

Math Teaching 5-year Urban ELE/ECE programs guide (Calculus)

(To be used in conjunction with advising and sequence sheets offered in your Education major)

All Math Teaching majors will be required to take a minimum of 13 MAT/STA course units and an orientation to the major. The 13 course units will consist of 12 required courses and one option:

MAT 099/Orientation to Mathematics and Statistics	0 course unit
MAT 105/Math Structures and Algorithms for Educators I	1 course unit
MAT 127/Calculus A (Prerequisite: PreCalculus)	1 course unit
MAT 128/Calculus B	1 course unit
MAT 200/Proof Writing through Discrete Mathematics	1 course unit
MAT 205/Linear Algebra	1 course unit
MAT 229/Multivariable Calculus	1 course unit
MAT 255/Perspectives on the Development of Mathematics	1 course unit
MAT 301/Number Theory	1 course unit
MAT 305/Abstract Algebra	1 course unit
MAT 310/Real Analysis	1 course unit
MAT 351/Geometry	1 course unit
STA 216/Statistical Inference and Probability	1 course unit
one MAT/STA option which can be any MAT/STA course at the 300/400 level (see department website)	1 course unit

SUGGESTED MATH COURSE SCHEDULE

<u>FRESHMAN YEAR</u>		<u>UNITS</u>
(FALL)		
MAT 099	Orientation for Math/Stat Majors	0
MAT 127	Calculus A (LL) ¹	1
MAT 105	Mathematical Structures and Algorithms for Educators I	1
(SPRING)		
MAT 128	Calculus B	1
MAT 200	Proof Writing through Discrete Mathematics	1
<u>SOPHOMORE YEAR</u>		
(FALL)		
MAT 229	Multivariable Calculus	1
(SPRING)		
STA 216	Statistical Inference & Probability (Spring only)	1
MAT 205	Linear Algebra	1
<u>JUNIOR YEAR</u>		

(FALL)			
MAT 301	Number Theory		1

(SPRING)			
MAT 255	Perspectives on the Development of Math (Spring only)		
MAT 305	Abstract Algebra		1

SENIOR YEAR

(FALL)			
MAT 351	Geometry		1
MAT 310	Real Analysis		1

(SPRING)			
MAT/STA	Mathematics/Statistics Option*		1

*See department website for MAT/STA options

¹Placement based on SAT/ACT scores or placement test. See department website.

Note: If your program doesn't allow in any one year for the number of courses we recommend to be taken in that year, courses can be postponed to the following year. Please keep in mind the following requirements:

- Discrete mathematics is a prerequisite for most upper level courses so it should be taken in the freshman year or as soon as possible thereafter.
- Calculus A is a prerequisite for Calculus B and Calculus B is a prerequisite for Multivariable Calculus.
- Multivariable Calculus is a prerequisite for Geometry.
- Linear Algebra is a prerequisite for Abstract Algebra. We also recommend that you take Number Theory before taking Abstract Algebra.

Revised: October 6, 2004

Revised: January 24, 2005

Revised: May 2, 2005

Revised: February 24, 2021