

# Program Learning Outcomes

I= Introduced  
 R= Reinforced  
 M= Mastered

Program Name: Mathematics (B.S.)

Date: 5/1/2020

Program Learning Outcomes Knowledge, skill, or behavior students can demonstrate upon program completion		Courses Mapped to Outcomes							
		126/131: Calculus with Review II and Calculus I	132: Calculus 2	231: Multivariate Mathematics I	232: Multivariate Mathematics II	280: Bridge to Higher Mathematics	331: Real Analysis I	341: Algebraic Structures I	Electives
<b>1</b>	Proficiency in Algebra	I	I	R	R	R		M	
<b>2</b>	Proficiency in Analysis	I	I	R	R	R	M		
<b>3</b>	Proficiency in Mathematical Modeling	I	R	R	M				R
<b>4</b>	Mathematical Writing	I	I	R	R	R	M	M	R
<b>5</b>	Problem Solving and Critical Thinking	I	I	R	R	R	M	M	R

# Program Learning Outcomes: Assessment Tools

Program Name: Mathematics (B.S.)

Date: 5/1/2020

Program Learning Outcomes Knowledge, skill, or behavior students can demonstrate upon program completion		Measurement Tool	Timeline/Frequency of Assessment	Target	Review
1	Proficiency in Algebra	Common Final Exam Question in 231 Common Final Exam Question in 341	Instructor applied departmental rubric each semester. Data is submitted each semester for each course by instructor.	Departmental rubric for each question will be developed. Target is that 80% of BS majors will get 3+ out of 4 in Math 341.	Results reviewed every two years at a department meeting in the fall.
2	Proficiency in Analysis	Common Final Exam Question in 132 Common Final Exam Question in 331	Instructor applied departmental rubric each semester. Data is submitted each semester for each course by instructor.	Departmental rubric for each question will be developed. Target is that 80% of BS majors will get 3+ out of 4 in Math 331.	Results reviewed every two years at a department meeting in the fall.
3	Proficiency in Mathematical Modeling	Common Modeling Project in Math 132 Common Modeling Project in Math 232	Instructor applied departmental rubric each semester. Data is submitted each semester for each course by instructor.	Departmental rubric for each question will be developed. Target is that 80% of BS majors will get 3+ out of 4 in Math 232	Results reviewed every two years at a department meeting in the fall.
4	Mathematical Writing	Common Writing Assignment in 280 Common Writing Assignments in 341	Instructor applied departmental rubric each semester. Data is submitted each semester for each course by instructor.	Departmental rubric for each question will be developed. Target is that 80% of BS majors will get 3+ out of 4 in Math 341.	Results reviewed every two years at a department meeting in the fall.
5	Problem Solving and Critical Thinking	Common Assignment in Math 280 Common Assignment in Math 331	Instructor applied departmental rubric each semester. Data is submitted each semester for each course by instructor.	Departmental rubric for each question will be developed. Target is that 80% of BS majors will get 3+ out of 4 in Math 331.	Results reviewed every two years at a department meeting in the fall.