

DEFIANCE COLLEGE

Screen blanks. Music halts.
System hums, revs.

Fingers stretch, flex, return to
controls.

Mind re-aligns.

The game is not over.

The next level begins.

Welcome to mathematics at Defiance College where students take a basic high school understanding of mathematics to the next level. As students refine their understanding of the discipline, they make connections between everyday situations and mathematical problem solving, and compare techniques and ideas from multiple mathematical branches.

Just as every smart gamer has mentors, mathematics majors at Defiance College have theirs, working with seasoned mathematicians who love the game and have mastered the next level. Professors work closely both in and out of the classroom to challenge and guide their majors, making student-oriented study central to the program.

Ready for the next level?

Mind re-aligned?

Fingers on the controls?

Go!

701 North Clinton Street
Defiance, OH 43512
www.defiance.edu
419-784-4010
1-800-520-GO DC

Mathematics

Bachelor of Science Degree with a major in Mathematics



Kelly Coble (right) uses her math background to plan menus for the Backpack Buddies program, part of Project 701.

After College — What's Next?

Someone interested in mathematics may choose to get certification as a teacher or have a chance to major in related fields. Some math students anticipate a career in engineering or minor in economics. A person with a math degree has excellent opportunities for employment. With underlying skills of logic and reasoning, problem-solving, and attention to detail, the math major is ready for a diverse number of jobs in banking, insurance, health care, marketing, local, state and federal government, business and non-profit organizations.

While the majority of math majors at Defiance College go on to become teachers of mathematics, there are many opportunities in mathematics outside of the classroom.

Beyond the basic thrill of studying mathematics, majors also use coursework and computer technology to benefit a local community agency. With their wide range of experience, students graduate prepared to assume positions in education, business, industry, government agency, or graduate school.

Mathematics majors at Defiance College have a unique opportunity to study in informal sessions working directly with the professor. Such student-oriented study quickly forms bonds that carry throughout the academic experience here at Defiance.



"I like the fact that I am able to build personal relationships with my professors at Defiance College. Within my major, I tend to have the same professors for a number of classes, so over time you naturally get to know each other better which makes classes more enjoyable. They are always willing to meet with you and discuss any problems or give you advice about any concerns that you might be having."

Traveling with the McMaster School to Belize was an experience that I'll never forget. I normally wouldn't get the chance to travel internationally, so when the opportunity arose I couldn't pass it up. The trip was very beneficial to me in more ways than I can describe, but some of them include gaining teaching experience, working within a different culture, and making me realize not to take things in life for granted."

Tyler Thomas

www.defiance.edu/pages/NS_majors_mathematics.html

The Faculty

David Stuckey, M.A.

Assistant Professor of Mathematics
419-783-2464 | dstuckey@defiance.edu

Joshua Francis, M.A.

Assistant Professor of Education
419-783-2571 | jfrancis@defiance.edu

Additionally, part-time instructors may teach specialized courses.



Mathematics and Integrated Mathematics majors both take a sequence of calculus courses as well as advanced courses in algebra and geometry. The Integrated Mathematics program needs particular additional coursework in preparation for teaching math while Mathematics requires Operations Research as an applied math course as well as a cognate course in physical science or economics.

Students in both majors develop an understanding of the nature of proof, communicating mathematical ideas in both written and oral form. They learn to look for patterns and make generalizations, analyze problems to choose the appropriate tool or technique, use problem solving skills in a variety of situations, and gain an appreciation for the historical development of mathematical perspective.

- MA 201 Analytical Geometry and Calculus I
- MA 202 Analytical Geometry and Calculus II
- MA 203 Analytical Geometry and Calculus III
- MA 301 Linear Algebra
- MA 405 Operations Research
- MA 490 Senior Capstone

Choose two from the following:

- MA 302 Modern Abstract Algebra
- MA 304 Modern Geometry
- MA 420 Real Analysis

And either:

- EC 201 Microeconomics or
- PH 210 General Physics I

Additional math electives to achieve 40 hours from courses numbered 200 or above.

Minor in Mathematics

The mathematics minor requires at least 18 semester hours including:

- MA 201 Analytical Geometry and Calculus I
- MA 202 Analytical Geometry and Calculus II
- MA 301 Linear Algebra or
- MA 302 Modern Abstract Algebra

6 additional credits are selected from MA courses numbered 200 or above.

Integrated Mathematics Education Adolescent to Young Adult Licensure (grades 7 through 12)

Special certification in Integrated Mathematics, grades 7 through 12, is available.

- MA 201 Analytical Geometry and Calculus I
- MA 202 Analytical Geometry and Calculus II
- MA 203 Analytical Geometry and Calculus III
- MA 300 History of Mathematics
- MA 301 Linear Algebra
- MA 302 Modern Abstract Algebra
- MA 304 Modern Geometry
- MA 305 Discrete Mathematical Structures
- MA 306 Probability and Statistics
- MA 420 Real Analysis
- MA 490 Senior Capstone
- ED 352 Mathematics Methods: Grades 7 - 12

Plus:

- ED 202 Instructional Technology
- ED 221 Foundations of American Public Education
- ED 228 Education of Exceptional Children
- ED 229 Educational Psychology
- ED 347 Reading in the Content Field
- ED 370 Teaching Secondary Students
- ED 371 Secondary Field Experience
- ED 410 Advanced Methods Seminar
- ED 458 Student Teaching in Secondary Schools (7-12)
- ED 497 Advanced Field Experience
- ED 498 Internship Seminar
- ES 334 Community First Aid and CPR
- PY 227 Adolescence and Adulthood

Come for a Visit!

A campus visit is the best way to find out how Defiance College defies the ordinary college experience. We'll arrange for you to meet with an admissions counselor, professors, coaches, students, and learn about scholarship and financial aid opportunities. You can sit in on a class, tour campus, and stay overnight if you wish. Call our Office of Admissions at 419-783-2359 or 1-800-520-GO DC to set up your appointment.

The Courses