

DEPARTMENT OF MATHEMATICS



INFORMATION FOR STUDENTS

OUR MISSION STATEMENT

The Department of Mathematics at Montclair State University is committed to supporting all learners in appreciating the power, roles, relevance, and beauty of mathematics within a dynamic, collaborative, and personalized environment. Through our undergraduate and graduate programs, we encourage students to think critically and creatively, pose and pursue purposeful questions, and approach problems from multiple perspectives. Our department embraces and advances mathematical connections among the sciences, arts, humanities, and in the business world, and creates opportunities for students to explore and pursue their interests at the intersections of these disciplines. In addition to preparing students for graduate studies, we also support them as they become more informed citizens and prepare them for a variety of careers including teaching and other jobs that meet their aspirations and the needs of an ever-changing society.

Contact Information

If you have any questions about the program or need to speak to someone about education related matters, feel free to contact us.

- Dr. Ashwin Vaidya, Chairperson, vaidyaa@montclair.edu, 973-655-2139
- Mr. George Grover, Undergraduate Adviser, groverg@montclair.edu
- Mr. Rick McCollough, Program Assistant, <u>mccolloughf@montclair.edu</u>

Faculty Information

First Name	Last Name	Contact Email	Expertise
Deepak	Bal	bald@montclair.edu	Graph Theory, Optimization
Jonathan	Cutler	cuterjo@montclair.edu	Graph Theory, Combinatorics
Joseph	DiNapoli	dinapolij@montclair.edu	Math Education
Eileen	Fernandez	fernandeze@montclair.edu	Math Education
Steven	Greenstein	greensteins@montclair.edu	Math Education
Mark	Korlie	korliem@montclair.edu	Math Modeling, Computation
Eliza	Leszczynski	leszczynskie@montclair.edu	Math Education
Aihua	Li	<u>lia@montclair.edu</u>	Graph Theory, Algebra
Arup	Mukherjee	mukherjeea@montclair.edu	Math modeling, Computation
Mika	Munakata	munakatam@montclair.edu	Math Education
Eileen	Murray	murrayei@montclair.edu	Math Education
Bogdan	Nita	nitab@montclair.edu	Math Modeling
Nicole	Panorkou	panorkoun@montclair.edu	Math Education
Teo	Paoletti	paolettit@montclair.edu	Math Education
Helen	Roberts	robertsh@montclair.edu	Biostatistics
Ashwin	Vaidya	vaidyaa@montclair.edu	Complex Systems, Modeling

DEPARTMENT WEBSITE: https://www.montclair.edu/mathematics/

Degrees Offered



Undergraduate Degree

- BS in Mathematics
- BS in Math with Teacher Certification
 - o Teacher Certification in Elementary School Teacher in Grades K-6
 - o Mathematics Education with Teacher Certification in Mathematics, Preschool-Grade 12

Undergraduate- Dual Degree Options

Our programs are flexible and allow for dual-degree or specialized tracks opportunities, within a span of four years. For instance, we have specific plans that allow students to complete the following two degrees in four years, through proper advising:

- Bachelors in Mathematics and Economics
- Bachelors in Mathematics and Sociology

If you are interested in other similar options, please reach out to us.

Undergraduate-Graduate Five Year Degrees

- BS(Math)/MS(Math)
- BS(Math)/MS(Applied Math)
- BS(Math)/MBA

Graduate Degrees

- MS(Math)
 - Concentration in Mathematics
 - o Concentration in Mathematics Education
- MA in Middle Grades Math (partially Online)
- PhD (Mathematics Education)

Highlights of the Department

RESEARCH

- **Undergraduate research**. Students are encouraged to work with our faculty and conduct research. Several of our students are engaged in research and have attended conferences and even published papers.
- **Complex Fluids Lab**. The math department is also home to a fluid dynamics laboratory where students can participate in ongoing experimental and mathematical research.
- **3D Printing Lab**: The department contains 3D printing facilities which are used to train students in several of our courses.



SUPPORT FOR OUR STUDENTS

- Scholarships: The department offers scholarships in various amounts to its students every semester depending on merit and need. We recommend that our students speak to faculty members in the department to learn about these or other funding opportunities.
- **Math Support Center** provides tutoring help for students in several courses. Students who do well in their courses are invited to serve as paid tutors in the future.

• Workshops for students: we hold several workshops for students to acclimate them to careers in Mathematics and research in the field. We will work with students to help find the right career path for them



STUDENT ACTIVITIES

- Math Student Club in the department allows students to participate in exciting events and network with their fellow mathematics students.
- Math Colloquium Series brings well regarded speakers to our department to share latest exciting developments in the field.
- **Math Competitions**: students are encouraged and trained to participate in local, national and international competitions.
- International Travel with classes: We are planning some of our classes to have a travel abroad component, where the entire class travels together for part of the semester.
- **Math Field Trips**: The department organizes field trips to local venues for students in the program and in math classes.





FOCUS ON CREATIVITY

• Math & Art Collaborations: The Math program is focused on promoting creativity among our students. Several faculty in the department collaborate with artists and musicians and integrate art with their teaching as well. We have a strong ongoing collaboration with the Arts and Cultural Performance Program at MSU and have involved several of our students in such projects.



Students in a Math course learn to juggle with artist Sean Gandini https://www.montclair.edu/newscenter/2018/12/14/math-is-in-the-air/

• **Joint Programs**: One way the math program highlights creativity in its curriculum is by allowing students to make connections, both within courses and also at the program level. Students who major in math can earn teaching certifications, but also have the opportunity to double major, pursue five year BS-MS programs which are collaborative in nature. The faculty are happy to help guide you so your academic experience will be both, fulfilling and rewarding.