Learning Outcomes and Curriculum Map, Undergraduate Degree Programs
Department of Mathematics and Applied Mathematical Sciences
VERSION 2022-2023

PROGRAM-WIDE STUDENT LEARNING OUTCOMES

1: Graduates demonstrate a command of fundamental concepts of calculus and linear algebra to acquire a solid foundation for advanced courses.

2: Graduates demonstrate a command of concepts from advanced courses in mathematics to acquire depth of knowledge.

3: Graduates can construct a rigorous mathematical argument to prove or disprove mathematical statements.

4: Graduates can use technology to do calculations, create visualizations, and test hypotheses.

5: Graduates can effectively communicate mathematical ideas to a variety of audiences.

6: Graduates can apply mathematical methods to solve problems in other disciplines.

CODES	I: INTRODUCED	E: EMPHASIZED	R: REINFORCED (AFTER EMPHASIS)	*: STUDENT WORK IDENTIFIED FOR USE IN PROGRAM ASSESSMENT
	COLORS	BLACK: ALL MAJORS	RED: BS - PURE MATH	BLUE: BS - APPLIED MATH	GREEN: BA

	141	142	215	243	244	307	316	322	381	382	425	435	436	437	438	441	442	447	451	452	462	471
OUTCOME 1	I*	E*	E*	E*	R R									R	R	R R	R R		R	R	R	R R
OUTCOME 2			I	I		I I	E E	E		E		E*	E*	E*	E*	E* E*	E* E*	E*	E*	E*	E*	E* E*
OUTCOME 3	I	I	I	I		I* I*	R* E*	E		E		E*	E*	R*	R*	R* R*						R* R*
OUTCOME 4	I	I	I	I				E*						I*	I*	I* I*	E* E*	R*				
OUTCOME 5			I			E* E*	E* E*	E*		E*		E*	E*	R	R	R R	E* E*	R	R	R	R	R R
OUTCOME 6	I	I	I	I	E*									E*	E*	E* E*	R* R*		E*	R*		

NOTE: Within the mathematics degree programs, once the core courses of MTH 141, 142, 215, 243 are completed, most higher-numbered courses are electives with few additional prerequisites. In particular, courses without consecutive numbers are not generally taken in numerical order. Notable exceptions include MTH 316 for BA,BS (pure) and MTH 435-436 and 437-438 for BS (pure, applied). Note also that students in the BA and BS tracks typically take different courses.