

**MATH 300: INTRODUCTION TO MATHEMATICAL
REASONING**

Course Web Page: <http://www.math.rutgers.edu/sthomas/300.html>

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Lectures: TTh8 (7:40-9:00 pm) HH B5

Office hours: TTh 2-3 pm Hill 220

We will cover the following material:

- Chapter 1
- Chapter 2, sections 1-5 (Omit section 6)
- Chapter 3, sections 1-4 (Omit section 5)
- Chapter 4
- Chapter 7, section 1.

If time permits, we may also cover some of the following material:

- Chapter 6, section 1-3
- Chapter 5, sections 1-3

Course Text:

- D. Smith, M. Eggen and R. St. Andre, *A transition to advanced mathematics*, Sixth Edition.

Prerequisites: One year of calculus, Rutgers Math 152, Math 154, Math 192, or equivalent.

Course purpose: The primary purpose of this course is to give prospective mathematics majors the tools needed to succeed in upper division mathematics courses, where the ability to understand and to produce careful mathematical arguments is essential. A secondary purpose is to introduce some of the basic mathematical concepts that are used in these courses. Although the course is designed for math majors, it is open to all students who meet the prerequisites.

Homework: Homework is collected each Thursday. Homework that is late because of religious observance, participation in varsity sports, and similar reasons will be accepted without penalty provided the instructor is informed in advance. No other late homework will be accepted.

Grading. The points for the final grade are distributed as follows.

- (1) Homework 30 %
- (2) First midterm 20 %
- (3) Second midterm 20 %
- (4) Final exam 30 %

Grading standards: Since the primary purpose of Math 300 is to prepare students for courses like Math 311 and Math 351, the term grade will reflect the students readiness for these courses. Grades of A and B will be given to students who are clearly ready for advanced mathematics courses. A grade of C will be given to students who have a reasonable chance of succeeding in advanced courses but who will probably need to expend a special effort to do so. A grade of F indicates that the student is not ready for most upper-level mathematics courses. There seems to be little justification for a grade of D in Math 300 and few if any D's will be given.