

**GRADUATE ASSESSMENT REPORT TEMPLATE 2018-19**

**College: Arts & Sciences** **Department/School: Mathematics**

**Program: MS** **Degree Level: Masters**

**Academic Year of Report:** 2018-19 **Date Range of Reported Data: 2016-2018**

**Person Preparing the Report:** Andrew W Swift

1. **Degree Program & Common Graduate Student Learning Outcomes (SLOs)**
2. List degree program SLOs. For each, SLO, indicate the highest cognitive level and Common Graduate Program SLO it represents. To accommodate more than four SLOs, add rows as needed. The Common Graduate SLOs for master’s programs (adopted 2/2017) are listed below.

Students shall demonstrate at the graduate level:

1. Mastery of discipline content

2. Proficiency in analyzing, evaluating and synthesizing information

3. Effective oral and written communication

4. Knowledge of discipline’s ethics and standards

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| **Student Learning Outcomes** | **Bloom’s Taxonomy**  **Cognitive Level**  *(check highest level*  *represented in the SLO)* | **Common Graduate**  **Program SLOs**  *(check as many as necessary)* |
| **SLO 1:** Mastery of discipline content | Knowledge  Analysis  Comprehension  Synthesis  Application  Evaluation | 1  3  2  4  Not applicable for SLO |
| **SLO 2:** Proficiency in analyzing, evaluating, and synthesizing information | Knowledge  Analysis  Comprehension  Synthesis  Application  Evaluation | 1  3  2  4  Not applicable for SLO |
| **SLO 3:** Effective oral and written communication | Knowledge  Analysis  Comprehension  Synthesis  Application  Evaluation | 1  3  2  4  Not applicable for SLO |
| **SLO 4:** Demonstrate knowledge of discipline’s ethics and standards | Knowledge  Analysis  Comprehension  Synthesis  Application  Evaluation | 1  3  2  4  Not applicable for SLO |

1. SLOs reflect professional standards as dictated by an accreditation or other external body. Yes  No
2. Describe how stakeholders are involved in the creation and/or review of SLOs as well as how SLOs are communicated to stakeholders.

*UPDATE (April 2019): SLOs were added to the department website during the Spring 2019 Semester: https://www.unomaha.edu/college-of-arts-and-sciences/mathematics/academics/graduate.php*

*There is a motion scheduled for the April 15th meeting of the department’s graduate committee which would require the inclusion of SLOs on each class syllabus distributed to students at the beginning of each course.*

**II. Assessment Methods**

A. Complete a table for each SLO. If an SLO is assessed by more than one measure, complete tables for each measure. Duplicate the table as needed to accommodate the number of measures. Attach copies of rubrics.

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| **SLO 1:** | |
| 1. **Title of the Measure: Project (Written Report and Oral Presentation)** | |
| 1. **Describe How the Measure Aligns to the SLO**   In completing a project, the student must demonstrate extensive knowledge of the subject material. | |
| 1. **Domain**   *Check all that apply* | Examination  Product  Performance |
| 1. **Type** | Direct Measure  Indirect Measure |
| 1. **Point in Program Assessment is Administered** | In final term of program  In final year of program  Where does the assessment occur: |
| 1. **Population Measured** | All students  Sample of students - Describe below  Students can choose either the project option or the comprehensive exam option. |
| 1. **Frequency of**   **Data Collection** | Once/semester  Once/year  Other - Describe below |
| 1. **Proficiency**   **Threshold** | *Describe: Currently graded as Pass/Fail.* |
| 1. **Program**   **Proficiency**  **Target** | *Describe: 95%* |
| **SLO 1:** | |
| 1. **Title of the Measure: Comprehensive Exam** | |
| 1. **Describe How the Measure Aligns to the SLO**   In taking and passing a comprehensive exam, a student mustdemonstrate extensive knowledge of the subject material. | |
| 1. **Domain**   *Check all that apply* | Examination  Product  Performance |
| 1. **Type** | Direct Measure  Indirect Measure |
| 1. **Point in Program Assessment is Administered** | In final term of program  In final year of program  Where does the assessment occur: |
| 1. **Population Measured** | All students  Sample of students - Describe below  Students can choose either the project option or the comprehensive exam option. |
| 1. **Frequency of**   **Data Collection** | Once/semester  Once/year  Other - Describe below |
| 1. **Proficiency**   **Threshold** | *Describe: 70%* |
| 1. **Program Proficiency Target** | *Describe: 95%* |
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| **SLO 2:** | |
| 1. **Title of the Measure: Project (Written Report and Oral Presentation)** | |
| 1. **Describe How the Measure Aligns to the SLO**   In completing a project, the student must demonstrate the ability to analyze, synthesize, and evaluate information. | |
| 1. **Domain**   *Check all that apply* | Examination  Product  Performance |
| 1. **Type** | Direct Measure  Indirect Measure |
| 1. **Point in Program Assessment is Administered** | In final term of program  In final year of program  Where does the assessment occur: |
| 1. **Population Measured** | All students  Sample of students - Describe below  Students can choose either the project option or the comprehensive exam option. |
| 1. **Frequency of**   **Data Collection** | Once/semester  Once/year  Other - Describe below |
| 1. **Proficiency**   **Threshold** | *Describe: Currently graded as Pass/Fail.* |
| 1. **Program**   **Proficiency**  **Target** | *Describe: 95%* |
| **SLO 2:** | |
| 1. **Title of the Measure: Comprehensive Exam** | |
| 1. **Describe How the Measure Aligns to the SLO**   In taking a passing a comprehensive exam, , the student must demonstrate the ability to analyze, synthesize, and evaluate information. | |
| 1. **Domain**   *Check all that apply* | Examination  Product  Performance |
| 1. **Type** | Direct Measure  Indirect Measure |
| 1. **Point in Program Assessment is Administered** | In final term of program  In final year of program  Where does the assessment occur: |
| 1. **Population Measured** | All students  Sample of students - Describe below  Students can choose either the project option or the comprehensive exam option. |
| 1. **Frequency of**   **Data Collection** | Once/semester  Once/year  Other - Describe below |
| 1. **Proficiency**   **Threshold** | *Describe: 70%* |
| 1. **Program**   **Proficiency**  **Target** | *Describe: 95%* |
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| **SLO 3:** | |
| 1. **Title of the Measure: Project (Written Report and Oral Presentation)** | |
| 1. **Describe How the Measure Aligns to the SLO**   Since completing a project requires both a written document and a oral defense, and the pass/fail grade is assigned primarily on the basis of the report and defense, a student is required to demonstrate effective oeal and written communication in order to obtain a Pass. | |
| 1. **Domain**   *Check all that apply* | Examination  Product  Performance |
| 1. **Type** | Direct Measure  Indirect Measure |
| 1. **Point in Program Assessment is Administered** | In final term of program  In final year of program  Where does the assessment occur: |
| 1. **Population Measured** | All students  Sample of students - Describe below  Students can choose either the project option or the comprehensive exam option. |
| 1. **Frequency of Data Collection** | Once/semester  Once/year  Other - Describe below |
| 1. **Proficiency ~~T~~hreshold** | *Describe: Currently graded as Pass/Fail.* |
| 1. **Program**   **Proficiency**  **Target** | *Describe: 95%* |
|  | |

B. Describe any indirect measures or additional data the program uses to complement the direct measures of SLOs.

None, although we plan on looking at the UNO graduate student survey in the future.

**III. Data Collection and Analysis**

A. Results Table – Report results for each SLO. If an SLO was assessed by multiple measures, report data for each measure. Add rows as needed to accommodate the number of SLOs and measures.

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| --- | --- | --- | --- |
|  | **Data Collection Date Range** | **Number of Students Assessed** | **Percentage of Students who Met/Exceeded Threshold**  **Proficiency** |
| **SLO 1 – Measure one** | *2016*  *2017*  *2018* | *7*  *7*  *10* | *100%*  *100%*  *100%* |
| **SLO 1 – Measure two**  *(if applicable)* | *2016*  *2017*  *2018* | *8*  *6*  *3* | *100%*  *100%*  *100%* |
| **SLO 2 – Measure one** | *2016*  *2017*  *2018* | *7*  *7*  *10* | *100%*  *100%*  *100%* |
| **SLO 2 – Measure two**  *(if applicable)* | *2016*  *2017*  *2018* | *8*  *6*  *3* | *100%*  *100%*  *100%* |
| **SLO 3 – Measure one** | *2016*  *2017*  *2018* | *7*  *7*  *10* | *100%*  *100%*  *100%* |
| ***SLO 3 – Measure two***  *(if applicable)* |  |  |  |
| **SLO 4 – Measure one** |  |  |  |
| **SLO 4 – Measure two**  *(if applicable)* |  |  |  |
| Note: To maintain student confidentiality, programs with low enrollments can aggregate data across multiple cycles. Programs with adequate enrollments to maintain student confidentiality should report three or more individual cycles (by semesters or academic year) of data. | | | |

1. SLO Status Table – Based on the results reported in the above table and referring to the program proficiency target, indicate the current status of program SLOs as Met, Partially Met, Not Met, or Unknown. Add rows as needed to accommodate additional SLOs.

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| --- | --- |
| SLO 1 | Met  Partially Met  Not Met  Unknown |
| SLO 2 | Met  Partially Met  Not Met  Unknown |
| SLO 3 | Met  Partially Met  Not Met  Unknown |
| SLO 4 | Met  Partially Met  Not Met  Unknown |

C. Describe how results are communicated within the program. Address each SLO.

Results are posted on the internal department repository.

**IV. Decisions and Actions**

Briefly describe specific decisions and actions related to each SLO. Include who (e.g., program faculty, a faculty committee, etc.) made the decision, when the decision was made (e.g., faculty retreat, faculty meeting, etc.), what data informed the decision, and a timeline for actions taken or to be taken. Add rows as needed to accommodate additional SLOs.

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| --- | --- |
| **SLO 1** | **In order to generate more useful data, the department’s graduate committee agreed over a series of meetings to introduce additional assessment tools for both of the MS paths (project & comprehensive exam). For the project, these will take the form of two rubrics, one for the written report and one for the oral presentation, that will be completed by each of the project advisors. For the comprehensive exam, these will take the form of a rubric that will be completed for each of the 3 courses that make up the exam. These are pending departmental approval, but we are hopeful that they will be in place by the end of the Spring 2019 semester. Rubrics are attached.** |
| **SLO 2** | **In order to generate more useful data, the department’s graduate committee agreed over a series of meetings to introduce additional assessment tools for both of the MS paths (project & comprehensive exam). For the project, these will take the form of two rubrics, one for the written report and one for the oral presentation, that will be completed by each of the project advisors. For the comprehensive exam, these will take the form of a rubric that will be completed for each of the 3 courses that make up the exam. These are pending departmental approval, but we are hopeful that they will be in place by the end of the Spring 2019 semester. Rubrics are attached.** |
| **SLO 3** | **In order to generate more useful data, the department’s graduate committee agreed over a series of meetings to introduce additional assessment tools for both of the MS paths (project & comprehensive exam). For the project, these will take the form of two rubrics, one for the written report and one for the oral presentation, that will be completed by each of the project advisors. For the comprehensive exam, these will take the form of a rubric that will be completed for each of the 3 courses that make up the exam. These are pending departmental approval, but we are hopeful that they will be in place by the end of the Spring 2019 semester. Rubrics are attached.** |
| **SLO 4** | **In order to generate more useful data, the department’s graduate committee agreed over a series of meetings to introduce additional assessment tools for both of the MS paths (project & comprehensive exam). For the project, these will take the form of two rubrics, one for the written report and one for the oral presentation, that will be completed by each of the project advisors. For the comprehensive exam, these will take the form of a rubric that will be completed for each of the 3 courses that make up the exam. These are pending departmental approval, but we are hopeful that they will be in place by the end of the Spring 2019 semester. Rubrics are attached.** |

**V.** **Additional Information**

**OPTONAL:** Provide additional information that may be helpful to reviewers.

*UPDATE (April 2019): The next stage of the process is to implement the attached rubrics and start collecting and analyzing the corresponding data. The rubrics will provide evaluation of all 4 SLOs with the exception of oral communication for those students who choose the comprehensive exam. During the fall we plan to discuss options for evaluating oral communication of those students. The next phase will also include discussion on dissemination of results and the inclusion of indirect measures.*