

### 2021-2022 Four-Year Plan for the BS Math: Applied Mathematical Biology Degree

<b>Freshman</b>			<b>Fall</b>			<b>Spring</b>					
MATH 143	College Algebra	3	MATH 170	Calculus I	4	MATH 144	Analytic Trigonometry	1			
BIOL 114	Organisms and Environments	4	ENGL 102	Writing and Rhetoric II	3	CHEM 111	General Chemistry I	3			
ENGL 101	Writing and Rhetoric I	3	CHEM 111L	General Chemistry I Lab	1	Elective	Humanistic and Artistic Ways of Knowing Course	3			
Elective	Oral Communication Course	2									
Elective	American Diversity Course	3									
Total Credits			<b>15</b>			Total Credits			<b>15</b>		

<b>Sophomore</b>			<b>Fall</b>			<b>Spring</b>					
MATH 175	Calculus II	4	STAT 251 or 301	STAT 251 or STAT 301	3	MATH 330	Linear Algebra	3			
BIOL 115	Cells and the Evolution of Life	3	MATH 275	Calculus III	3	BIOL Elective	Upper Division Biology Elective	3			
BIOL 115L	Biology 115 Lab	1	BIOL Elective	Upper Division Biology Elective	3	Elective	Humanistic and Artistic Ways of Knowing Course	3			
Elective	Social and Behavioral Ways of Knowing Course	3									
Elective	International Course	3									
Elective	Free Elective, 1 credit course	1									
Total Credits			<b>15</b>			Total Credits			<b>15</b>		

<b>Junior</b>			<b>Fall</b>			<b>Spring</b>					
MATH 451	Probability Theory	3	MATH 437	Mathematical Biology	3	MATH 452	Mathematical Statistics	3			
BIOL 310	Genetics	3	BIOL Elective	Upper Division Biology Elective	3	BIOL Elective	Upper Division Biology Elective	3			
MATH 310 or 453 or STAT 431	MATH 310 or MATH 453 or STAT 431	3	Elective	Social and Behavioral Ways of Knowing Course	3	Elective	Free Elective	3			
Elective	Free Elective	3									
Elective	Free Elective	3									
Total Credits			<b>15</b>			Total Credits			<b>15</b>		

<b>Senior</b>			<b>Fall</b>			<b>Spring</b>					
BIOL 456	Computer Skills for Biologists	3	BIOL Elective	Upper Division Biology Elective	3	MATH 428 or 430 or 480	MATH 428 or MATH 430 or MATH 480	3			
MATH 428 or 430 or 480	MATH 428 or MATH 430 or MATH 480	3	MATH 310 or 453 or STAT 431	MATH 310 or MATH 453 or STAT 431	3	Elective	Free Elective	3			
MATH 415	Cryptography	3	Elective	Free Elective	3	Elective	Free Elective	3			
BIOL Elective	Upper Division Biology Elective	3									
Elective	Free Elective	3									
Total Credits			<b>15</b>			Total Credits			<b>15</b>		