

MATH 327H, INTRODUCTION TO ADVANCED ANALYSIS – FALL 2012

Instructor: Teena Gerhardt

Email: teena@math.msu.edu

Webpage: <http://www.math.msu.edu/~teena>

Phone Numbers: 884-0593 and 353-8482

Offices: E-194A Holmes Hall and C218 Wells Hall

Office Hours: Mon 3-4pm (in C218 Wells), Wed 10-12 (in E-194A Holmes), and by appointment

Lecture: MWF, 1:50 - 2:40 in A108 Wells Hall

Text: Rudin, *Principles of Mathematical Analysis*, 3rd Ed.

Course Objectives: This advanced track analysis course will cover the first six chapters of Rudin's book. Topics include real and complex numbers, topology, sequences and series, continuity, differentiation, and integration. Students will develop skills in reading mathematics and writing proofs.

Homework: Assignments will be announced in class and posted on the ANGEL course page. You are encouraged to talk with your classmates about the assignments, but each student must submit his or her own solutions. Assignments will be due most weeks, usually on Wednesday at the beginning of class.

Exams: There will be two take home exams. You will have at least a week to work on each of these exams. The tentative exam due dates will be **October 19** and **December 5**. There will be no final exam for the course.

Academic Honesty: Cheating will not be tolerated. Students who cheat may receive a 0.0 on the assignment or fail the course. This includes plagiarism and copying another's work.

ANGEL: The course page on ANGEL (<http://angel.msu.edu>) will contain course announcements, written assignments, and supplementary materials.

Grading Components:

Homework	40%
Take Home Exams	60%

Grading Scale:

Percentage	Grade	Percentage	Grade
$90 \leq x$	4.0	$60 \leq x < 66$	2.0
$82 \leq x < 90$	3.5	$55 \leq x < 60$	1.5
$74 \leq x < 82$	3.0	$50 \leq x < 55$	1.0
$66 \leq x < 74$	2.5	$0 \leq x < 50$	0.0

Semester grades may be higher than given by this breakdown, but they will not be lower.