



CONNECTICUT COLLEGE

Hana Kolibiarova '08

Mathematics, psychology



Q: Why did you decide to major in mathematics?

A: My high school in Slovakia was geared toward math, so I was pretty sure I'd major in math. But I'm

also a double major in psychology. It's something of a natural combination, since psychology uses so much math. I feel as if I have an edge because I am studying math.

Q: What were your favorite courses?

A: I loved taking statistics. It's one of the more applied math courses, and you can really see the connections with the real world. A course in differential equations was also a lot of fun, partly because of the professor, and partly because of the way the equations worked out.

Q: What activities were you involved in?

A: I started working in the math help center in my sophomore year and, as a senior, I ran it. It has been a really cool experience. You reinforce what you learn by explaining it to other people. Sometimes you have to explain things in three or four different ways. But even when I was explaining introductory level material, I got a new perspective and a new way of understanding it.

Q: Did you have the opportunity to work with math professors on research?

A: Math is a great major at Connecticut College. It's really small, you get so much individual attention, and you have the opportunity to do individual studies. I've been working with one of my professors to prepare a lecture on data compression.

Mathematics

Overview

As a mathematics major at Connecticut College, you will explore both pure and applied mathematics. You will learn techniques for answering questions within mathematics as well as in other academic disciplines. For example, you might take a course in mathematical methods for the physical sciences, the mathematics of finance, or ethnomathematics, which studies the relationship between mathematics and culture. You'll have small classes, lots of personal attention from professors, and plentiful opportunities for individual study, research or honors study. Some of our students collaborate on research with faculty and present the results at conferences.

Interdisciplinary Study

One of the strengths of mathematics at Connecticut College is a strong program in statistics; we offer a broad range of statistics courses and have a full-time faculty member who is a trained statistician. The commitment to statistics enhances connections between math and other fields of study. Students often choose to double major, combining math with economics, physics, computer science, music or dance, among others. Through the College's funded internship program, you may do an internship on- or off-campus. You may choose to combine the math major with an interdisciplinary certificate from one of our academic centers. Many math majors study abroad.

Department Activities

Math students are highly involved in the department and participate in a wide range of related activities. In addition to your classes, you may attend career nights and game nights and hear lectures by prominent mathematicians. For example, you might work at the math help center, a student-run service to help students in introductory and intermediate-level courses. During your junior or senior year, you will participate in the advanced departmental seminar featuring lectures from visiting experts and Connecticut College faculty. You will also prepare and deliver a one-hour lecture on an advanced topic of your own choice. The department regularly organizes a team to compete in the William Lowell Putnam Mathematical Competition, a national mathematics contest. You might present a paper at the Hudson River Undergraduate Mathematics Conference or another professional meeting. The College is also home to the Connecticut Epsilon Chapter of Pi Mu Epsilon, the national mathematics honor society.

After Connecticut College

Mathematics provides powerful tools for explaining how the world works. As a math major, you will hone the skills of logical thought and precise exposition. With these capabilities, alumni pursue successful careers in scientific laboratories, computer firms, financial companies, public school education and higher education. They also earn graduate degrees in a variety of disciplines, including mathematics, chemistry and education.

Faculty

Bridget B. Baird, *Professor of Mathematics and Computer Science*

B.A., Bryn Mawr College; M.A., Ph.D., SUNY Buffalo

Virtual reality; interactions of touch and sound; multiple modalities and way finding

Sanjeeva H. Balasuriya, *Associate Professor of Mathematics*

B.S., Lafayette College; Sc.M., Ph.D., Brown University

Applied analysis; dynamical systems; ordinary differential equations; fluid mechanics

Gabriel Chandler, *Assistant Professor of Mathematics*

B.S., California Lutheran University; M.S., Ph.D., University of California, Davis

Statistics; non-stationary time series analysis; classification/discrimination problems in time series

Christopher Hammond, *Associate Professor of Mathematics*

B.A., University of the South; M.S., Ph.D., University of Virginia

Operator theory; complex analysis

Warren P. Johnson, *Visiting Assistant Professor of Mathematics*

B.S., University of Minnesota; Ph.D., University of Wisconsin, Madison
Q-analysis; enumerative combinatorics; special functions; determinants; history of mathematics

Kathleen A. McKeon, *Professor of Mathematics*

B.S., Worcester Polytechnic Institute; M.S., Ph.D., Michigan State University
Graphical enumeration; combinatorial generation; graph coloring and labeling

Ann Robertson, *Senior Lecturer in Mathematics*

B.A., University of Connecticut; M.S., Trinity College

Geometric issues including fractal geometry; math and the arts; information technology

Perry Susskind, *Professor of Mathematics; Chair of Mathematics Department*

B.A., Columbia College; M.A., Ph.D., SUNY Stony Brook

Complex analysis, geometry and low-dimensional topology; particularly Kleinian groups; discrete groups of isometries of hyperbolic n -space; Hadamard manifolds and geometric group theory

Introductory and intermediate courses include the calculus sequence, linear algebra, multivariable calculus, discrete mathematics and ordinary differential equations. In advanced courses, students encounter some of the major branches of mathematics, including abstract algebra, and real and complex analysis. Advanced courses tend to be more theoretical, but also may deal with concrete applications.

Selected Courses

Advanced Regression Techniques; Design and Analysis of Experiments; Discrete Mathematics; Ordinary Differential Equations; Abstract Algebra; Real Analysis; Graph Theory; Theory of Computation; Differential Geometry; Mathematics From a Cultural Perspective; Statistics and Baseball; Infinity, Fractals, Chaos and Culture

About Connecticut College

Connecticut College is a highly selective residential liberal arts college with 1,900 students from all over the country and the world. The academic program offers more than 47 majors in the arts, sciences, social sciences and humanities, as well as innovative interdisciplinary programs. Students engage with dedicated faculty and each other to create a vibrant social, cultural and intellectual community in which learning is valued for its own sake — and individuals' diverse perspectives enrich the experience of all.

What can you do with a major in math?

Peter Luthy '05

Mathematics, physics

Ph.D. candidate at Cornell University specializing in harmonic analysis and singular integral operators.

Worked for two summers in the College's Daghlian ion accelerator lab. Co-authored and published two journal articles based on his undergraduate research.

Erin Munro '00

Mathematics

Postdoctoral fellow at Boston University. Received a Ph.D. in mathematics at Tufts University.

Uses powerful computers to research patterns of neuronal activity in the brain that may be related to epilepsy.

Sijia Hu '06

Economics, mathematics and computer science

M.B.A. candidate at Harvard University.

Bailey Fidler '07

Mathematics

High school math teacher at Brentwood High School, in Brentwood, Tenn.

For more information, visit
www.conncoll.edu/academics/