

SECONDARY MATH EDUCATION/MATHEMATICS

B.S. MATH EDUCATION / TERRAPIN TEACHERS SECONDARY CERTIFICATION

Name: _____

UID: _____

Note: A minimum of 120 credits are required for a degree in addition to satisfactory completion all course and other degree requirements. The total number of credits actually earned for the degree may exceed 120 depending on the number of "elective" and "double count" courses taken.

GENERAL EDUCATION REQUIREMENTS

Fundamental Studies

Requirements: ___ credits Course Credits Grade

Requirements: ___ credits	Course	Credits	Grade
Academic Writing (AW)		3	
Professional Writing (PW)		3	
Oral Communication (OC)		3	
Mathematics (MA)*	MATH 140	4	
Analytic Reasoning (AR)	MATH 140	4	

*Math 212 and 213 do not fulfill MA

Distributive Studies

Requirements: ___ credits Course Credits Grade

Requirements: ___ credits	Course	Credits	Grade
Natural Science Lab (NL)	Science sequence course	4	
Natural Sciences (NS)	Science sequence course	3	
History/Social Sciences (HS)	TLPLxx KL	3	
History/Social Sciences (HS)		3	
Humanities (HU)	TLPLxxPerS	3	
Humanities (HU)		3	
Scholarship in Practice (SP)	TLPLxx CI	3	
Scholarship in Practice (SP)	CMSC122	3	

I-Series (double count with Distributive Studies and/or Diversity)

Requirements: ___ credits Course Credits Grade

Requirements: ___ credits	Course	Credits	Grade
I-Series (IS)		3	
I-Series		3	

Diversity(double count with Distributive Studies and/or Diversity)

Requirements: ___ credits Course Credits Grade

Requirements: ___ credits	Course	Credits	Grade
Understanding Plural Soc. (UP)	TLPLxx CI	3	
Understanding Plural Soc. Or Cultural Competency (CC)		3	

Experiential Learning – optional General Ed category

Requirements: ___ credits Course Credits Grade

Requirements: ___ credits	Course	Credits	Grade
		3	
		3	

PROFESSIONAL PROGRAM ADMISSIONS

All Gen Ed, pre-professional and professional coursework must be completed with a "C-" or better prior to student teaching. Students must be admitted to the Professional Program in order to register for the courses below. Students must maintain a 2.75 GPA while completing these courses.

PROFESSIONAL COURSES (Fall Only)

TLPL xxx	Research Methods MATH420 plus 1 cr seminar	4	
TLPLxxx	Project Based Instruction	3	
TLPLxxx	Classroom Interactions*	3	
EDCI 355	Student Teaching Internship	1	

Primary Major

Advisor: _____

PRE-PROFESSIONAL CONTENT REQUIREMENTS

Math (Education Track) Major Requirements

Please see a Math advisor for details on requirements and courses (Must earn a "C-" or better)

MATH 140 Calculus I (AR)	4	
MATH 141 Calculus II (AR)	4	
MATH 240 Linear Algebra (or MATH 341 ⁴ Honors Sequence)	4	
MATH 241 Calculus III (or MATH 340 ⁴ Honors Sequence)	4	
MATH 310 Introduction to Analysis ²	3	
MATH 410 Advanced Calculus I	3	
MATH 402 or 403 Algebraic Structure/Abstract Algebra	3	
MATH 430 Euclidean & Non-Euclidean Geometries	3	
MATH 406, 445, 446, 456, or 475 (Theory/Logic)	3	
MATH 246 ³ , 341 ³ , 401, 420, 452, 462, or AMSC 460, or 466	3	
400 level MATH Elective (may not include MATH 400, 461, 478, 480-484, AMSC 462 or STAT 464)	3-6	
STAT 400 or 410 Applied Probability and Stats/Probability Theory	3	

Programming Requirement

(May be exempted through demonstrated adequate programming knowledge from prior course or AP credit.)

CMSC 106, 114, 122, 131, 132, PHYS 165 or ENEE 114 or ENEE250	3-4	
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Science Sequence: One of the following sequences(NL,NL)

(Science sequence may meet Science Gen Ed requirements)

*CHEM 131/132(NL) & CHEM 231/232	*BSCI 170/171(NL) & BSCI 160/1761(NL) (formerly BSCI105 & 106)
PHYS 161 & *PHYS 260/261	ASTR 120 & ASTR 121
*GEOL 100/110 & one of : GEOL 322, 340, 341, or 375	AOSC 200/201, and any 400 level AOSC course

NOTES:

- EDCI 450 and 451 are requirements for Mathor (Education Track).
- Students are strongly encouraged to take MATH 310 as a program elective. MATH 310 provides foundation for MATH 410, which is a program requirement.
- Seven MATH/AMSC/STAT courses at the 400 level are required. Neither MATH 246 nor MATH 341 can count as one of these seven courses.
- Completion of MATH 340-341 satisfies completion of MATH 240-241-246

PRE-PROFESSIONAL EDUCATION COURSES

TLPL 101	Inquiry Teaching of STEM in Elementary	1	
TLPL 102	Inquiry Teaching of STEM in Middle School	2	
EDHD 426	Reading	3	
MATH 274	History of Mathematics	3	
MATH 4xx	Functions and Modeling	3	
TLPLxxx	Knowing & Learning *	3	

STUDENT TEACHING SEMESTER (Spring Only)

EDCI 450 ¹	Student Teaching Seminar in Math Ed	1	
EDCI 451 ¹	Student Teaching: Math	12	
EDCI 474	Inclusion, Diversity and Professionalism	2	

Second Major:

Advisor: _____

Dean: _____

Dean: _____

Secondary Education Math/Math Four-Year Plan

NOTE: This is a proposed plan and the College of Education does not guarantee that these courses will be offered in the designated semester. Consult the *Schedule of Classes* for class availability and meeting times. A minimum of 120 credits are required for a degree in addition to satisfactory completion all course and other degree requirements. The total number of credits actually earned for the degree may exceed 120 depending on the number of “elective” and “double count” courses taken. This curriculum is a double major program. Please contact your Education and Math advisor to verify course selection and completion. For questions regarding Math courses, Science, and Programming requirements, please see Math advisor.

FRESHMAN YEAR:

<i>Fall Semester:</i>	<i>Cr.</i>	<i>Spring Semester:</i>	<i>Cr.</i>
ENGL 101 (AW)	3	MATH 141	4
MATH 140 (AR)	4	Science Sequence II (NL)	3-4
Science Sequence I (NL)	4	ORAL COMMUNICATION (OC)	3
HUMANITIES (HU/I-series/UP)	3	HISTORY/ SOCIAL SCIENCE (HS/SP/I-series)	3
TLPL 101	1	TLPL 102	2
<i>Total Credits</i>	15	<i>Total Credits</i>	14-15

SOPHOMORE YEAR: *Apply to the Professional Program after completion of TLPL Knowing & Learning*

<i>Fall Semester:</i>	<i>Cr.</i>	<i>Spring Semester:</i>	<i>Cr.</i>
MATH 240	4	MATH 241	3
CMSC Requirement: CMSC 122 recommended (SP)	4	MATH 310	3
TLPL Knowing and Learning (HS) currently EDCI 488M	3	MATH 274 History of Mathematics (HU)	3
Elective	1	TLPL reading currently EDHD 426	3
		Elective	3
<i>Total Credits</i>	15	<i>Total Credits</i>	15

JUNIOR YEAR:

<i>Fall Semester:</i>	<i>Cr.</i>	<i>Spring Semester:</i>	<i>Cr.</i>
MATH 410	3	MATH 406	3
STAT 400 or 410	3	MATH 430	3
PROFESSIONAL WRITING (PW)	3	Elective	3
TLPL Project Based Instructions (currently EDCI 488P)	3	TLPL Research Methods (researched based course or experience, along with 1 credit seminar)	4
elective	3	MATH4xx Functions and Modeling	3
<i>Total Credits</i>	15	<i>Total Credits</i>	16

SENIOR YEAR:

<i>Fall Semester:</i>	<i>Cr.</i>	<i>Spring Semester:</i>	<i>Cr.</i>
MATH xx	3	EDCI 450	1
MATH 402	3	EDCI 451	12
TLPL Classroom Interactions (SP/UP) currently EDCI 470	3	EDCI 474	2
TLPL Field Experience in Science Education currently EDCI 375	1		
Elective	5		
<i>Total Credits</i>	15	<i>Total Credits</i>	15

Total Credits: 120

* All students must complete two Distribute Studies courses that are approved for ***I-series*** courses. Students must complete ***Understanding Plural Society*** and ***Cultural Competence*** courses that may also fulfill a Distributive Studies category.

** All remaining Gen Ed and Pre-Professional courses not listed on this plan must still be completed to earn the Mathematics Education/Mathematics-Secondary Education track Double Major degree.