Assurance of Student Learning 2018-2019	
Ogden College of Science & Engineering	Department of Mathematics
049 Master of Arts in Mathematics	

Use this page to list learning outcomes, measurements, and summarize results for your program. Detailed information must be completed in the subsequent pages.			
Student Learning Outcome 1: Students will be able to communicate mathematics in a written form at a level commensurate with that of students completing a master's degree.			
Instrument 1	Paper/project from MATH 501, Introduction to Probability and Statistics I. A score of 8 or higher on a 10-point multipart rubric will demonstrate students' ability to communicate mathematically. We expect at least 75% of students to meet this learning outcome.		
Based on your results, circle or highlight whether the program met the goal Student Learning Outcome 1.		**Met**	**Not Met**
Student Learning Outcome 2: Students will be able to write proofs of theorems in mathematics.			
Instrument 1	Assessments from MATH 503, Introduction to Analysis (Math 512). A score of 8 or higher on a 10-point multipart rubric for problems given on assessments will indicate that students are able to use multiple strategies in problem solving situations. We expect at least 75% of students to meet this learning outcome.		
Based on your results, circle or highlight whether the program met the goal Student Learning Outcome 2.		**Met**	**Not Met**
Student Learning Outcome 3: Students will demonstrate their capacity to use multiple strategies and appropriate technology to apply mathematics in problem solving situations and will justify their solutions with sound logic.			
Instrument 1	Assessments from MATH 512, Geometry from an Advanced Perspective. A score of 8 or higher on a 10-point multipart rubric will demonstrate students' ability to choose appropriate strategies, including the use of technology, to solve problems and justify their solutions. We expect at least 75% of students to meet this learning outcome.		
Based on your results, circle or highlight whether the program met the goal Student Learning Outcome 3.		**Met**	**Not Met**
Student Learning Outcome 4: Students will demonstrate their capacity for collaboration in the mathematics classroom as a learner and as a teacher.			
Instrument 1	Discussion boards from MATH 511, Algebra from an Advanced Perspective. A score of 8 or higher on a 10-point multipart rubric will demonstrate students' ability to collaborate when working towards solutions to problems. We expect at least 75% of students to meet this learning outcome.		
Based on your results, circle or highlight whether the program met the goal Student Learning Outcome 4.		**Met**	**Not Met**
Program Summary (Briefly summarize the action and follow up items from your detailed responses on subsequent pages.)			
We have no plans for changes to the program during the 2019-2020 academic year.			

Student Learning Outcome 1				
Student Learning Outcome	Students will be able to communicate mathematics in a written form at a level commensurate with that of students completing a master's degree.			
Measurement Instrument 1	Paper/project from MATH 501, Introduction to Probability and Statistics I.			
Criteria for Student Success	A score of 8 or higher on a 10-point multipart rubric will demonstrate students' ability to communicate mathematically.			
Program Success Target for this Measurement	75%	**Percent of Program Achieving Target**	80%	
Methods	Discussion boards, midterm, and the final were considered. Fourteen students were assessed.			
Based on your results, circle or highlight whether the program met the goal Student Learning Outcome 1.			**Met**	**Not Met**
Actions (Describe the decision-making process and actions planned for program improvement. The actions should include a timeline.)				
We have no plans for any changes to the program at this time.				
Follow-Up (Provide your timeline for follow-up. If follow-up has occurred, describe how the actions above have resulted in program improvement.)				
We will continue to monitor student success on this learning outcome.				

Student Learning Outcome 2				
Student Learning Outcome	Students will be able to write proofs of theorems in mathematics.			
Measurement Instrument 1	Assessments from MATH 503, Introduction to Analysis (Math 512).			
Criteria for Student Success	A score of 8 or higher on a 10-point multipart rubric for problems given on assessments will indicate that students are able to use multiple strategies in problem solving situations.			
Program Success Target for this Measurement	75%	**Percent of Program Achieving Target**	78%	
Methods	Discussion boards, homework, midterm, and the final were considered. Nine students were assessed.			
Based on your results, circle or highlight whether the program met the goal Student Learning Outcome 2.			**Met**	**Not Met**
Actions (Describe the decision-making process and actions planned for program improvement. The actions should include a timeline.)				
We have no plans for any changes to the program at this time.				
Follow-Up (Provide your timeline for follow-up. If follow-up has occurred, describe how the actions above have resulted in program improvement.)				
We will continue to monitor student success on this learning outcome.				

Student Learning Outcome 3				
Student Learning Outcome	Students will demonstrate their capacity to use multiple strategies and appropriate technology to apply mathematics in problem solving situations and will justify their solutions with sound logic.			
Measurement Instrument 1	Assessments from MATH 512, Geometry from an Advanced Perspective.			
Criteria for Student Success	A score of 8 or higher on a 10-point multipart rubric will demonstrate students' ability to choose appropriate strategies, including the use of technology, to solve problems and justify their solutions.			
Program Success Target for this Measurement	75%	**Percent of Program Achieving Target**	75%	
Methods	Discussion boards, homework, midterm, and the final were considered. Eight students were assessed.			
Based on your results, circle or highlight whether the program met the goal Student Learning Outcome 3.			**Met**	**Not Met**
Actions (Describe the decision-making process and actions planned for program improvement. The actions should include a timeline.)				
We have no plans for any changes to the program at this time.				
Follow-Up (Provide your timeline for follow-up. If follow-up has occurred, describe how the actions above have resulted in program improvement.)				
We will continue to monitor student success on this learning outcome.				

Student Learning Outcome 4				
Student Learning Outcome	Students will demonstrate their capacity for collaboration in the mathematics classroom as a learner and as a teacher.			
Measurement Instrument 1	Discussion boards from MATH 511, Algebra from an Advanced Perspective.			
Criteria for Student Success	A score of 8 or higher on a 10-point multipart rubric will demonstrate students' ability to collaborate when working towards solutions to problems.			
Program Success Target for this Measurement	75%	**Percent of Program Achieving Target**	71%	
Methods	Discussion boards, homework, midterm, and the final were considered. Seven students were assessed.			
Based on your results, circle or highlight whether the program met the goal Student Learning Outcome 4.			**Met**	**Not Met**
Actions (Describe the decision-making process and actions planned for program improvement. The actions should include a timeline.)				
We have no plans for any changes to the program at this time.				
Follow-Up (Provide your timeline for follow-up. If follow-up has occurred, describe how the actions above have resulted in program improvement.)				
We will continue to monitor student success on this learning outcome.				