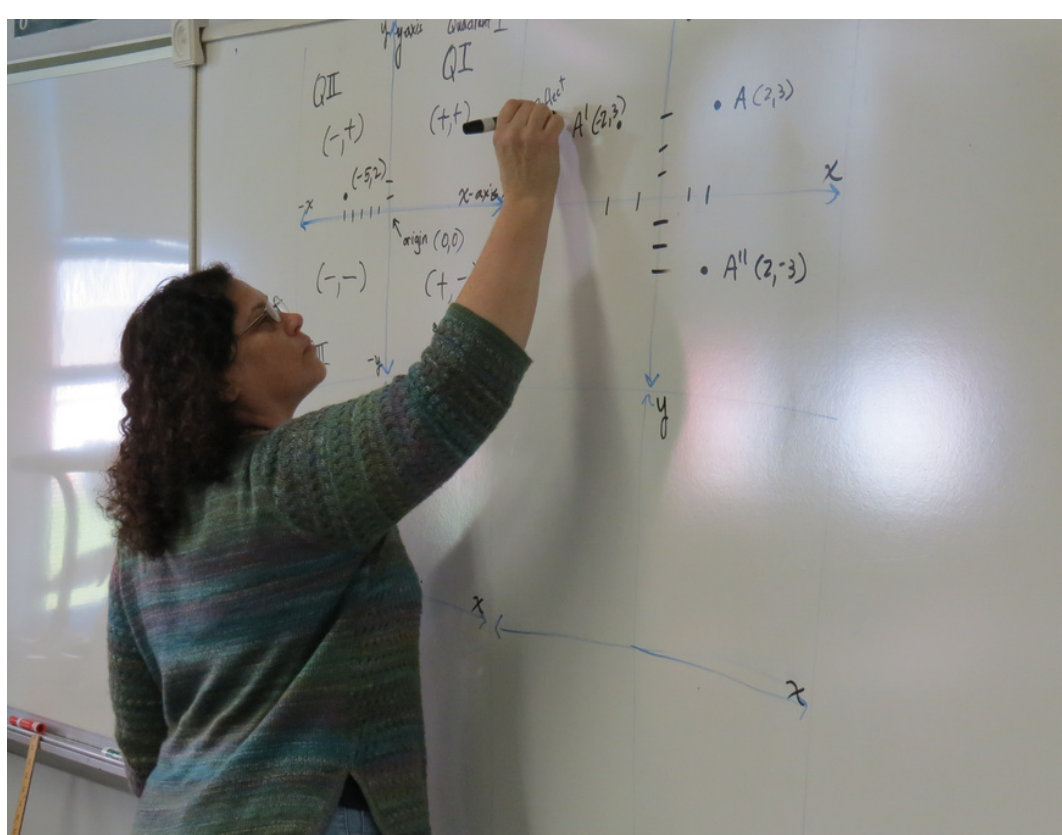




# POSITION PROFILE:

## Mathematics Faculty







## About the Maine School of Science and Mathematics

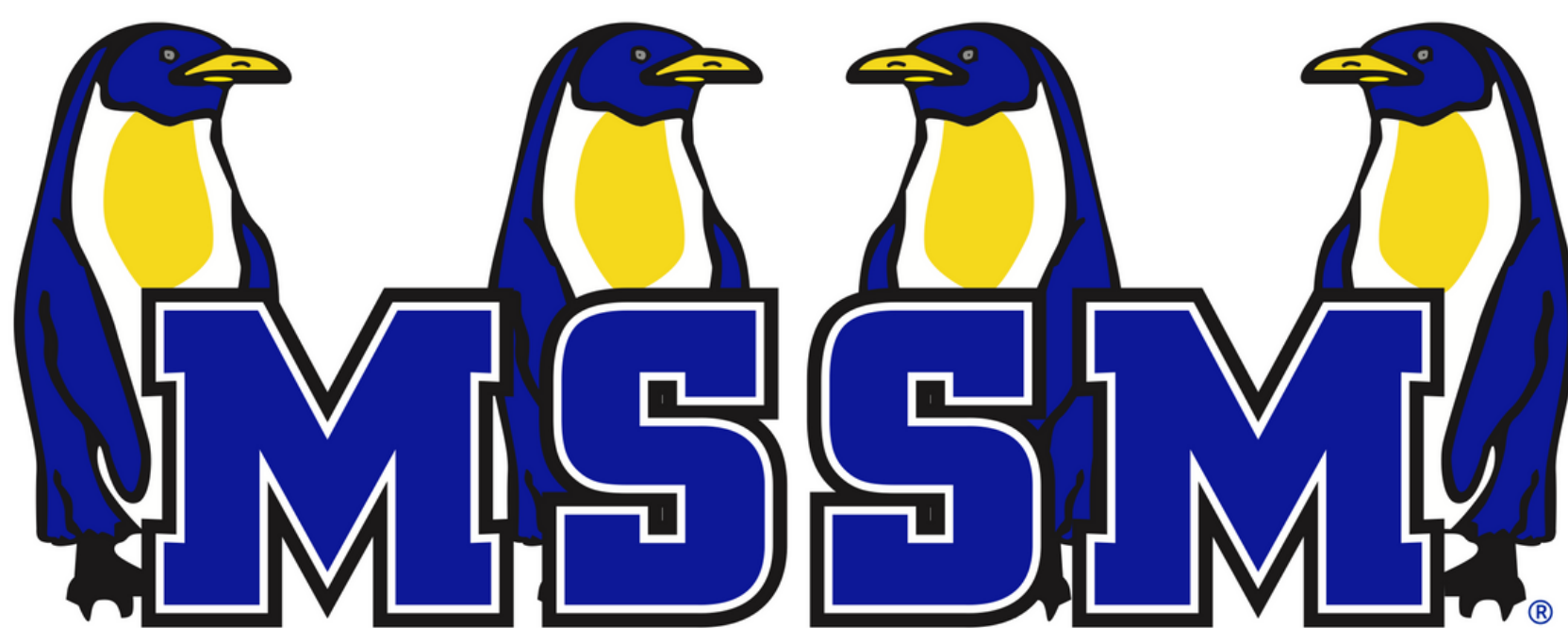
The Maine School of Science and Mathematics (MSSM) brings together and helps a group of Maine's most academically motivated high school students become innovative, well-rounded scholars with the ability to develop, investigate, and communicate critical ideas that improve the human condition and benefit the state of Maine. The school builds and shares a rigorous curriculum that exceeds state educational standards while emphasizing connections between science, mathematics, and the humanities. MSSM extends its mission by fostering a statewide, year-round community of innovative learners that includes many of Maine's students, educators, and the general public.



MSSM is a public residential magnet high school chartered and funded by the Maine State Legislature. A living/learning community committed to the pursuit of academic excellence, MSSM provides an extensive and challenging curriculum in science, mathematics, technology, and the arts and humanities.

The Maine School of Science and Mathematics opened with a pioneer class in 1995. At that time, it was only the eleventh statewide residential magnet school specializing in mathematics and science education in the United States and the only school of its kind in New England. Both remain true today.

While MSSM students come from diverse backgrounds, one common purpose prevails—the enthusiasm, desire, and motivation for, as well as the commitment to, learning. The challenging curriculum and stimulating environment create an ongoing learning experience with students working, studying, and socializing with classmates who share similar interests and goals. MSSM was created by the 116th Maine Legislature in 1995 and is a member of the National Consortium of Secondary STEM Schools. In 2019, U.S. News and World Reports recognized MSSM as the #2 ranked public high school in the United States.







# THE POSITION

As a member of MSSM's Mathematics Department, you will join talented and dedicated colleagues in delivering high-quality math courses for all students, as well as provide support, enrichment and extracurricular opportunities. MSSM students are intelligent, creative, and engaged, hold high standards for their teachers and school, and expect a significant voice within the community. Engaging fully with our unique student body is a privilege and expectation.

## Specific Responsibilities:

- Teach a full-time (4/4) course load in the Department of Mathematics at MSSM, typically a mixture of foundational (Algebra II, Precalculus) and advanced (dual-credit or Advanced Placement) courses;
- Participate fully in MSSM's living/learning community by attending campus events, offering office hours, attending meetings, and being available to meet the needs of our students and community;
- Contribute to Math Team, mathematics competitions, guest lectures, field trips, and other department/school activities;
- Serve as an advisor to a small group of students, acting as the primary point of contact between advisees' parents and the school;
- Design and teach a January Term course (two weeks immersive learning), or contribute similarly to the J-Term program by coordinating internships, etc.;
- Act as a student club/organization advisor and/or chaperone (student activities include VEX Robotics, Student Senate, Youth in Government, Girl Up!, and many others; athletic coaching duties may be substituted);
- Please note that while MSSM is a residential school, dorm duty or other residential life contributions are not expected of teaching faculty.

## About MSSM's Mathematics Program:

MSSM attracts strong mathematics students from across the state and world. All students take at least one math course while school is in session, chosen from a variety of year-long and semester courses. Our program of studies begins with Algebra II & Trigonometry, includes several options for Precalculus and Calculus, and extends to advanced courses including AP Statistics, Multivariable Calculus, Linear Algebra, and Differential Equations. With student ability and interest, the department offers advanced electives on occasion, which have included Number Theory, Applied Combinatorics, Data Science, and Real Analysis in past years. The math department also leads Math Team (our most popular extracurricular activity), and hosts a variety of other math competitions, including the AMC-10/12, AIME, and NEML contests.



# Qualifications

- Master's Degree in mathematics, computer science, engineering, or a related, mathematics-intensive field.
- A proven track record of effective and inspiring teaching, preferably with advanced high school or undergraduate students.
- Strong organizational, communication, and interpersonal skills.
- Teacher certification is valued (but not required) of MSSM faculty members.

# Key Competencies

- Ability to develop and deliver courses using effective and innovative practices in pedagogy, technology, and classroom management. Applicant should be willing and able to use appropriate educational technology to engage students in learning, in both face-to-face and remote settings.
- Willingness to support the intellectual, emotional, and social growth of students, a responsibility that goes beyond the expectations at most traditional high school or colleges and requires a full commitment to participate in the MSSM Community.
- Commitment to diversity, equity, and inclusion in all forms, as well as specific sensitivity to the unique, multi-dimensional identities of our student body.
- Desire to engage fully in building a student-centered culture of collegiality, support, and respect.

# Other Responsibilities & Expectations

- Attend Team Meetings, Faculty Meetings, All-School Meetings, Department Meeting, and other events;
- Regularly monitor, assess, and communicate students' learning progress, providing timely and frequent feedback to students, parents, and advisors;
- Participate fully in the community, attending school events and serving as a supplementary chaperone/driver as needed;
- Maintain up-to-date knowledge and practice of your academic discipline and best practices in pedagogy;
- Accommodate and support students with disabilities, English Language Learners, and those requiring short-term leave from campus;
- Effect timely responses to student needs and student/parent communication;
- Meet all academic and professional deadlines;
- Attend required trainings and professional development;
- Demonstrate a high level of professionalism in public image and communication;
- Promote a collegial atmosphere of support;
- Maintain a publicly-visible digital calendar;
- Give, solicit, and receive feedback to/from colleagues, supervisors, students, and families;
- Serve on departmental, faculty, and school-wide committees;
- Write recommendation letters for students as requested;
- Act as a Mandated Reporter of suspected child neglect or abuse;
- Follow the school's philosophy, policies, and procedures;
- Comply with all Federal, State, and Local laws in professional and personal life.





# WHY TEACH AT MSSM?

- **Advanced & Accelerated Curriculum:** Virtually all of MSSM's courses are taught at an undergraduate-equivalent level and pace, allowing faculty members to intellectually engage with advanced students around compelling questions and deep topics.
- **Collaboration:** Opportunity to collaborate with inspiring, multi-talented, professional colleagues across departments.
- **Academic Freedom:** Curricular freedom, no state standardized testing, and the support for faculty to pursue professional development and original research.
- **Motivated, Talented Students:** MSSM students pass through a selective admissions process and have persuaded their families they are ready to leave home and live independently as high school students. MSSM students are talented, engaged, and creative, and are a joy to work with.
- **Small Class Size:** MSSM average section size is 12 students, with most classes capped at 16.
- **Free Campus-Adjacent Housing:** MSSM provides free housing (outside of utility expenses) to faculty and staff as available. At the time of this posting we have multiple vacancies available for new employees. Our single-family, multi-bedroom, garaged homes are all within 1/8 mile of the school building. Maintenance, including mowing and snow plowing, is provided by the school.
- **Educational Opportunities:** MSSM faculty receive fee waivers for dependents wishing to attend MSSM. Professional development, field trips, conferences, and travel are frequently supported by the MSSM Foundation.
- **Work/Life Balance:** With a 4/4 teaching load and small classes, MSSM faculty are able to balance professional and personal life. Outside of scheduled classes, meetings, and office hours, faculty members are free to come and go from campus and manage their own time.
- **Family-Friendly Workplace:** Partners, dependents, and other family members are welcome on campus, and MSSM provides a range of benefit packages to support our employees and their families.
- **Focus on Student and Employee Wellness & Health:** All MSSM students and employees are valued members of the living/learning community, whose well-being and happiness are important to the school.
- **Campus Facilities:** Access to our makerspace, greenhouse, Olympic-sized indoor pool, fitness facilities, playing fields, two gymnasiums, and trails.
- **Quality of Life:** Close, professional, and supportive school community, low cost of living, access to natural resources and outdoor recreation, and a safe and friendly community.







## How to Apply

Applications should be submitted electronically to Tracy Moore, Director of Human Resources, at [moore.tracy@mssm.org](mailto:moore.tracy@mssm.org). A complete application consists of the following:

- MSSM Teaching Application (<https://www.mssm.org/about/employment-opportunities>)
- Cover Letter
- Curriculum Vitae/Resume
- Statement of Educational Philosophy
- 3 Letters of Recommendation

Candidates may also include sample syllabi, original research, or other supplemental materials.

Final candidates are subject to criminal and sex offender background checks. Some vacancies may also require a motor vehicle and/or credit check. If the highest degree is from an institution outside of the U.S., final candidates are required to have their degree equivalency verified at [www.wes.org](http://www.wes.org) or equivalent service. Federal law requires all employers to verify the identity and employment eligibility of all persons hired to work in the United States.

MSSM is a diverse and inclusive community, and does not discriminate on the basis of race, color, age, sex, sexual orientation, gender identity or expression, religion, ancestry, national origin, genetic information, or disability in its programs, activities, employment, or advancement.

If you have questions, please contact Tracy Moore, Director of Human Resources, at (207) 325-3303 or email [moore.tracy@mssm.org](mailto:moore.tracy@mssm.org).

