

SYLLABUS – MATH 3210, SECTION #3

FOUNDATIONS OF ANALYSIS

Description: This is a course on real analysis, or in other words the theory behind calculus. There will be an emphasis on mathematically correct proof writing. This class quite different than what you have done in previous calculus classes.

In terms of precise topics, there will be a rigorous reconsideration of the real-numbers. We will also learn about the details of and behind continuity, differentiation and integration for functions of one variable, as well as infinite sequences and series.

- **Time:** Monday, Tuesday, Wednesday, Friday 10:45 AM – 11:35 AM.
- **Location:** LCB 225 MWF, LCB 215 Tuesdays.
- **Instructor:** Karl Schwede
- **Contact information:**
 - email: schwede@math.utah.edu
 - office: JWB 323
 - website: <http://www.math.utah.edu/~schwede/math3210> (or see Canvas).
- **Office hours:** TBD
- **Textbook:** *Foundations of Analysis* by Joseph L. Taylor

Grade: Your grade will be determined by the following formula.

- 35% Homework, in class group worksheets, and quizzes. Homework will be approximately weekly. Quizzes will once every 1 or 2 weeks. Worksheets will be once every 1-2 weeks. Your lowest homework / quiz / worksheet score will be dropped.
- 15% Midterm #1. Tentatively Monday, September 30th.
- 20% Midterm #2. Tentatively Friday, November 15th.
- 30% Final. Scheduled as per University guidelines.

In terms of letter grade assignments, here is the minimum scale (the final scale may be more generous than what is written here).

93+ will be an A,	83-86 will be a B,	73-76 will be a C,	63-66 will be a D,
90-92 will be an A-,	80-82 will be a B-,	70-72 will be a C-,	60-62 will be a D-,
87-89 will be a B+,	77-79 will be a C+,	67-69 will be a D+,	0-59 will be an E.

Generally speaking, late homework will not be accepted. In unavoidable circumstances, you must speak with the instructor *prior* to missing the homework in order to receive credit. In such situations, the impact on the grade will be dealt with on a case by case basis.

- We will try using **gradescope** to both turn in and grade homework, worksheets etc.

Students are allowed, and even encouraged to work together when solving homework problems (although each student is responsible for their own write-up, unless it is specifically a group assignment).

Prerequisites: They officially are “C” or better in ((MATH 2210 OR MATH 1260 OR MATH 1280 OR MATH 1321 OR MATH 3140) AND (MATH 2200 OR MATH 2270 OR MATH 2250)).

Academic Integrity: All University of Utah policies regarding ethics and honorable behavior apply to this course.

Disabilities: The Americans with Disabilities Act requires that reasonable accommodations be provided to qualified individuals. To discuss any such accommodations, please contact me as well as the Center for Disability Services, (801) 581-5020, at the beginning of the semester.