

## MATH 4661/6661 – Analysis I – Course Syllabus

**Instructor:** Prof. Xiaojing Ye, xye@gsu.edu, COE 704, Phone: 413-6444.

**Course Website:** <http://www.math.gsu.edu/~xye/course/analysis.html>

**Textbook:** Principles of Mathematical Analysis (Third Edition) by Walter Rudin. Published by McGraw-Hill.

**Time:** 3 credit hours in Fall semester. Two lectures per week, 75 min per lecture.

**Prerequisites:** A grade of C or higher in Introductory Linear Algebra (MATH 3435). Co-requisite: Linear Algebra (Math 4435).

### Course Outline:

Chapter 1 The real and complex number systems .....	approx. 6 lectures
Chapter 2 Basic topology .....	approx. 6 lectures
Chapter 3 Numerical sequences and series .....	approx. 9 lectures
Chapter 4 Continuity .....	approx. 6 lectures

**Course Description:** Rigorous approach to calculus; proof techniques in the area of real analysis.

### Grading Scales:

Score	0–59	60–69	70–76	77–79	80–82	83–86	87–89	90–92	93–96	97–100
Grade	F	D	C	C+	B–	B	B+	A–	A	A+

**Grading Weights:** Homework (20pts). Midterm Exam 1 (25pts). Midterm Exam 2 (25pts). Final Exam (30pts).

**Exam:** Two midterm exams and one final exam. All exams are held in lecture room.

**Homework:** 10 homework assignments are given during lectures. Each one has a total of 2 points.

**Academic Honesty:** All work submitted by a student for a grade must have been done without help from other persons. Cheating and plagiarism are strictly forbidden. A first occurrence will result in a grade of 0 on the assignment for all concerned parties as well as an Academic Dishonesty form being filed with the Dean of Students. A second occurrence will result in a grade of F for the course for the concerned parties and a second Academic Dishonesty form being filed.

**Makeup Policy:** Exams may be made up only in the event of a suitable verifiable excuse (e.g., a doctor's note is necessary).

### Remarks:

- Whilst every effort will be made to adhere to the syllabus, the circumstances may make it necessary to deviate from it.
- Students who wish to request accommodation for a disability may do so by registering with the Office of Disability Services. Students may only be accommodated upon issuance by the Office of Disability Services of a signed Accommodation Plan and are responsible for providing a copy of that plan to instructors of all classes in which accommodations are sought.

## MATH 4662/6662 – Analysis II – Course Syllabus

**Instructor:** Prof. Xiaojing Ye, E-mail: [xye@gsu.edu](mailto:xye@gsu.edu), Office: COE 704, Phone: 413-6444.

**Course Website:** <http://www.math.gsu.edu/~xye/course/analysis.html>

**Time:** 3 credit hours in Spring semester. Two lectures per week, 75 min per lecture.

**Textbook:** Principles of Mathematical Analysis (Third Edition) by Walter Rudin. Published by McGraw-Hill.

**Prerequisites:** A grade of C or higher in Analysis I (Math 4661).

### Course Outline:

Chapter 5 Differentiation of real functions. .... approx. 5 lectures  
Chapter 6 Riemann integrals ..... approx. 6 lectures  
Chapter 7–8 Sequences of functions ..... approx. 8 lectures  
Chapter 9–10 Function of several variables ..... approx. 5 lectures

**Course Description:** Rigorous approach to calculus; proof techniques in the area of real analysis.

### Grading Scales:

Score	0–59	60–69	70–76	77–79	80–82	83–86	87–89	90–92	93–96	97–100
Grade	F	D	C	C+	B–	B	B+	A–	A	A+

**Grading Weights:** Homework (20pts). Midterm Exam 1 (30pts). Midterm Exam 2 (30pts). Final Project (20pts).

**Homework:** 10 homework assignments are given during lectures. Each one has a total of 2 points.

**Exam:** Two midterm exams and one final project. All exams are held in lecture room.

**Academic Honesty:** All work submitted by a student for a grade must have been done without help from other persons. Cheating and plagiarism are strictly forbidden. A first occurrence will result in a grade of 0 on the assignment for all concerned parties as well as an Academic Dishonesty form being filed with the Dean of Students. A second occurrence will result in a grade of F for the course for the concerned parties and a second Academic Dishonesty form being filed. See the University's policy on academic honesty at <http://codeofconduct.gsu.edu/>.

**Attendance Policy:** Students are required to attend lectures. A student who incurs an excessive number of absences may be withdrawn from a class at the discretion of the professor.

**Makeup Policy:** Exams may be made up only in the event of a suitable verifiable excuse (e.g., a doctor's note is necessary).

### Remarks:

- Whilst every effort will be made to adhere to the syllabus, the circumstances may make it necessary to deviate from it.
- Students who wish to request accommodation for a disability may do so by registering with the Office of Disability Services. Students may only be accommodated upon issuance by the Office of Disability Services of a signed Accommodation Plan and are responsible for providing a copy of that plan to instructors of all classes in which accommodations are sought.