Monteith 112

Monday, Wednesday, Friday, 10:10 - 11:00

This syllabus contains the policies and expectations that the instructor has established for this course. Please read the entire syllabus carefully before continuing in this course. These policies and expectations are intended to create a productive learning atmosphere for all students. Unless you are prepared to abide by these policies and expectations, you risk losing the opportunity to participate further in the course.

Instructor: Prof. Matthew Badger (matthew.badger@uconn.edu)

Office: Monteith 326

Office Hours: Wednesdays 11:00-12:00, Thursdays 2:00-3:00

#### Course Description

A rigorous introduction to the real numbers, sequences in  $\mathbb{R}$ , numerical series, continuity, the derivative, sequences and series of functions, and the Riemann integral. This course assumes that students are already familiar with writing mathematical proofs (e.g. having taken Math 2710).

### Required Resources

- Course Webpage: www.math.uconn.edu/~badger/ → Link to Math 3150, Section 1
- HuskyCT: huskyct.uconn.edu for class announcements and grade sheet
- **Textbook:** Pons, Matthew A. Real analysis for the undergraduate. With an invitation to functional analysis. *Springer*, *New York*, 2014. Chapters 1–7 excluding last section per chapter.

### **Graded Components**

- Quizzes: Short quizzes will be given in class throughout the semester, typically once per week during Friday's lecture. Deviations from this schedule will be announced in advance, in class.
- Midterm Exam: There will be one in class midterm exam, in mid October. Exact date to be announced in advance, in class.
- Portfolio: In lieu of a final exam, you will prepare a writing portfolio consisting of proofs illustrating essential concepts and techniques learned throughout the course. Portfolio problems will be assigned in stages throughout the course. Drafts will be collected, returned with feedback, and must be revised for the final portfolio. Details will be announced in class. The completed portfolio is due in class on the day of the last lecture.

The *final grade* for the class will be based on your course average (see below) and your progress in the course. Your *course average* will be determined by the following calculation:

• 20% Quizzes, 20% Midterm, 60% Portfolio

## **Disability Support Services**

If you have a physical, psychological, medical, or learning disability that may impact your course work, please contact the Center for Students with Disability:

⟨http://www.csd.uconn.edu/⟩.

They will determine with you what accommodations are necessary and appropriate. All information and documentation is confidential.

### **Academic Integrity**

Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work. Representing another person's work as your own is always wrong. Faculty are required to report any suspected instance of academic dishonesty to Community Standards. For more comprehensive information on academic integrity, please refer to the Undergraduate Academic Integrity Policy:

\langle http://community.uconn.edu/the-student-code-appendix-a/\rangle.

# Syllabus Revision

The standards and requirements set forth in this syllabus may be modified at any time by the course instructor. Notice of such changes will be by announcement in class and changes to this syllabus will be posted on the course website.

Current as of: August 26, 2017