## **Program: Mathematics**

## Academic Program Assessment Plan (2017-2018)

1. Please review last year's assessment results (2016-2017) as well as the Academic Program Assessment Report with the faculty in your program. How does your program plan to take these results into consideration in future programmatic planning?

We will try different courses with different outcomes.

2. Please review your program's Learning Outcomes. Do any of them need to be updated or clarified?

No, they don't need to be updated.

Please provide brief indications of the kinds of assessment (e.g. course exams, term papers, course projects, senior seminar, senior interview, etc.) that <u>might</u> be used to assess each outcome. (The purpose here is to see that your program has considered ways it might measure each outcome.)

The homework assignments, the in-class weekly quizzes, the midterm exam, and/or the final exam will be used.

b. Please compare your Learning Outcomes to the University's main learning objectives: interdisciplinary, problem-focused education; critical thinking; diversity; environmental sustainability; and engaged citizenship. (These objectives were identified in the MLLO Project, which may be found here: <u>http://www.uwgb.edu/MLLO/</u>.) Which programmatic outcomes match university mission outcomes?

problem-focused education; critical thinking

3. Which outcome will you assess this year (2017-2018)?

MATH 328 Introduction to Algebraic Structures (F17) MATH 324 Analysis II (S18)

- 1. Mathematics majors will be able to understand the important mathematical/statistical concepts, theorems, formulas, computational techniques and axiomatic systems in the required courses.
- 2. Mathematics majors will be able to demonstrate the ability to follow, construct, and write mathematical proofs.

4. Mathematics majors will be able to pose mathematical/statistical problems and select and apply appropriate mathematical/statistical theories, models and tools to solve and/or analyze the problems.

MATH 430 Design of Experiments (S18)

- 4. Mathematics majors will be able to pose mathematical/statistical problems and select and apply appropriate mathematical/statistical theories, models and tools to solve and/or analyze the problems.
- 5. Mathematics majors will be able to demonstrate their understanding of how mathematics/statistics is used in the solution of real-world problems.
- 6. Mathematics majors will be able to use technological aids appropriately in the study of mathematics/statistics and properly interpret and assess the computed results.
- 5. Which technique will you use to assess this outcome?

Responses and scores from the homework assignments, the in-class weekly quizzes, the midterm exam, and/or the final exam will be used.

6. Which course or group of students will you assess on the outcome chosen above and when?

Everyone who will take the courses. (MATH 328: n=10, MATH 324: n=10, MATH 430: n=6)

	LO 1	LO 2	LO 4	LO 5	LO 5
MATH 328	$\checkmark$	$\checkmark$	$\checkmark$		
MATH 324	$\checkmark$	$\checkmark$	$\checkmark$		
MATH 430			$\checkmark$	$\checkmark$	$\checkmark$