



Nathan Hayduk | Political Science & German Student Highlight

From growing up on Main Street in Kutztown to having a mother who is also a KU professor, Senior Political Science and German dual major Nathan Hayduk spent a lot of his childhood on campus in the back of his mom's classroom, so he never planned on choosing KU for his college career. However, after weighing all his options, Nathan realized that Kutztown had much more to offer than he ever realized.

Set on majoring in Information Technology (IT) wherever he ended up, Nathan attended Berks Career and Technical Institute for IT while in high school. He dual enrolled with Reading Area Community College to get an early start to his college career. Nathan was also longing to see the world for himself after graduating high school because he watched his older siblings leave home and travel when he was younger. Considering he enjoyed his German courses in high school, Nathan found a study abroad experience to Germany. "I had 60 credits when I got to Kutztown which allowed me to go on a study abroad as soon as I walked in the door," he said. "I didn't even set foot on campus. I took a flight to Germany and went there instead."

Nathan arrived at the University of Hildesheim in September 2018. He declared a German major to go on the trip, but he planned on changing back to IT once he returned to Kutztown; he was simply in Germany for the experience. Not very confident with his German, Nathan stayed away from native speaking German courses and instead focused on language, grammar, and international relations courses taught in English his first semester. Nathan pushed himself the next semester

and took courses taught in German. To keep it fun and interesting, he enrolled in sports courses designed for gym teachers, such as basketball, trampoline, and flag football. Nathan realized how much he truly loved the German language and interacting with different cultures while he was there, so before he even returned to KU, he switched his path and decided to major in both German and Political Science.

"All of my roommates were German," Nathan said. "They became my best friends. I still talk to them to this day. This was the key part for me learning the language, by being immersed in that atmosphere." Nathan spent his time biking to class, studying in the library, and exploring the area through the many festivals that were always happening. Nathan also spent most of his afternoons at the indoor rock-climbing center in Hildesheim and his weekends traveling outside the city to climb and hike outdoors.

After spending an entire year abroad, Nathan craved a once in a lifetime adventure before returning home. "I didn't care how long I stayed in a country. I just needed to be in a new country every day," he said. From Poland to Ukraine and Italy to Hungary, Nathan spent nights sleeping on buses as he traveled, sometimes staying in one place for only a few hours. He never planned where he would go next; he just looked up available buses and trains and went from there.

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His main internship responsibility was facilitating the application process for the students who were studying abroad through AMIDEAST. Nathan made sure each student's application was completed and accounted for. Nathan was also responsible for completing one major project. Students in the education abroad program completed

a language assessment before and after their study abroad opportunity to see how their language abilities had improved, and Nathan was in charge of compiling and analyzing this data. As the internship continued, Nathan was given more freedom and responsibility as he assisted with budgets and social media posts.

Nathan advises other students beginning their first internship experience that the work may not be fascinating and detailed all the time. An internship is about "managing expectations of what you will be doing," he said. "When you do go into that situation, you are doing an integral part because someone has to do that work."

Since he has returned home, Nathan has been working as an Admissions Tour Guide and a German tutor, and he recently started a research assistant internship with the Small Business Development Center. Nathan hopes to have another internship in D.C. in Spring 2021 to get one more professional experience before he graduates in Fall 2021. From there, Nathan is not entirely sure what he would like to do next. He hopes to eventually move back to Germany or Washington, D.C. to work in international relations. "I have absolutely no idea," he said. "That's perfectly fine."

To expand upon the passion for intercultural communication and international relations he discovered in Germany, Nathan spent his next semester in Washington, D.C. interning for AMIDEAST, an organization whose mission is to create understanding between the people of the Middle East and North Africa and the United States. He worked in the education abroad department, which helps facilitate programs in Jordan, Morocco, and Egypt.





Dr. Brian Kronenthal | Mathematics Faculty Highlight

Dr. Brian Kronenthal always pictured himself working at a small college. However, when he joined the Kutztown University team over seven years ago as a professor of mathematics, he was intrigued by the opportunity to work at a larger university and still be able to work one on one with students in small classes. Dr. Kronenthal has been able to achieve this dream while making an impact on his students through his unique area of study and research—and winning awards while he does it.

Dr. Kronenthal's area of study is combinatorics, which simply put is the study of counting problems. "I really like it because the problems are very easy to state and understand, but the techniques to solve the problems get much more complicated as you advance through courses," he said. "I can pull out any problem in the book and read it to someone in the street, and they will understand."

An area of math with strong connections to combinatorics is graph theory, which looks at networks where vertices and edges interact. An example is a Facebook

network: who a person is connected to and how they are connected. Dr. Kronenthal constructs certain types of these graphs that involve algebra, and studies the connections and cycles within them.

Dr. Kronenthal has researched extensively in this area, and one of his most recent publications, titled "The Settlers of 'Catanbinatorics'," focuses on counting the number of ways to start the board game Catan. The basis of the game is to construct a new board every time you play; you get to place resource tiles and tokens down in a new position every time. "In a lifetime of playing this game," he said, "if you set it up randomly, you will never play the same game twice." Dr. Kronenthal and his coauthors, both of whom are friends from graduate school, drew board models, analyzed, and counted the configurations. Based on the rules and certain conditions in the game, there are 1.54×10^{28} possible game set-ups with 20,369,419,560 ways to place the resource tiles.

Aside from research with colleagues, Dr. Kronenthal has completed many projects with students. He has mentored students at REUs, or Research Experience for Undergraduates, at Lafayette College and Moravian College. During each of these experiences, Dr. Kronenthal has worked with students from all over the country, including Kutztown University students, on combinatorics-related projects. After the Lafayette College REU, Dr. Kronenthal's research group wrote and published their findings in a peer reviewed math journal.

Dr. Kronenthal's passion has always been teaching and working with students. "That's my favorite part of the job," he said. "If you're a professor and you don't enjoy working with students, you are in

the wrong field." Because of his love for teaching, Dr. Kronenthal attempts to make classrooms as interactive as possible. He hates if he is the only one talking during class; he encourages questions. Dr. Kronenthal also tries to always be available. Whether it is extending office hours or setting up special study sessions, he will be there to help, even if he is the last person to leave the building at night.

Dr. Kronenthal's colleagues have noticed his amazing efforts to connect with and help students; that is why three colleagues nominated Dr. Kronenthal for the John P. Schellenberg Award for Excellence in Teaching and Learning. The award was established by John P. Schellenberg—Emeritus Professor of Physical Sciences—as well as by KU faculty, alumni, and friends, to recognize an early career faculty member who has demonstrated outstanding work within the missions of the Center of Enhancement of Teaching: pedagogy and curriculum innovation, learning technology innovation, and assessment and/or research on learning.

Dr. Kronenthal is very content with where he is in his career. Aside from setting up a

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new scholarship program with the research grant KU was awarded from the National Science Foundation, he has no plans on changing where he is or what he is doing. He urges all Kutztown students to engage with their professors and ask questions—that is what professors want. According to Dr. Kronenthal, so many opportunities are waiting, even at the start of an academic career, that can change a student's entire path. Those opportunities may just lead to a student feeling good about the work they do each day, just like Dr. Kronenthal does.

DEAN'S CORNER DR. DAVID BEOUGHER

It is hard to believe that we are already at the Thanksgiving break. An incredibly challenging and, for me, inspiring semester is quickly drawing to a close. As I reflect on the past several months, I am thankful. I am thankful for the dedication of our faculty and staff who have spent significant time preparing and adjusting in order to deliver classes and support in a meaningful way while doing their best to maintain safe practices in the face of a continued pandemic. I am thankful for our incredible students who have shown such strength and resilience as they persevered through a second abnormal semester. I am thankful for the concern shown by members of our KU community for others. The articles in this edition of *The Collage* are two highlights of what makes Kutztown a place for which I am thankful. Enjoy this edition and have a wonderful, and restful, break.

