, and lectures are conducted in conjunction with prominent actors, directors, and technical theatre personnel. Tours of English theatres are included. Pre-trip study and post-trip papers are required. PREREQUISITE: THE 015 or permission of instructor. May be repeated up to 6 credits.

THE 328 Advanced Acting: Period and Styles I 4 ch – 3 sh
This course is designed to introduce the student to the vocal, movement, analytical, and research skills necessary for the actor to portray characters written before the advent of Realism. Period and Styles I is the introductory class of a two-course sequence with the objective of exposing the advanced acting student to a wide range of periods and styles of dramatic literature and performance drawn from the Western European theatrical tradition. This first course will focus on the drama and performance styles of the theatre of Ancient Greece and Rome, Medieval Europe, the European Renaissance, and the Commedia dell'arte of Italy. The student will be introduced to the cultural milieu of each of the above-mentioned historical periods and the theatrical conventions in force at that time; and participate in a variety of exercises designed to immerse him/her in that particular period or style of theatre. Finally, the student will perform a scene or monologue from a piece of dramatic literature written during each of those periods or styles of theatre or drama. PREREQUISITES: Junior/senior status theatre majors; "B" or better in THE 220; "B" or better in THE 200 or with permission of the instructor.

THE 329 Advanced Acting: Period and Styles II 4 ch – 3 sh
This course is designed to introduce the student to the vocal, movement, analytical and research skills necessary for the actor to competently portray characters written before the advent of Realism. Period and Styles II is the second course in a two-course sequence with the objective of exposing the advanced acting student to a wide range of periods and styles of dramatic literature and performance drawn from the Western European theatrical tradition. This second course will focus on the drama and performance styles of the theatre of Shakespeare, the English Restoration and French Neoclassicism, Romanticism and Melodrama and "Displaced" or contemporary dramas set in non-contemporary contexts. The student will be introduced to the cultural milieu of each of the above-mentioned historical periods and the theatrical conventions in force at that time. The student will also participate in a variety of exercises designed to immerse him/her in that particular period or style of theatre. Finally, the student will perform a scene or monologue from a piece of dramatic literature written during each of the above-mentioned periods or styles of theatre or drama. PREREQUISITES: Junior/senior status theatre majors; "B" or better in THE 200; "B" or better in THE 220; "B" or better in THE 328.

THE 331 Acting III: Monologue/Audition Workshop 4 ch – 3 sh
Especially designed for the serious theatre student, the Workshop provides a close examination of selected materials available from various periods and styles which could be used for audition material, in addition to providing the theatre student with assistance in preparing a professional acting résumé and headshot(s). PREREQUISITE: THE 015 and THE 231.

THE 332 Acting III: Monologue/Audition Workshop 4 ch – 3 sh
Especially designed for the serious theatre student, the Workshop provides a close examination of selected materials available from various periods and styles which could be used for audition material, in addition to providing the theatre student with assistance in preparing a professional acting résumé and headshot(s). PREREQUISITE: THE 015 and THE 231 or permission of instructor.

THE 333 Theatre History I: Ancient European 3 sh
A comprehensive study of the history of stage architecture, literature, styles, theory, criticism, and production methods. This course covers Ancient Greek, Roman, and Medieval Theatre. Representative dramas will be read in translation. PREREQUISITE: THE 203, and Junior status.

THE 334 Theatre History II: Classical Asian and European 3 sh
A comprehensive study of the history of stage architecture, literature, styles, theory, criticism, and production methods. This course covers Classical Asian and European Renaissance Theatre. Representative dramas will be read in translation. PREREQUISITE: THE 203, and Junior Status.

THE 335 Theatre History III: 18th & 19th Century 3 sh
A comprehensive study of the history of stage architecture, literature, styles, theory, criticism, and production methods. This course covers American and European Theatre from the beginning of the 18th Century through the development of Realism at the end of the 19th Century. Representative dramas will be read in translation. PREREQUISITE: THE 203, and Junior status.

THE 336 Theatre History IV: World Theatre Since 1900 3 sh
A comprehensive study of the history of stage architecture, literature, styles, theory, criticism, and production methods. This course covers theatre since 1900 from Africa, Asia, America, and Europe starting with the Anti-Realists. Representative dramas will be read in translation. PREREQUISITE: THE 203, and Junior status.

THE 341 Intermediate Directing 3 sh
This course is designed to develop depth and breadth of techniques introduced in Fundamentals of Directing while introducing more advanced skills. Emphasis will be placed on play, scene, and character analysis; communicating with actors and design personnel; and non-proscenium arch staging techniques for the thrust and arena stages. Practical scene work will be drawn from a variety of periods and styles including pre-realistic dramatic literature. PREREQUISITES: Junior/senior status theatre majors; "B" or better in THE 240 or with permission of the instructor

THE 351 Advanced Theatrical Design Projects 3 sh
Advanced design projects in scenery, lighting, or costumes. Emphasis on musical forms: opera, dance, and musical theatre. Course by special arrangement requiring weekly presentations. Repeatable to a maximum of 9 hrs. Repeatable only with a grade of "B" or better. PREREQUISITE: THE 205 or THE 248 or THE 250; and written permission of the instructor.

THE 370 Independent Study in Theatre 3 – 6 sh
Independent Study involves individual, intensive study or work in any theatre area. Independent Study could include, but is not restricted to, topics such as research on an actor or style of acting, a one-person show, and technical theatre work (such as designing and constructing costumes, or lighting, or sets, for actual production). The course may be repeated for credit up to a maximum of six semester hours as topics change. PREREQUISITE: THE 015 and junior or senior standing and permission of instructor and department chairperson.

THE/SPE 380 Senior Seminar: Issues from Dramatic/ Rhetorical Perspectives 3 sh
Required of all Seniors majoring in Speech Communication and Theatre, the course consists of a weekly three-hour session in which the students will prepare and discuss contemporary issues related to their individual field of study, and present a series of "position papers" for Departmental evaluation.

THE 390 Internship in Theatre 3 – 15 sh
Upon approval of a cooperating agency, the student will be placed in a situation in which practical professional experience can be acquired from some organization related to his career plans. Interested students should apply through their advisor. PREREQUISITE: THE 015 and junior or senior status and recommendations of the Department of Speech and Theatre. Course may be repeated to a maximum of 12 credits.

THE 460 Selected Topics in Theatre 3 sh
An examination of selected topics (at the proposal of the individual professor) not covered or only covered briefly in another undergraduate theatre course. The course topics may include, but not be limited to: "Women in Theatre," "Sex and Politics," "Monodramas — One Man or One Woman Shows," "Theatre and Social Problems," and others. Offered on an "as needed" basis. Students may repeat the course as often as the topic changes, but may not repeat the same topic. PREREQUISITE: THE 015.

UNIVERSITY STUDIES

UST/BUS 001 University Studies: The First Year Seminar 3 sh
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.

UST 015 First Year Seminar: University Studies 1 ch – 1 sh
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 UST 015 is not to be used as a repeat of UST 001, and it may not be taken if a student has already taken another first-year seminar (e.g. BUS 001, EDU 015, VPA)

WOMEN'S STUDIES

WST 010 Introduction to Women's Studies 3 sh
This course introduces students to the fundamental issues that affect women's lives by focusing on the socially constructed definitions of women and women's roles. Specific attention will be given to women's experiences vis-à-vis family, work, education, health, and the legal system. While the primary focus will be how gender hierarchies and biases affect diverse American women, the course will also examine how these issues affect the lives of women in other cultures. The course will include readings, writing assignments, lectures, discussions, and guest presenters.

WST/MAT 045 Women in Mathematics 3 sh
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. PREREQUISITE: 2 years of high school algebra.

WST/HPD 067 Self Defense for Women **1 sh**
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.

WST/NUR 111 Women's Wellness **3 sh**
This course permits the learner to study the wide variety of issues affecting the lives of women in today's society. The course will emphasize women and what women can do for themselves and for one another to deal with these issues effectively. The course will enable learners to focus on how women can take charge of their own wellness and their lives, deal with existing medical system, and utilize strategies to create change and improvement. Investigation of current research on women's wellness and strategies will be utilized to assist women to deal with these issues. This course is not open to nursing majors. PREREQUISITES: None.

WST/MUS 209 Women in Music **3 sh**
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.

WST/HUM 211 Women in the Arts **3 sh**
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.

WST/FRE 226 Women and the New Québécois Novel **3 sh**
This course (taught in English) studies the development of the modern novel by Quebec female novelists. In 1960, the quiet revolution brought profound changes in every facet of Quebec life. Secularization and modernization gave Quebecers a new consciousness of themselves as a collectivity within the Canadian federation and as a majority within their province. For women especially, the break with a clerical traditional patriarchal society antagonistic to their advancement has been abrupt and profound. Their desire for freedom resounded in an outburst of new feminine and feminist writings. We will read and examine the works which best illustrates their vision, the interpretation of their history and present realities. Also included is written and oral work on the unique socio-cultural context in which these women write.

WST/EDU 228 Women in Education **3 sh**
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.

WST 250 Women and Leadership **3 sh**
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).

WST/ENG 276 Nineteenth Century Women's Literature **3 sh**
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. PREREQUISITE: ENG 023 or its equivalent.

WST/ENG 278 Women Writers Around the World **3 sh**
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. PREREQUISITE: ENG 023 or its equivalent.

WST 310 Seminar in Women's Studies **3 sh**
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 understandings 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: WST 010 Introduction to Women's Studies and the completion of 9 hours of electives chosen from the list of courses approved for inclusion in the Women's Studies Minor Program.

WST 370 Selected Topics in Women's Studies **3 sh**
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.

WST 380 Independent Study **1, 2, 3 ch - 1, 2, 3 sh**
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. PREREQUISITE: WST 010.

WST 390 Internship in Women's Studies **3 sh or 6 sh**
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.

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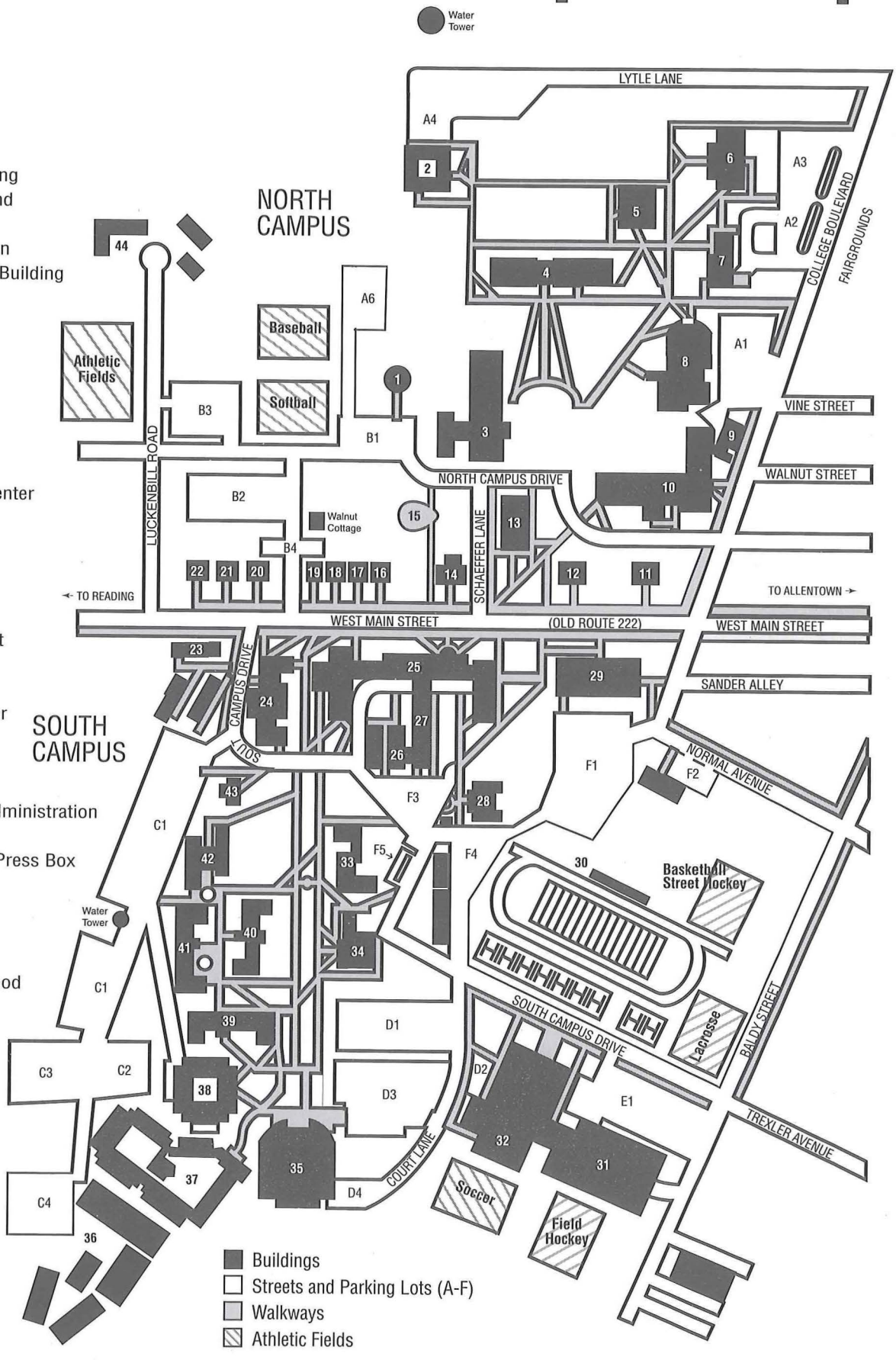
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Kutztown University Campus Map

Directory

1. Grim Science Building
2. Lytle Hall
3. Boehm Science Center
4. Rohrbach Library
5. deFrancesco Building
6. Beekey Education Building
7. Rickenbach Research and Learning Center
8. McFarland Student Union
9. Communication Design Building
10. Sharadin Building
11. Poplar House
12. President's Home
13. Schaeffer Auditorium
14. Graduate Center
15. Alumni Plaza
16. Christopher House
17. Boxwood House
18. Wiesenberger Alumni Center and Walnut Cottage
19. Maple Manor
20. Education House
21. Admissions Center
22. Lutheran Center
23. Golden Bear Village West
24. Rothermel Hall
25. Old Main
26. Health & Wellness Center
27. Georgian Room and Blue Room of Old Main
28. Risley Hall
29. Lawrence M. Stratton Administration Center
30. University Stadium and Press Box
31. Keystone Field House
32. Keystone Hall
33. Beck Hall
34. Deatrick Hall
35. South Dining Hall and Food Court
36. Golden Bear Village South
37. University Place
38. Bonner Hall
39. Johnson Hall
40. Berks Hall
41. Lehigh Hall
42. Schuylkill Hall
43. John B. White Multicultural Center
44. Pennsylvania German Cultural Heritage Center





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