MAE 301/501 -- Foundations of Secondary School Mathematics
Fall 2023

Instructor: Rob Lazarsfeld
Office: Math 4-107
Zoom Room: 631 632 8293
e-mail: robert.lazarsfeld@stonybrook.edu

Tentative Office Hours: Tues noon - 1:00; Wed 2:30-3:30; Thurs 2:30-3:30.

The goal of this course is to explore topics that appear in the high school curriculum from a more advanced mathematical viewpoint. Subjects to be considered include real and complex numbers, functions, integers and polynomials and congruence.

I will roughly (but not in detail) follow the book Mathematics for High School Teachers by Usiskin et al.

I will assign homework every week or ten days. Each assignment will contain exercises which you should do for yourself to practice the material. There will also be more challenging problems which I will collect and grade. There will also be occasional brief in-class quizzes to make sure everyone is on-track.

There will be three exams and a final. The first exam, at the beginning of the semester, will consist of problems taken from past Regents exams. If necessary re-takes will be given, but in order to pass the class students must end up with at least an 85% on this. The two midterms will occur approximately one-third and two-thirds of the way through the class.

The different components of the class will be weighed as follows in determining the final grade:

HW and Quizzes: 20%
Exam 1: 10%
Exams 2, 3: 20% each
Final: 30%