

INSTRUCTOR: Xiangjin XU *E-mail:* xxu@math.binghamton.edu

Office: Library North , Room 2226

Phone: 607-777-2514

Time and Location: MWF 1:10-2:10 pm, R 1:15-2:40pm at FA 241

Office Hours: W 2:30-4:30pm, R 11:00-1:00pm (or by appointment)

Homepage: <http://www.math.binghamton.edu/xxu/>.

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

PREREQUISITE: MATH 478 with a grade of C or better.

COURSE CONTENT: This is the second 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 metric space, continuous functions on metric space, uniform convergence, power series, Fourier series, several variable differential calculus, an brief introduction of Lebesgue measure and Lebesgue integration, and cover most parts of Chapter 12 to Chapter 19 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 website. 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 homework nor exams of any student missing more than 25 percent of the classes. The assigned grade for these homework 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.

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.** In computing your homework grade, the highest 10 grades will be counted. Discussion is encouraged, but everyone must hand in your own homework. Homework should be prepared with considerable care. More on this will be discussed in class.

QUIZ: Weekly quiz is generally taken in class of Thursday or Friday. In computing your quiz's 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 and one final exam. The dates for midterms will be announced at least one week advance if there are any change:

MIDTERM EXAM I: February 20, Take-home
MIDTERM EXAM II: end of March, to be announced
FINAL EXAM: May 11, 2009, 2:00-4:00pm S2-140

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: 200

Homework: 200

Mid-terms: 350 (150 + 200)

Final Exam: 250

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: February 6

Last day to **add** a course: February 6

Last day to **withdraw** (with a "W") from a course: March 27

Last day of classes: May 8