

Academic year 2024-2025

MS in Mathematics - MS-MSMH Learning Outcomes

Written communication - content knowledge **MET**

Students must demonstrate mastery in at least 3 areas by the time they graduate.

MEASURES	RESULTS	ACTIONS
content knowledge - algebra Direct - Portfolio <i>Modern Algebra: MATH 5320</i> Target 85% of students should score a 7 or higher on the written communication rubric for a sample problem taken from the final exam.	<i>No results have been added.</i>	<i>No actions have been added.</i>
content knowledge - topology Direct - Portfolio <i>Topology: MATH 5340</i> Target 85% of students will score a 7 or higher on the written communication rubric for a sample problem taken from the final exam.	MET Analysis We had one spring 2025 graduate, who scored an 9 on this rubric.	Gather Additional Data Not Started Because of graduating only one student this spring, we want to continue to measure this outcome for the next cohort of students. Recommended Due Date: 05/31/2025
content knowledge - analysis Direct - Portfolio <i>Real Variables: MATH 5310</i> Target 85% of students will score a 7 or higher on the written communication rubric for a sample problem taken from the final exam.	MET Analysis We had one spring 2025 graduate, who scored an 8 on this rubric.	Gather Additional Data Not Started Because of graduating only one student this spring, we want to continue to measure this outcome for the next cohort of students Recommended Due Date: 05/31/2026
content knowledge - complex variables Direct - Portfolio <i>Complex Variables: MATH 5312</i> Target 85% of students will score a 7 or higher on the written communication rubric for a sample problem taken from the final exam.	MET Analysis We had one spring 2025 graduate, who scored an 9 on this rubric.	Gather Additional Data Not Started Because of graduating only one student this spring, we want to continue to measure this outcome for the next cohort of students Recommended Due Date: 05/31/2025

Conclusion

Our one graduate successfully met the requirement in 3 areas, so we have successfully met this goal. We will continue to gather data for our next cohort because the sample size was small.

Oral communication - content knowledge **NOT MET**

MEASURES	RESULTS	ACTIONS
oral communication - analysis Direct - Presentation <i>Real Variables: MATH 5310</i> Target 85% of students will score 7 or higher on the rubric for oral presentations	NOT MET Analysis This is a new requirement and our one graduating student took this course before this requirement was instated.	Gather Additional Data IN PROGRESS New requirement - will measure in the future Recommended Due Date: 05/31/2025
oral communication - algebra Direct - Presentation <i>Modern Algebra: MATH 5320</i> Target 85% of students will earn a 7 or higher on the oral communication rubric for at least one presentation in this course.	NOT MET Analysis Our one graduating student took this course prior to the implementation of this requirement.	Gather Additional Data IN PROGRESS This course will run in fall 2025, and this new requirement will be measured for continuing graduate students. Recommended Due Date: 05/31/2025

Conclusion

This goal will be measured starting in Fall 2025 - our graduating student took these courses before the implementation of this goal.

Computational proficiency **NOT MET**

MEASURES	RESULTS	ACTIONS
computational proficiency - Math 5312 An assignment will be given in which students need to apply these techniques of complex integration. Direct - Assignment <i>Complex Variables: MATH 5312</i> Target 85% of students will successfully be able to compute integrals using complex techniques.	NOT MET Analysis Of the four students enrolled in Math 5312 in spring 2025, only 50% met the requirement for computational proficiency by scoring a 7 or higher on the computational proficiency rubric.	Gather Additional Data IN PROGRESS Gather more data when this course is next offered (in Fall 2026) Recommended Due Date: 05/31/2027
computational proficiency - elective Direct - Assignment	NOT MET Analysis	Gather Additional Data Not Started This will be measured beginning in Fall 2025.

Target At least 85% of students completing a computational elective course will show proficiency on computational problems. They will score a 7 or higher on the computational proficiency rubric on a sample problem collected from their elective class.	This will be measured beginning in Fall 2025.	Recommended Due Date: 05/31/2025
--	---	----------------------------------

Conclusion

We will continue to gather data for computational proficiency from appropriate courses and will re-evaluate Math 5312 when it is next offered.

Thesis MET

Students will complete a successful, well-written thesis with a successful, well-articulated thesis oral defense.

MEASURES	RESULTS	ACTIONS
Thesis - written The student's thesis will be scored by their faculty committee on the rubric for written expository and mathematical work. Direct - Other <i>Thesis: MATH 5391</i> Target At least 85% of students completing a thesis will score 7 or higher on the rubric for written expository and mathematical work.	MET Analysis Our one graduating student scored a 9 on the rubric for their written thesis.	Gather Additional Data IN PROGRESS Continue to gather data for a larger student sample size. Recommended Due Date: 05/31/2026
Thesis - oral Students will demonstrate excellent oral exposition skills by scoring a 7 or higher on the oral presentation rubric during their oral thesis defense as scored by their committee and any other faculty attending the defense. Direct - Presentation <i>Thesis: MATH 5391</i> Target At least 85% of students will score a 7 or higher on the oral defense rubric.	MET Analysis Our one graduating student gave an excellent oral defense, scoring a 9 on the rubric.	Gather Additional Data IN PROGRESS We want to gather more data since we only had one student graduate this spring. Recommended Due Date: 05/31/2027

Conclusion

We successful met this goal, but only had one student graduate so we want to continue to measure.

MS in Mathematics - MS-MSMH Success Outcomes

Program satisfaction and efficacy

MEASURES	RESULTS	ACTIONS
<p>Exit survey</p> <p>The exit survey will allow us to gather information about the efficacy of the program and the satisfaction of the students with the program as well as to gather information about their future plans.</p> <p>Indirect - Survey</p> <p>Target</p> <p>80% of the students who complete the MS program will respond to an exit survey.</p>	<p>No results have been added.</p>	<p>No actions have been added.</p>

Prepare students for jobs or further graduate study in a related field

70% of our students will continue in graduate school or have a job within 6 months of completing their MS in CQM.

MEASURES
<p>No measures have been added.</p>