Expected Outcomes: Mathematical knowledge and understanding

Graduates should have an adequate understanding of a range of advanced mathematical subjects relevant to their area of specialization and be able to comprehend related technical content.

Assessment methods

**Method**: Evaluation by advisory committees

Each student's mathematical knowledge and understanding, career preparedness, and mathematical reasoning, problem-solving, and communication skills will be individually assessed by the members of the student's advisory committee.

**Findings**:

In each of the 7 individual evaluations filed, the student’s mathematical knowledge and understanding was judged at least satisfactory (3 (43%) excellent, 3 (43%) good, 1 (14%) satisfactory).

**How did you use findings for improvement?**

More detailed and more meaningful data were obtained. Advisors will be encouraged to ensure that students' knowledge and understanding is at least good.

**Additional comments**:

Faculty need to be educated about the purpose of this process, in order to improve ratings return rates.

**Method**: Program evaluation by graduating students

Graduating students will be encouraged to complete exit surveys to assess their experience in the master's program and, in particular, their level of mathematical knowledge, problem-solving and communication skills, and career preparedness.

**Findings**:

No student graduating with a Master's degree in Applied Mathematics completed the exit survey.

**How did you use findings for improvement?**

A revised version of the exit survey is under development, with the goal of collecting more meaningful data with less effort.

**Additional comments**:

Return rates need to be improved!

Expected Outcomes: Mathematical reasoning and problem-solving skills

With proper guidance, graduates should be able to apply advanced mathematical techniques and rigorous logical reasoning to prove theorems, implement algorithms, or analyze mathematical models.
Assessment methods

Method: Evaluation by advisory committees

Each student's mathematical knowledge and understanding, career preparedness, and mathematical reasoning, problem-solving, and communication skills will be individually assessed by the members of the student’s advisory committee.

Findings:

In each of the 7 individual evaluations filed, the student’s mathematical reasoning and problem-solving skills were judged at least satisfactory (2 (28%) excellent, 5 (72%) good).

How did you use findings for improvement?

More detailed and more meaningful data were obtained. Advisors will be encouraged to ensure that students’ problem-solving skills are at least good.

Additional comments:

 Faculty need to be educated about the purpose of this process, in order to improve ratings return rates.

Method: Program evaluation by graduating students

Graduating students will be encouraged to complete exit surveys to assess their experience in the master’s program and, in particular, their level of mathematical knowledge, problem-solving and communication skills, and career preparedness.

Findings:

No student graduating with a Master's degree in Applied Mathematics completed the exit survey.

How did you use findings for improvement?

A revised version of the exit survey is under development, with the goal of collecting more meaningful data with less effort.

Additional comments:

Return rates need to be improved!

Expected Outcomes: Mathematical communication skills

Graduates should be able to communicate advanced mathematical concepts and technical material, both orally and in writing.

Assessment methods

Method: Evaluation by advisory committees

Each student’s mathematical knowledge and understanding, career preparedness, and mathematical reasoning, problem-solving, and communication skills will be individually assessed by the members of the student’s advisory committee.

Findings:

In each of the 7 individual evaluations filed, the student’s mathematical communication skills were judged at least satisfactory (5 (72%) excellent, 2 (28%) good in oral communication).
How did you use findings for improvement?

More detailed and more meaningful data were obtained. Advisors will be encouraged to ensure that students’ are excellent.

Additional comments:

Faculty need to be educated about the purpose of this process, in order to improve ratings return rates.

Method: Program evaluation by graduating students

Graduating students will be encouraged to complete exit surveys to assess their experience in the master’s program and, in particular, their level of mathematical knowledge, problem-solving and communication skills, and career preparedness.

Findings:

No student graduating with a Master’s degree in Applied Mathematics completed the exit survey.

How did you use findings for improvement?

A revised version of the exit survey is under development, with the goal of collecting more meaningful data with less effort.

Additional comments:

Return rates need to be improved!

Expected Outcomes: Career preparedness

Graduates should have the mathematical knowledge and problem-solving skills appropriate for a range of professional careers or further graduate studies.

Assessment methods

Method: Evaluation by advisory committees

Each student’s mathematical knowledge and understanding, career preparedness, and mathematical reasoning, problem-solving, and communication skills will be individually assessed by the members of the student’s advisory committee.

Findings:

In each of the 7 individual evaluations filed, the student’s career preparedness was judged at least satisfactory (4 (57%) excellent, 3 (43%) good).

How did you use findings for improvement?

More detailed and more meaningful data were obtained. Advisors will be encouraged to maintain high levels of career readiness.

Additional comments:

Faculty need to be educated about the purpose of this process, in order to improve ratings return rates.

Method: Program evaluation by graduating students

Graduating students will be encouraged to complete exit surveys to assess their experience in the
master's program and, in particular, their level of mathematical knowledge, problem-solving and communication skills, and career preparedness.

Findings:

- No student graduating with a Master's degree in Applied Mathematics completed the exit survey.

How did you use findings for improvement?

- A revised version of the exit survey is under development, with the goal of collecting more meaningful data with less effort.

Additional comments:

- Return rates need to be improved!