Adolescence Education: Mathematics (7-12)

Bachelor of Science (B.S.) Degree in Adolescence Education: Mathematics

Total minimum required credits: 120

A.   Major Requirements   20 Courses (**86** Credits)

1.   Mathematics Courses   12 Courses (**48** Credits)

MA2310	Calculus and Analytic Geometry I	4
MA2320	Calculus and Analytic Geometry II	4
MA2500	History of Mathematics	4
MA3030	Discrete Mathematics	4
MA3160	Linear Algebra	4
MA3180	Foundations of Second. School Math	4
MA3210	Introduction to Probability & Statistics	4
MA3330	Calculus and Analytic Geometry III	4
MA3520	Transition to Advanced Mathematics	4
MA4510	Geometry	4
MA5120	Abstract Algebra I	4
MA5320	Advanced Calculus I	4

2.   Education Courses   8 Courses (**38** Credits)

ED3742	Middle Childhood & Adolescence	4
ED3950	Schools for a Just Society	4
ED4000	Foundations of Special Education	4
ED4230	Reading Across the Curriculum	4
ED4231	Reading Practicum	2
ED4082	Methods & Materials of Teaching Math	4
ED5890	Observation, Practicum, and Seminar	4
ED5900	Student Teaching & Seminar (7-12)	12

B.   Mathematics Department Requirements

- A grade of **C** or higher is needed in all required mathematics courses
- Candidates who desire a Second Major in Mathematics must take: MA4360, CS2510, and one Math elective at 4000 or 5000 level and Transfer students must complete a minimum of **28** credits (**7** courses) of the required mathematics courses at or above the 3000 level at Old Westbury

C.   Liberal Education Requirements

Refer to the Liberal Education Curriculum Guidelines

D.   School of Education Requirements

Refer to the School of Education Requirements for Adolescence Education: Mathematics

Reminders: **MA4510** and **ED4082** are offered in Spring and **MA3180** is offered in Fall.
ED4082 & **ED5890** must be taken together
ED4230 & **ED4231** are recommended to be taken concurrently
ED3742 is cross listed as **PY3220**

Department Chair: **Dr. Frank Sanacory**   sanacoryf@oldwestbury.edu   Tel: **516 876 3127**

Prerequisite Guide

COURSES	PREREQUISITE Grade of **C** or better
MA2310 Calculus and Analytic Geometry I	**MA2090** Precalculus
MA2320 Calculus and Analytic Geometry II	**MA2310** Calculus and Analytic Geometry I
MA2500 History of Mathematics	**MA2310** Calculus and Analytic Geometry I
MA3030 Discrete Mathematics	**MA2090** Precalculus or **MA2080** Precalculus for Business & Economics
MA3160 Linear Algebra	**MA2310** Calculus and Analytic Geometry I or **MA2300** Calculus for Business & Economics
MA3180 Foundations of Sec. School Math	**MA2320** Calculus and Analytic Geometry II **MA3030** Discrete Mathematics **MA3160** Linear Algebra
MA3210 Intro. to Probability & Statistics	**MA2310** Calculus and Analytic Geometry I or **MA2300** Calculus for Business & Economics
MA3330 Calculus and Analytic Geometry III	**MA2320** Calculus and Analytic Geometry II
MA3520 Transition to Advanced Mathematics	**MA2320** Calculus and Analytic Geometry II **MA3030** Discrete Mathematics
MA4510 Geometry	**MA2320** Calculus and Analytic Geometry II
MA5120 Abstract Algebra I	**MA3160** Linear Algebra **MA3520** Transition to Advanced Mathematics **EC II** English Composition II
MA5320 Advanced Calculus I	**MA2320** Calculus and Analytic Geometry II **MA3520** Transition to Advanced Mathematics **EC II** English Composition II

MA4100 Number Theory	**MA3030** Discrete Mathematics
MA4160 Advanced Linear Algebra	**MA3160** Linear Algebra
MA4360 Differential Equations	**MA2320** Calculus and Analytic Geometry II
MA4910 Operations Research I	**MA3160** Linear Algebra
MA5380 Complex Analysis	**MA3330** Calculus and Analytic Geometry III
CS2510 Computer Programming I	**MA1020** or **MA2090**