2025-2026

MATHEMATICS AND STATISTICS LEARNING CENTER

ANNUAL REPORT

ABOUT THE MSLC

MSLC Mission: Promote, facilitate, and support student-centered, researched-based, and innovative mathematics education tied to undergraduate Mathematics Department courses to empower all students to reach their math potential.

Tutor Mission: MSLC tutoring provides support for mathematics and statistics students by undergraduate peer tutors and teaching assistants who give students individual attention and share their own learning experiences. We are committed to helping students persist in their career path and gain confidence in their mathematical understanding and problem-solving ability.

ABOUT THE MSLC

The Mathematics and Statistics Learning Center (MSLC) provides a wide range of support for Mathematics Department course instructors and students. The MSLC supports over 20,000 students a year with services such as drop-in and appointment tutoring, online resources, and outreach to programs for specific populations. The MSLC provides support for instructors though professional development opportunities, consultation, and the support of instructional technology and online teaching.

The educational mission of the Mathematics Department is advanced through MSLC acquisition and implementation of course improvement grants, development of new courses and course materials, collaboration with faculty on educational initiatives, and the analysis of project data.

The MSLC's leadership and research in the global undergraduate math education community supports the introduction of discipline-specific research-based educational practices and teaching innovation in both the Mathematics department's courses and MSLC services.

MEET A TUTOR: Vivian Ferrigni

How has tutoring impacted your learning and prepared you for your future career?

After graduation, I will be attending the University of Colorado Boulder this fall to pursue a PhD in Applied Mathematics. Tutoring has been one of the most impactful aspects of my academic journey, whether I'm teaching a student how to factor or working on multivariable calculus, I love sharing my excitement for math with others.

Tutoring has prepared me for graduate school by giving me the opportunity to develop my teaching skills while also strengthening my own understanding of the material. It has also connected me to the math community at Ohio State; I've built meaningful relationships with fellow students, professors, and graduate TAs. I've taken classes with other tutors, and it's always great to walk into a classroom on the first day already knowing people.

What advice would you give to students taking their first math course?

My advice to students taking their first college math course is to stay ahead on the material, don't wait until the first exam to start learning it. Math builds on itself so having a solid foundation makes a big difference.

Also, be brave! Ask questions in class, become friends with your classmates, and go to office hours. I remember being nervous about going to office hours, and I still sometimes feel that way when talking to professors. But they are there to help you, and they are always excited to see students engaged and asking questions.

Tell us about one of your most memorable moments at the MSLC.

One of my favorite memories as a tutor took place in the College Algebra drop-in room. I had just worked through a challenging word problem with a student when I noticed two other students nearby struggling with the same question. We went over together, and I got to watch my student explain the problem to them. They ended up continuing to work together through the rest of their homework. It was a really rewarding moment to see my student's confidence grow and collaborate with others.

MSLC TUTORING AND STUDENT SUPPORT

MSLC tutoring serves most Mathematics and Statistics courses at the 1000 level and select 2000 and 3000 level courses. Over 15,000 unique students are eligible for tutoring annually. These students are often enrolled to meet a GE requirement. We offer a variety of student supports to meet their unique needs.

Drop-In Tutoring

Used like a library study space with the added benefit of a tutor nearby.

Offered for both math and statistics.

Multiple large rooms, each dedicated to specific courses.

Appointment Tutoring

Student-tutor pairings meet weekly to provide structure and mentorship.

Offered for math courses including advanced courses such as linear algebra and differential equations.

Small Group Workshops

Students learn problem-solving strategies in an active learning environment.

Focus on review and synthesis of common difficult topics prior to midterms.

MSLC TUTORING: BY THE NUMBERS

All Tutoring

Data not available for Statistics online tutoring.

22,211 Total student visits and appointments
Each student is counted once for each time they visit or have an appointment.

3,375 Distinct students

By Type of Tutoring

Math Drop-In Tutoring

14,336 Total student visits

2,702 Distinct students

Statistics Tutoring

601 Total student visits

228 Distinct students

Math Appointment Tutoring

7,275 Total appointments

823 Distinct students

STUDENT FEEDBACK ON TUTORING

Quotes from students when asked to share their positive tutoring experiences

I want to thank my tutor for being patient with me as this was a difficult class for me and he was always willing to re explain topics that I had a hard time remembering.

I feel like I have able to understand the material of the class. My performance on exams for this class improved significantly after starting tutoring.

I love one on one tutoring. I find it that I am able to ask more of the "dumb" questions in this setting. MSLC tutors never make me feel dumb when I don't understand a concept. Additionally, I love forming a personal relationship with my tutors. I find it awesome that sometimes they will help me with work outside of their tutoring subject and also offer advice about classes.

I really enjoy using it as a place to work on assignments with my classmates. It has connected me more with me class.

After going to the MSLC to complete the practice midterms, my midterm scores have gone up by more than 10 points.

The MSLC has benefited me by providing me with a helpful and calm place to complete my work. Whether I need active assistance or simply need a place to work, the workers and tutors there are always ready to tackle any question and guide me towards a better understanding. I have only benefited from the MSLC tutoring and appreciate all of the work they have done to give back to students.

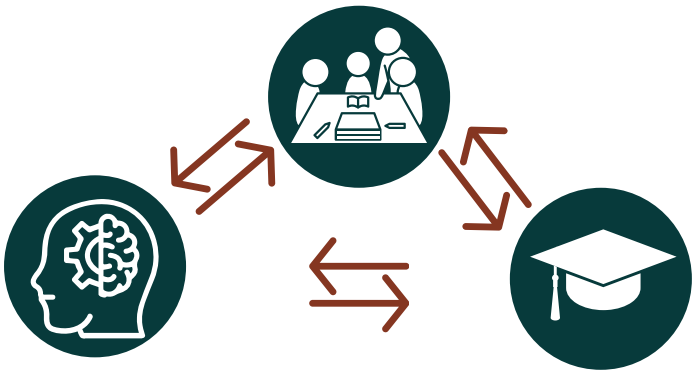
LEARNING ASSISTANTS:

PEER INSTRUCTIONAL SUPPORT IN ACTIVE LEARNING CLASSROOMS

The LA Model

Practice

- Facilitate group work and hold office hours.
- Students are more likely to ask questions and admit confusion to someone who feels relatable.
- As recent learners themselves, LAs understand common misconceptions and can explain concepts in accessible language.



Content

- Meet weekly with instructor to reflect on and plan class sessions.
- Share insights on students' current understanding.

Pedagogy

- MSLC tutors who have undergone rigorous pedagogical training.
- Ongoing training to extend skills to group interactions and reflect on practices.

Student Feedback

- I really love the learning assistants and think that they are doing a wonderful job. I really appreciate how they give us pointers based on problems they encountered when they took the course. It makes me feel very understood.
- I really like how sweet and vigilant they are. They're able to notice when students are struggling and also approach with a open ended question to let students have room to think without being under pressure.
- I've really appreciated the assistants and they've made the class infinitely more engaging and easier to follow along with!

INSTRUCTOR PARTNERSHIPS

Krystal Taylor, Assistant Professor in the Math Department

Krystal is an active mathematics researcher in harmonic analysis, geometric measure theory, and fractal geometry with a passion for helping graduate students and early career mathematicians advance in their field. She has taught a wide variety of undergraduate and graduate courses. Recently, she has been teaching an online Math 2568: Linear Algebra where she has demonstrated her dedication to the student experience through personalized support, community building, and continuous course improvement.

The MSLC has been an invaluable partner for my online Linear Algebra course. Their prompt and consistent assistance in improving online testing, enhancing the student experience, and navigating student requests has always been delivered with kindness and a genuinely personal touch. When technical issues arose, I felt as though I had a trusted colleague to call upon - someone who knew my course and cared about my success as an instructor. Time and again, the MSLC staff went above and beyond what was required, and their thoughtful, human-centered support has made a meaningful difference in both my teaching and my students' learning experience.

TEACHING AT SCALE:

MSLC SUPPORT OF LARGE COURSE COORDINATORS

20 UNIQUE COURSES

184 UNIQUE INSTRUCTORS

14K NON-UNIQUE STUDENTS

The MSLC works closely with coordinators of large first-year math courses to enable teaching at scale, supporting all aspects of course delivery, including: course design, pedagogy, and instructional technologies.

What's new this year:

- Led the expanded Math Dept Service Instruction Committee
- Piloted Simple Syllabus and provided implementation suggestions
- Implemented new online lessons in Calculus 1 & 2 with improved accessibility, functionality, and a more modern feel

Instructor Professional Development

The MSLC provides various professional development opportunities to course coordinators and all instructors in the Math Department with the goal of building communities of practice in the department, including:

Math Education Reading Group

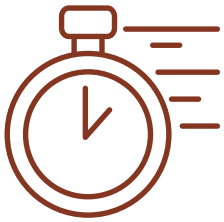
TA Training Invited Guests

New Instructor Orientation

COURSE DESIGN SPOTLIGHT

Corequisite Course for College Algebra

The new corequisite course stems from a university-wide Pre-College Math Initiative. The course is being created to provide a pathway for students to enroll in a credit-bearing quantitative course their first semester at OSU. The course will be piloted on three campuses in autumn. The MSLC has played a pivotal role in coordinating logistics and course design.



The course will allow some students with placement level below credit-bearing courses to instead enroll in College Algebra, provided they also enroll in the corequisite course. The corequisite course meets one day a week to review just-in-time content for the upcoming College Algebra topics.

Active Learning

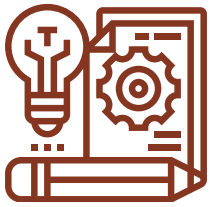
Designed to approach content in new ways.

Students engage in problem solving with their peers.

Embedded study strategy discussions.

Coordinated Care

Instructor carefully monitors students' progress and works with their advising team to refer students to additional supports, as needed.



Adaptive to the Individual

Time out of class is spent working in an adaptive learning system that lets students chose topics to learn based on their current understanding.

ACCESSIBILITY SUPPORT

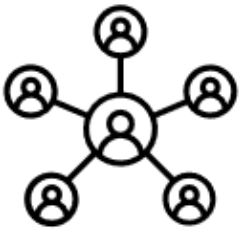
The MSLC led for the effort for math instructors to discover, document, and communicate ways for math instructors to meet the new digital accessibility requirements required under Title II of the Americans with Disabilities Act.

Math-Specific Recommendations

- How-To Guides
- LaTeX Templates
- Workshops
- Office Hours
- Individual Consultations

Collaboration Across and Beyond OSU

- Math Dept Undergraduate Committee
- OSU STEM Accessibility Working Group
- ASC Accessibility
- ASC Office of Distance Education
- OSU Libraries
- OSU OTDI
- OSU College of Engineering
- Other Colleges and University Math Departments



Our Math Accessibility Recommendations have been viewed over 500 times in the last five months.

SCHOLARSHIP AND SERVICE

HHMI GRANT

Served as project manager and instructional designer on the math department portion of OSU HHMI Driving Change grant to improve the experience and retention of first-year STEM students.

XIMERA DOE GRANT

Served as data reporting specialists and instructional technology consultants on a DOE grant to improve OSU's open-source math textbook and homework system.

YOUNG SCHOLARS PROGRAM

Worked with YSP to provide math enrichment for the Samuel DuBois Cook Summer Academy and Early Arrival Program.

PUBLICATIONS ON TUTORING

Examining the impact of AI on math tutoring centers across the nation to better understand directors' and tutors' perspectives on the changing role of tutoring centers.

LEADERSHIP IN LEARNING CENTERS

Led professional networking group of leaders in academic support units across OSU, including regional campuses. Participated in various national professional networks of math learning center leaders.

COLLABORATION ACROSS OSU

-Arts and Sciences Office of Distance Education
-Office of Technology and Digital Innovations
-OSU Academy
-College of Engineering Community, Access, Retention and Empowerment Office

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