Salem | STATE UNIVERSITY

Name:_____
Student ID: _____
Date Admitted Into Major:_____

BACHELOR OF SCIENCE
MATHEMATICS

GENERAL EDUCATION REQUIREMENTS

Competencies

☐	♦ Basic College Math
☐	♦ Reading Comprehension

♣General Education Categories (34-35 credits total)

♦FYS	First Year Seminar				3	
♦W-I	Written Communication - Level I				3	
♦OC	Oral Communication				3	
PGR	Personal Growth & Responsibility				3	
CEA	Creative Expression & Appreciation				3	
WC	World Cultures				3	
HP	The Human Past				3	
CS	Contemporary Society				3	
SR	Scientific Reasoning:	♯ Any SR course			3-4	
		♯ SR Lab course			4	
QR	Quantitative Reasoning				3	

‡ Written Communication (Level II and Level III)

W-II	Written Communication - Level II			☐
W-III	Written Communication - Level III			☐

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.

COURSES IN MAJOR (37 credits total)

Major Core Courses (28 credits)

MAT	218	Intro. to Mathematical Computing	1	
MAT	220	Calculus I	4	
MAT	221	Calculus II	4	
MAT	234	Intro. to Mathematical Proof	3	
MAT	303A	Abstract Algebra I	3	
MAT	304A	Linear Algebra	3	
MAT	320	Calculus III	4	
MAT	411	Real Analysis	3	
MAT	490	Senior Sem. In Mathematics	3	

Major Electives (9 credits minimum)

(Three courses numbered above 300 with at most 3 credits from MAT572.)				
MAT				
MAT				
MAT				

(The above major courses must satisfy *one* of the following sequences.)	
Algebra sequence	MAT303A, MAT306 or 403
Analysis sequence	MAT409, MAT411 or 412
Discrete Mathematics sequence	MAT314, MAT316
Geometry sequence	MAT406, MAT412
Probability & Statistics sequence	MAT407, MAT417

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 and Level III Written Communications 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

Effective: 9/2016

Special Application Process Required

Name:_____
Student ID: _____
Date Admitted Into Major:_____

Salem | STATE UNIVERSITY

COMBINED BACHELOR OF SCIENCE IN MATHEMATICS AND MASTER OF EDUCATION IN SECONDARY EDUCATION WITH A MINOR IN TEACHER EDUCATION

TEACHER LICENSURE FOR MATHEMATICS EDUCATION: GRADES 5-8 OR 8-12

GENERAL EDUCATION REQUIREMENTS

Competencies

☐	♦ Basic College Math
☐	♦ Reading Comprehension

♣General Education Categories - 34-35 credits

♦FYS	First Year Seminar				3	
♦W-I	Written Communication - Level I				3	
♦OC	Oral Communication				3	
PGR	Personal Growth & Responsibility				3	
CEA	Creative Expression & Appreciation				3	
WC	World Cultures				3	
HP	The Human Past				3	
CS	Contemporary Society				3	
SR	Scientific Reasoning:	♯ Any SR course			3-4	
		♯ SR Lab course			4	
QR	Quantitative Reasoning				3	

‡ Written Communication (Level II and Level III)

W-II	Written Communication - Level II			☐
W-III	Written Communication - Level III			☐

♥ Required Support Courses for the Teacher Education Minor

PSY	252	Adolescent Psychology	3	
HST	204	U.S. History and Constitutional Gov't I	3	

Minor (Teacher Education):*

Required (30 Credits; courses with asterisk carry graduate and undergraduate credit)

EDC	115	Exploring Education	3	
EDC	404	Intro to Teaching and Assessment	3	
EDC	405	Culturally Responsive Teaching	3	
EDC	415	Teaching Exceptional Learners	3	
EDC	416	Assessment Methods	3	
*EDC	774	Methods of Teaching Mathematics I	3	
*EDC	760	Adolescent Literacy in the Disciplines	3	
*EDC	762	Technology Methods	1.5	
*EDS	775	Methods of Teaching Mathematics II	3	
*EDS	860	Sheltering Content for ELLs	3	
*EDS	763	Classroom Mgmt and Community Bldg	1.5	

COURSES IN MAJOR (37 credits total)

Required (34 credits total)

MAT	218	Intro to Mathematical Computing	1	
MAT	220	Calculus I	4	
MAT	221	Calculus II	4	
MAT	234	Intro to Mathematical Proof	3	
MAT	303A	Abstract Algebra	3	
MAT	304A	Linear Algebra	3	
MAT	320	Calculus III	4	
MAT	406	Modern Geometry	3	
MAT	407	Probability and Math. Statistics I	3	
MAT	411	Real Analysis	3	
MAT	490	Senior Seminar	3	

Mathematical Sequence Elective (3 credits total)
One of the following:

MAT	403	Abstract Algebra II	3	
MAT	409	Complex Variables	3	
MAT	412	Topology	3	
MAT	414	Linear Algebra II	3	
MAT	417	Probability and Statistics II	3	

Free Electives

5th Year Courses (M.Ed.): (18 credits)

EDC	884PS	Practicum Seminar Tchg Math	3	
EDC OR EDC	884P 885P	Stu Tchg Pract. Math (8-12) Stu Tchg Pract. Math (5--8)	3	
EDC	804	School-Based Internship	3	
EDC	805	Professional Lives of Teachers	3	
		Elective	3	
		Elective	3	

♥ 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 and Level III Written Communications 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.

* Students accepting into the combined undergraduate/graduate program who choose not to continue in the combined program must complete an educational studies minor in lieu of the teacher education minor.

♦ 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 **The additional credits listed above are required for Graduate graduation** **Effective: 9/2016**