

Standing Requirements

## Outcomes Library

### BA/BS in Mathematics Outcome Set

#### Objective 1: Use and construct logical arguments

Students will learn to use and construct logical arguments.

Outcome	Mapping
Outcome 1.1: Students will construct direct proofs.	No Mapping
Outcome 1.2: Students will construct proofs by contradiction	No Mapping
Outcome 1.3: Students will construct proofs by induction.	No Mapping
Outcome 1.4: Students will construct examples/counterexample Students will construct examples and counterexamples.	No Mapping

#### Objective 2: Communicate mathematics effectively

Students will communicate mathematics effectively.

Outcome	Mapping
Outcome 2.1: State mathematical results accurately Students will state mathematical results accurately for a research problem.	No Mapping
Outcome 2.2: Conduct an independent investigation Students will conduct an independent investigation of their problem.	No Mapping
Outcome 2.3: Oral presentation of research Students will make an oral presentation of their research report that is accessible to their peers.	<b>Foundational Studies:</b> 10. Express themselves effectively, professionally, and persuasively both orally and in writing.
Outcome 2.4: Witten report of research Students will make a detailed written report of their research.	<b>Foundational Studies:</b> 10. Express themselves effectively, professionally, and persuasively both orally and in writing.

#### Objective 3: Ready to use mathematical skills post-bac

Students will demonstrate that they are ready to use their mathematical skills in a post-baccalaureate position.

Outcome	Mapping
Outcome 3.1: Prepared to persue graduate studies in math Students will demonstrate mastery of undergraduate mathematics that will allow them to pursue graduate studies in the mathematical sciences.	No Mapping
Outcome 3.2: Prepared to pursue careers utilizing knowledge Students will demonstrate mastery of mathematics and related content that will allow them to pursue careers utilizing their knowledge.	No Mapping

