#### **ACADEMIC ROADMAP**

Math Education 5-12 Majors

## Freshman Year (32 credits)

	FIRST SEMESTER	
Course Title	Catalog Number	Prerequisite(s)
College Writing I (3)	CWP 101	
GE 23: Mathematics and Quantitative Reasoning (4 credits)	MAT161	MAT124 or HS equivalent
GE 23 Diversity: Equity, Inclusion and Social Justice (3)	EXE100	
GE 23 courses (6 credits)		

	SECOND SEMESTER	
Course Title	Catalog Number	Prerequisite(s)
College Writing II (3)	CWP 102	CWP101
Calculus II (4)	MAT162	MAT161
Introduction to Linear Algebra (3)	MAT202	MAT161
GE 23 Course (3 credits)		
GE 23 Natural Sciences & Scientific Reasoning		
(3 credits)		

# Sophomore Year (63 credits)

	THIRD SEMESTER	
Course Title	Catalog Number	Prerequisite(s)
Calculus III (4)	MAT263 <sup>2</sup>	MAT162
Foundations of Teaching Mathematics 7-12	MED200 <sup>1</sup> or GE23	MAT161
and Field Experience OR GE 23 Course (3)	Course	
GE 23 courses (9 credits)		

	FOURTH SEMESTER	
Course Title	Catalog Number	Prerequisite(s)
Foundations of Teaching Mathematics 7-12	MED200 <sup>1</sup> or SPF353 <sup>2</sup> or	MAT161
and Field Experience OR Upper Division Math	Upper Division Math	
Elective OR Human Development During Early	Elective	
Adolescence and Adolescence (3)		
Techniques of Proof (3)	MAT300 <sup>2</sup>	
Number Theory (3)	MAT351	
GE 23 courses (6-9 credits, as needed to		
complete DW category)		

**Notes and recommendations:** <sup>1</sup>MED200 every 3 semesters, <u>take as soon as offered after MAT161 completed</u>. 
<sup>2</sup>MAT300, SPF353 offered spring only; MAT263 offered fall semesters only.

# Junior Year (93 credits)

	FIFTH SEMESTER	
Course Title	Catalog Number	Prerequisite(s)
Foundations of Teaching Mathematics 7-12 and Field Experience <u>OR</u> Methods of Teaching Middle School Math <u>OR</u> Upper Division Math Elective (3)	MED200 <sup>1</sup> or MED309 <sup>4</sup> or Upper Division Math Elective	MAT161 or Upper-division status
Probability and Statistics (3)	MAT325 <sup>3</sup>	MAT162

	FIFTH SEMESTER	
Course Title	Catalog Number	Prerequisite(s)
Modern Geometry <b>OR</b> Learning and Teaching	MAT322 <sup>4</sup> or MED383 <sup>4</sup> or	Upper-division status
Problem Solving OR Uses of Technology in	MED307 <sup>4</sup>	
Teaching Math (3 credits)		
Educational Psychology (3)	SPF303	
Teaching Literacy (3)	EDU416	

	SIXTH SEMESTER	
Course Title	Catalog Number	Prerequisite(s)
Fundamentals of Abstract Algebra (3)	MAT301 <sup>5</sup>	MAT300
Methods of Teaching Middle School Math	MED309 <sup>4</sup> and/or SPF353 <sup>5</sup>	Upper-division status
AND/OR Human Development During Early	or Upper Division Math	
Adolescence and Adolescence (3) OR Upper	Elective	
Division Math Elective		
Adolescent Literacy (3)	EDU417	EDU416
Modern Geometry <b>OR</b> Learning and Teaching	MAT322 <sup>4</sup> or MED383 <sup>4</sup> or	Upper-division status
Problem Solving OR Uses of Technology in	MED307 <sup>4</sup>	
Teaching Math (3 credits)		
Historical & Philosophical Forces in Secondary	SPF403	SPF303
Education (3)		

**Notes and recommendations:** <sup>1</sup>MED200 offered every 3 semesters, <u>take as soon as offered after MAT161 completed</u>. <sup>3</sup>MAT325 offered fall only. <sup>4</sup>MAT322, MED383, MED307, and MED309 offered every 3 semesters; <u>take as offered beginning junior year</u>. <sup>5</sup>MAT301 and SPF353 offered spring only.

## Senior Year (120 credits)

	SEVENTH SEMESTER	
Course Title	Catalog Number	Prerequisite(s)
Field Experience: Methods of Teaching	MED300 <sup>6</sup>	Math GPA 2.75+ and MED307 (can
Secondary Mathematics (3)		be concurrent)
Methods of Teaching Secondary Mathematics	MED308 <sup>6</sup>	Math GPA 2.75 and MED307 (can
(3)		be concurrent)
Intro to Real Analysis (3)	MAT417 <sup>7</sup>	MAT263 and MAT300
Modern Geometry <b>OR</b> Learning and Teaching	MAT322 <sup>4</sup> or MED383 <sup>4</sup> or	Upper-division status
Problem Solving <b>OR</b> Uses of Technology in	MED307 <sup>4</sup>	
Teaching Math (3 credits)		
Methods of Teaching Middle School Math OR	MED309 <sup>4</sup> or Upper	Upper-division status
Upper Division Math Elective (3)	Division Math Elective	

No other courses allowed during student teaching:	EIGHTH SEMESTER	
Course Title	Catalog Number	Prerequisite(s)
Student Teaching Math in JR HI/MS (6)	MED407	
Student Teaching in SR HS (6)	MED408	

#### Notes and recommendations:

<sup>6</sup> MED300 and MED308 are taken concurrently, and only offered in fall semesters. Email instructor for permission to enroll in class. <sup>7</sup>MAT417 offered fall semester only.