		Program: MS Economics		
Measure/Benchmarks	**2017/2018**	**2018/2019***	**2019/2020**	**2020/2021**
Learning Objective 1A: Students who graduate will generate solutions to economic optimization problems under constraints.				
ECON 601: Faculty identified sections of individual student exam. Department developed graduate rubric used as assessment tool. Current Benchmark: 70% of students will meet expectations.	Implementing improvement actions	**Assessments:** Spring 2019 [n = 14]: *100% of students met expectations* **Closing the Loop:** -Winter 2017 results document that 63 percent of students met expectations for this Learning Objective. In Spring 2019, 100% met expectations. This indicates that changes made to the program beginning fall 2018, when the program was redesigned as the University converted from quarters to semesters, have been successful. An important change was a redesigned ECON 600: Foundations of Economic Theory class that places a larger and more general focus on mathematical and computational optimization techniques. This class is a pre-requisite for ECON 601 where assessment of LO 1A occurs. -Two additional changes were made for Spring 2019 that likely helped improve assessment results. First, supplementary materials were added to the textbook, e.g. extra textbook recommendation, slides, and problem sets. Second, students were required to do group presentations that applied their learning to economic modelling and optimization. **Improvements:** -We will implement further changes to ECON 600 in Fall 2020. The class will be retitled "Advanced Quantitative Methods for Economists," and its learning objectives will be revised to focus more heavily on quantitative skills in both mathematics and statistics. The previous title was more narrowly focused on optimization. The new title allows for a greater emphasis on statistics. We plan to modify the content of this course over time to strengthen all aspects of the program, including performance in ECON 601 where LO 1A is assessed.	Closing the loop discussions	Refining AOL system
Learning Objective 2A: Students who graduate will construct equilibria in models of strategic behavior.				
ECON 601: Faculty identified sections of individual student exam. Department developed graduate rubric used as assessment tool. 70% of students will meet expectations.	Implementing improvement actions	**Assessments:** Spring 2019 [n = 14]: 84% *of students met expectations* **Closing the Loop:** -Winter 2017 results document that 52 percent of students met expectations for this Learning Objective. In Spring 2019, 84 percent met expectations. This indicates that changes made to the program beginning fall 2018, when the program was redesigned as the University converted from quarters to semesters, have been successful. An important change was a redesigned ECON 600: Foundations of Economic Theory class that places a larger and more general focus on mathematical and computational optimization techniques. This class is a pre-requisite for ECON 601 where assessment of LO 2A occurs. -Two additional changes were made for Spring 2019 that likely helped improve assessment results. First, supplementary materials were added to the textbook, e.g. extra textbook recommendation, slides, and problem sets. Second, students were required to do group presentations that applied their learning to economic modelling and optimization. **Improvements:** -We will implement further changes to ECON 600 in Fall 2020. The class will be retitled "Advanced Quantitative Methods for Economists," and its learning objectives will be revised to focus more heavily on quantitative skills in both mathematics and statistics. The previous title was more narrowly focused on optimization. The new title allows for a greater emphasis on statistics. We plan to modify the content of this course over time to strengthen all aspects of the program, including performance in ECON 601 where LO 2A is assessed.	Closing the loop discussions	Refining AOL system
Learning Objective 3A: Students who graduate will identify and apply appropriate empirical techniques for estimation problems.				
ECON 693: Individual student project. The piece of assessment (artifact) is the empirical research paper at the center of ECON 693 (i.e. the class is designed to force students to conduct an original piece of empirical research). 70% of students will meet expectations.	Implementing improvement actions	**Assessments:** Spring 2019 [n = 11]: 97% *of students met expectations* **Closing the Loop:** -Spring 2017 results document that 95 percent of students met expectations for this Learning Objective. In Spring 2019, 97 percent met expectations. This suggests that our program continues to meet expectations for this Learning Objective. -The Learning Objective is assessed in ECON 688 and ECON 693 (co-requisites), which were heavily modified when the MS Economics program was modified during the University's conversion from quarters to semesters. In particular, the pair of courses require students to complete five smaller empirical assignments rather than one larger empirical paper. The fifth assignment gives students similar freedom to choose their topic that the single assignment under the original course did. However, students now have experience with a wider array of empirical techniques. **Improvements:** -Creation of a required programming class for the MS Economics program, "Computational Methods for Economists," that would introduce computer programming in R with an emphasis on data collection and management. This would support students' learning of empirical techniques in both ECON 610 and ECON 688/693.	Closing the loop discussions	Refining AOL system
Learning Objective 4A: Students who graduate will estimate models informed by economic theory using specialized software for data analysis.				

| ECON 693: Individual student project. The piece of assessment (artifact) is the empirical research paper at the center of ECON 693 (i.e. the class is designed to force students to conduct an original piece of empirical research).

70% of students will meet expectations. | Implementing improvement actions | **Assessments:**
Spring 2019 [n = 11]: 100% *of students met expectations*
Closing the Loop:
-Spring 2017 results document that 98 percent of students met expectations for this Learning Objective. In Spring 2019, 100 percent met expectations. This suggests that our program continues to meet expectations for this Learning Objective.
-The Learning Objective is assessed in ECON 688 and ECON 693 (co-requisites), which were heavily modified when the MS Economics program was modified during the University's conversion from quarters to semesters. In particular, the pair of courses require students to complete five smaller empirical assignments rather than one larger empirical paper. The fifth assignment gives students similar freedom to choose their topic that the single assignment under the original course did. However, students now have experience implementing a wider array of empirical techniques using specialized software.
Improvements:
-Creation of a required programming class for the MS Economics program, "Computational Methods for Economists," that would introduce computer programming in R with an emphasis on data collection and management. This would support students' use of specialized software for data analysis in both ECON 610 and ECON 688/693. | Closing the loop discussions | Refining AOL system |
| **Footnotes:**
Totals may not add up to 100 due to rounding. | | | | |