### THE COLLEGE OF NEW JERSEY MATHEMATICS AND STATISTICS DEPARTMENT MATHEMATICS SECONDARY EDUCATION MAJOR (starting in Calculus)

## FRESHMAN YEAR

### <u>UNITS</u>

(FALL)		
MAT 099	Orientation for Math/Stat Majors	0
MAT 127	Calculus A (College Core requirement) <sup>1</sup>	1
MAT 270/MAT 203 Intro. to Mathematical Computing		1
FYS 1XX	First Year Seminar $(CC)^2$	1
	Second Language <sup>3</sup>	<u>1</u>
		4
(SPRING)		
		0

SED 099	Secondary Education freshmen seminar	0
MAT 128	Calculus B	1
MAT 200	Proof Writing through Discrete Mathematics	1
	Second Language <sup>3</sup>	1
	College Core (Literary, Visual, or Performing Arts)	1
		4

# SOPHOMORE YEAR

(FALL)		
MAT 229	Multivariable Calculus	1
MAT 205	Linear Algebra	1
STA 216	Statistical Inference & Probability (Fall only)	1
SED 224	Adolescent Learning & Development	1
		4

(SPRING)		
MAT 301	Number Theory (Spring only)	1
MAT 255	Perspectives on the Development of Math (Spring only)	1
(It is recomme	ended that the following two courses be taken together if possible)	
SPE 322	Inclusive Practices	1
EFN 299	Schools & Communities	<u>1</u>
		4

# JUNIOR YEAR

(Either semes	ter)		
MAT 310, M.	AT 316, or MAT 326	Real Analysis (Spring only), Probabilit	y (Fall
only), or Diffe	erential Equations		1
BIO 201, CHE 201, or PHY 201		Science	1
,	,		
(FALL)			
MAT 305	Abstract Algebra (Fall	(only)	1
MTT 380	Methods of Teaching	•	1
	interneties of Teaching		-

MAT 351	Geometry (Fall only)	$\frac{1}{2}$
		3
(SPRING)		
	College Core (Historical Perspectives - EFN 398 recommended)	) 1
MAT 497	Topics in Secondary Mathematics from an Advanced Viewpoin	t
	(Spring only)	1
MAT/STA	Mathematics/Statistics Option <sup>4</sup>	<u>1</u>
		3

#### SENIOR YEAR

(FALL)			
CLINICAL PRACTICE I: THE FOLLOWING 2 COURSES MUST BE TAKEN AS A			
BLOCK IN THE SEMESTER DIRECTLY PRECEDING CLINICAL PRACTICE II			
MTT 390	Methods of Teaching Math II (Fall only)	1	
RAL 328	Reading in Secondary Education	0.5	
SED 399	Pedagogy in Secondary Schools	<u>1.5</u>	
		3	
(SPRING)			
MTT 490	Clinical Practice II: Math	2	
SED 498	Collaborative Capstone for Professional Inquiry	1	
		3	
MTT 490	Clinical Practice II: Math Collaborative Capstone for Professional Inquiry	<u>1</u>	

#### TOTAL REQUIRED FOR GRADUATION: 30 UNITS

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

<sup>2</sup>FYS 1xx will also count as a Social Justice requirement, depending on its course number.

<sup>3</sup>If studying a foreign language not previously taken in high school, you must complete the language requirement at the 102 level or higher.

<sup>4</sup>MAT/STA option must be chosen from list of courses on the department website.

**NOTE:** The official major requirements, including retention and graduation grade requirements, can be found in the Undergraduate Bulletin and on the department website.

Revised 7/11/19 2/13/21 7/13/23 6/3/24 9/25/24 5/13/25