

## ACADEMIC ROADMAP

### Math Education 5-12 Majors

#### Freshman Year (34 credits)

##### FIRST SEMESTER

Course Title	Catalog Number	Prerequisite(s)
College Writing I (3)	CWP 101	
Calculus I (4)	MAT 161	MAT 124 or HS equivalent
Using Technology to Explore Calculus (1)	MAT 163	
IF Diversity: Nature & Needs of Individuals with Special Needs (3)	EXE 100	
IF Art (3)		
IF Humanities (3)		

##### SECOND SEMESTER

Course Title	Catalog Number	Prerequisite(s)
College Writing II (3)	CWP 102	CWP 101
Calculus II (4)	MAT 162	MAT 161
Using Technology to Explore Calculus (1)	MAT 164	MAT 163
Introduction to Linear Algebra (3)	MAT 202	MAT 161
IF Social Science (3)		
IF Natural Science (3)		

#### Notes and recommendations:

Total 17 credit hours for both first and second semesters.

#### Sophomore Year (63 credits)

##### THIRD SEMESTER

Course Title	Catalog Number	Prerequisite(s)
Calculus III (4)	MAT 263	MAT 162
Using Technology to Explore Calculus (1)	MAT 264	MAT 164
Discrete Math (3)	MAT 270	MAT 161
Foundations of Teaching Mathematics 7-12 and Field Experience (3)	MED 200 <sup>1</sup>	MAT 161
IF Western Civilization (3)		

##### FOURTH SEMESTER

Course Title	Catalog Number	Prerequisite(s)
Probability and Statistics (3)	MAT 325 <sup>2</sup>	MAT 162, MAT 270
Learning and Teaching Problem Solving (3)	MED 383 <sup>3</sup>	MAT 162, MAT 270, CWP 102
Techniques of Proof (3)	MAT 300	MAT 270
Upper Div. Math Elective (3)		
IF Non-Western Civilization (3)		

#### Notes and recommendations:

<sup>1</sup>MED200 Fall semester only, <sup>2,3</sup>MAT325 and MED383 spring semester only

**Junior Year (93 credits)**

FIFTH SEMESTER

Course Title	Catalog Number	Prerequisite(s)
Modern Geometry (3)	MAT 322 <sup>4</sup>	MAT 270
Educational Psychology (3)	SPF 303	
Teaching Literacy (3)	EDU 416	
Number Theory (3)	MAT 351	
IF American History (3)		

SIXTH SEMESTER

Course Title	Catalog Number	Prerequisite(s)
Fundamentals of Abstract Algebra (3)	MAT 301 <sup>5</sup>	MAT 300
Uses of Technology in Teaching Math (3)	MED 307 <sup>6</sup>	Upper-division status
Human Dev. Early Adoles. (3)	SPF 353	
Adolescent Literacy (3)	EDU 417	EDU 416
Methods Teach Math in MS (3)	MED 309 <sup>7</sup>	

**Notes and recommendations:**

<sup>4</sup>MAT322 offered fall semester only; <sup>5,6</sup>MAT 301, MED 307, MED 309 offered spring semester only.

**Senior Year (120 credits)**

SEVENTH SEMESTER

Course Title	Catalog Number	Prerequisite(s)
Field Experience: Methods of Teaching Secondary Mathematics (3)	MED 300 <sup>7</sup>	Math GPA 2.75+ and MED 307
Methods of Teaching Secondary Mathematics (3)	MED 308 <sup>8</sup>	Math GPA 2.75 and MED 307
Intro to Real Analysis (3)	MAT 417 <sup>9</sup>	MAT 300
Upper Div. Math Elective (3)		Check pre-requisites
Open Elective (3)		

EIGHTH SEMESTER

Course Title	Catalog Number	Prerequisite(s)
Student Teaching Math in JR HI/MS (6)	MED 407	
Student Teaching in SR HS (6)	MED 408	
<i>No other courses allowed during student teaching</i>		

**Notes and recommendations:**

<sup>7,8</sup> MED 300 and MED 308 are taken concurrently, and only offered in fall semesters. Email instructor for permission to enroll in class. <sup>9</sup> MAT 417 offered fall semester only.