

MAT 207 Transition Mathematics—Spring 2009 Syllabus

I. Basic Information

3 hrs credit
Corequisite: MAT 212

II. Course Professor

Professor:	Dr. Troy Riggs	Office:	C-57
Phone:	661-5257	Email:	triggs@uu.edu
Office Hours:	TBA		

III. Course Description & Objectives

This course is designed to bridge the gap between the computational focus in lower-level mathematics courses and the more theoretical content in upper-level courses. The main objectives of the course are:

1. to teach students how to read and write mathematical arguments (proofs),
2. to sharpen critical thinking skills,
3. to develop mathematical maturity,
4. to introduce students to the foundations of mathematics,
5. to communicate the beauty of mathematics as an intellectual pursuit.

IV. Method of Instruction

This course will be taught in a seminar-style setting in which the professor and the students will share in demonstration, problem solving, and discussion.

V. Required Text

Mathematical Proofs: A Transition to Advanced Mathematics, 2nd Ed., Daniel Chartrand, Polimeni and Zhang, Pearson Education, Inc. (ISBN: 0-321-39053-9).

VI. Method of Evaluation

1. Exams: There will be three exams and a comprehensive final exam (each exam 1/6th of course grade).
2. Exercises: Exercises will be assigned and regularly collected. This written work will be graded for accuracy and completeness (1/6th of grade). Late work will not be accepted.
3. Classroom Presentations: Each student will present proofs from the exercises to the class and will read and present one mathematics paper during the semester. This paper will be chosen with the instructor (1/6th of grade).

Grades will be determined according to the scale: A-90% (excellent), B-80% (good), C-70% (satisfactory), D-60% (less than satisfactory), F-below 60% (failure).

VII. Attendance & Participation

Regular attendance and participation is necessary for a student to be successful in this class.

VIII. ADA Compliance

In compliance with the Americans with Disabilities Act, appropriate accommodations will be made to meet documented student needs. It is your responsibility to inform the professor of those needs.

IX. Statement on Cheating and Plagiarism

No forms of cheating will be tolerated. If the professor observes cheating by a student during an exam, the student will receive a grade of zero for that exam and subsequently will be reported to the dean's office.

X. Course Outline

- A. Set Theory & Logic (Chapters 1, 2)
- B. Proofs (Chapters 3-6)
- C. Relations & Functions (Chapters 8, 9)
- D. Cardinality & Number Theory (Chapters 10, 11)