Department of Mathematics

Majors:	Minors:
B.S. in Applied Mathematics (Curriculum Map) (GLOBE Outcomes Map) B.A. in Mathematics (Curriculum Map) (GLOBE Outcomes Map) B.S. in Mathematics (Curriculum Map) (GLOBE Outcomes Map) B.A. in Mathematics, Adolescence Education: Mathematics (Curriculum Map) (GLOBE Outcomes Map)	Mathematics

Program Learning Outcomes for the Mathematics Major

1. Students will be able to analyze problems and formulate appropriate mathematical models in a variety of areas of Mathematics.
2. Students will be able to select and utilize appropriate mathematical technology with which to analyze mathematical problems in a wide variety of areas.
3. Students will be able to make rigorous mathematical arguments including how to both prove and disprove conjectures.
4. Students will critically read mathematics.
5. Students will be able to use the concepts of Analysis in solving problems. The fundamental concepts include sets, numbers, functions, and convergence.
6. Students will be able to use the concepts of Algebra in solving problems. The fundamental concepts include equations, numbers, and algebraic structures.
7. Students will be able to express themselves in writing in an articulate, sound and well-organized fashion.
8. Students will be able to express themselves in orally in an articulate, sound and well-organized fashion.

Adolescent Certification

- Mathematics majors who graduate with adolescent certification will have a strong mathematical background and will be able to make connections between the college curriculum they have studied and the 7-12 curriculum they will teach.
- Mathematics majors who graduate with adolescent certification and who seek employment in secondary mathematics teaching will find employment in the field.
- Mathematics majors who graduate with adolescent certification and who would like to pursue a graduate degree in mathematics/mathematics education will be prepared for, and accepted into a masters (or higher) level program.

Service Courses

- The courses offered by the Mathematics Department that are required of, or recommended (i.e., the service courses) for students in other majors are in fact taken by the intended students.
- The content of the service courses offered by the Mathematics Department will be appropriate for the intended audience.

Plan to Assess Mathematics Department Program Learning Outcomes

In years congruent to 2019-2020 (mod 5): We pursue a goal consistent with the Five-Year Review Committee's findings and/or needs.
In years congruent to 2020-2021 (mod 5): We evaluate PLO 5 (analysis) and PLO 8 (oral communication).
In years congruent to 2021-2022 (mod 5): We evaluate PLO 6 (algebra) and PLO 3 (rigorous arguments).
In years congruent to 2022-2023 (mod 5): We evaluate PLO 7 (written communication) and PLO 1 (modeling and problem solving).
In years congruent to 2023-2024 (mod 5): We evaluate PLO 4 (critically read mathematics) and PLO 2 (math tech in prob solving).

The Program Goals and Program Learning Outcomes were adopted by the Department on 24 September 2013.

- How Math Has Closed the Assessment Loop