

INSTRUCTOR: Xiangjin XU **E-mail:** xxu@math.binghamton.edu
Office: Library North , Room 2226 **Phone:** 607-777-2514
Time and Location: MWF 12:00-1:00 pm, T 1:15-2:40pm at S2-337
Office Hours: T 2:50-4:20pm, W 3:30-5:00pm (or by appointment)
Homepage: <http://www.math.binghamton.edu/xxu/>

TEXTBOOK: Analysis I by Terence Tao, Publisher: Hindustan Book Agency

PREREQUISITE: Graders C or better in Linear Algebra (MATH 304), Calculus III (MATH 323) and Number systems (MATH 330). One should know basic knowledge of the real numbers, the rational numbers and the integers, including a thorough study of induction and recursion, the methodology of mathematics: basic logic, the use of quantifiers, equivalence relations, sets and functions. Methods of proof in mathematics.

COURSE CONTENT: This is the first semester for an undergraduate course in real analysis, an essential subject for students majoring in mathematics or using mathematics heavily in another major (physics, economics, etc.) We will carefully discuss sequences and series on \mathbb{R} , infinite sets, continuous functions on \mathbb{R} , differentiation of functions, and the Riemann integral on \mathbb{R} , and cover most parts of Chapter 5 to Chapter 11 in the textbook. Some topics at the ends of the chapters may be omitted if time gets tight.

There will be weekly homework assignments, which will be posted on the class web-site. There will also have weekly quizzes in class.

ATTENDANCE POLICY: Regular attendance is expected. Following the academic policy listed in the University Bulletin, I will not grade neither homeworks nor exams of any student missing more than 25 percent of the classes. The assigned grade for these homeworks and exams will be a zero. Attendance and class participation may be used in determining borderline grades. Students are expected to be on time for class and stay for the entire class period. Always turn off your **cell phone** before entering the classroom.

QUIZ and HOMEWORK: Weekly homework is generally due at class time on a given day. It will be graded and returned to you as soon as possible. **LATE HOMEWORK WILL NOT BE ACCEPTED FOR ANY REASON.** Discussion is encouraged, but everyone must hand in your own homework. Homework should be prepared with considerable care. Weekly quiz will be given in class at the day when homework is due to. In computing your quiz and homework grade, the highest 10 grades will be counted. More on this will be discussed in class.

MIDTERM EXAMS and FINAL EXAM: There will be TWO mid-term exams in class and one final exam. The dates for midterms will be announced at

least one week advance if there are any change:

MIDTERM EXAM I: October 6, Tuesday, in class

MIDTERM EXAM II: November 3, Tuesday, in class

FINAL EXAM: December 16th 2009, 11:00-13:00pm FA 258

The final exam can't be taken early; please make your travel plans accordingly.

E-MAIL: I will frequently use e-mail to contact the class with announcements or other information. Please check your university e-mail regularly. Also, if you need to contact me, feel free to e-mail me at xxu@math.binghamton.edu.

HONOR CODE: The Honor Code will be strictly observed in this class. Please remember to pledge each written assignment.

COURSE GRADES: Course grades will be based on the following point distribution (Total: 1,000 points):

Quiz and Homework:	400
Mid-terms:	300 (150 each)
Final Exam:	300
Tentative grade scale:	
A: 900-1000; B: 750-899; C: 600- 749; D: 500-599; F: below 500.	

IMPORTANT DATES: Please be aware of the following dates:

Last day to drop a course:	September 11, Friday
Last day to add a course:	September 11, Friday
Last day to withdraw (with a "W") from a course:	October 30 Friday
Last day of classes:	December 11