# E Salem | STATE UNIVERSITY

Ν	an	ne:

Student ID:

Date Admitted Into Major:\_

## BACHELOR OF SCIENCE MATHEMATICS

MAT

MAT

411

490

### GENERAL EDUCATION REQUIREMENTS

#### Competencies

Basic College Math
Reading Comprehension

#### ★General Education Categories (34-35 credits total)

♦FYS	First Year Sei			3		
♦W-I	Written Comn			3		
+OC	Oral Commun			3		
PGR	Personal Grov			3		
CEA	Creative Expr			3		
WC	World Culture			3		
HP	The Human Past				3	
CS	Contemporary Society				3	
SR	Scientific Reasoning:				3-4	
SK		# SR Lab course			4	
QR	Quantitative Reasoning				3	
# Written Communication (Level II and Level III) and Diversity,						
	Powe	r Dynamics and Soc	cial Just	ice		
W-II	Written Communication - Level II					
W-III	Written Communication - Level III					]
DPDS	Diversity, Power Dynamics and Social Justice					]

Free Electives/Minor (48 credits minimum) May be necessary to take additional credits to attain the minimum 120 credits required for graduation depending on choices made for general education or minor selection.				

#### Major Core Courses (28 credits) MAT 218 Intro. to Mathematical 1 Computing MAT 220 Calculus I 4 MAT 221 Calculus II 4 MAT 234 Intro. to Mathematical Proof 3 Linear Algebra 3 MAT 240 MAT 303A Abstract Algebra I 3 4 MAT 320 Calculus III

Real Analysis

**COURSES IN MAJOR (37 credits total)** 

#### Major Electives (9 credits minimum)

Senior Sem. In Mathematics

3

3

(Three courses numbered above 300 with at most 3 credits from MAT572.)						
MAT						
MAT						
MAT						
`	(The above major courses must satisfy <i>one</i> of the following sequences.)					
Algebr	Algebra Sequence A		MAT 303A and MAT 306			
Algebra Sequence B		ience B	MAT 303A and MAT 403			
Analysis Sequence A		uence A	MAT 409 and MAT 411			
Analysis Sequence B		uence B	MAT 411 AND MAT412			
Discrete Mathematics Sequence		nematics	MAT 314 and MAT 316			
Geometry Sequence		quence	MAT 406 and MAT 412			
Linear Algebra Sequence			MAT 240 and MAT 414			
Probability &Statistics Sequence			MAT 407 and MAT 417			

Note: A course may count as both a major core course and as part of a sequence.

Students may choose to use support courses to satisfy general education categories, but may not be required to do so. Note: If a course is used to satisfy two or more requirements (for example, a support course and Scientific Reasoning requirement), the credits are counted in only one place. Using a course to satisfy more than one requirement does not reduce the credit total required for graduation.

- Courses used to satisfy the general education requirements of the university must be taken from a minimum of six different academic disciplines. First Year Seminar and Level I Written Communications courses are exempt from this restriction. Courses may not be used to fulfill both major discipline and general education requirements.
- These Scientific Reasoning General Education Category courses do not have to be a sequence or be from the same discipline.
- Level II, Level III, Vitten Communications and Diversity, Power Dynamics and Social Justice Courses may be used to satisfy requirements anywhere else in a student's program of study where they may apply. The credits are counted only in one area.

COMPETENCIES - TO BE COMPLETED WITHIN THE FIRST 30 CREDITS
GENERAL EDUCATION CATEGORIES - TO BE COMPLETED WITHIN THE FIRST 30 CREDITS

Exceptions in the timing of courses will be made for transfer students

Total credits for graduation: 120