

Math 371 Advanced Calculus
Spring 2019

Instructor: Dr. Kathy Temple

Office: Samuelson 221D

Phone: (509) 963-1389

E-mail: Kathryn.Temple@cwu.edu

Office Hours: MF 10 - 10:50 AM, TTh 1 - 1:50 PM, and by appointment.

Course Goals: The goal of this course is to approach the real numbers and calculus from an axiomatic point of view. This course also helps students develop proof-writing skills that are necessary for more advanced mathematics. Specifically, we will cover:

- Number systems (naturals, integers, rationals, and reals): axioms and properties
- Sequences and series of real numbers
- Continuity

Prerequisite: MATH 272 and {MATH 351 or MATH 335}

Required Text: None; we'll be using lecture notes "An Introduction to Analysis on \mathbb{R} ," written by Dr. Bisgard. These notes will be posted on Canvas.

Evaluation:

- Two in-class exams (30% total); tentative dates: Monday, April 22 and Friday, May 17.
- Comprehensive final exam (20%); given/due Thursday, June 6, from 8 - 10AM. The final exam will include an in-class portion and a take-home portion.
- Homework (50%).

Course grades will be assigned based upon the following scale:

93-100%=A	90-92.9%=A-	87-89.9%=B+	83-86.9%=B	80-82.9%=B-
77-79.9%=C+	73-76.9%=C	70-72.9%=C-	67-69.9%=D+	63-66.9%=D
60-62.9%=D-	below 60%=F			

Course Conduct:

- **Homework:** Weekly homework will be assigned in class, typically due on Fridays. You will be given about one week to complete a regular assignment. You will also be asked to turn in outlines of some selected problems a few days before the actual assignment is due, typically on Tuesdays. A separate handout will describe what is required in a proof outline.

Homework must be done neatly, stapled, and written on clean-edged paper. Your work should be in a logical order, provide sufficient explanation, and use complete sentences where appropriate. You may use/ask/talk to whatever/whoever you'd like, as long as you say what resources you used. However, you must write your solutions up in your own words to hand in. Credit will not be given for late homework.

Since there's always an element of adapting to a new instructor, up through the first exam you will be able to do revisions on homework assignments. Revisions will be due on the

Thursday after the homework assignment was originally due, and can earn up to two points per problem (out of 10). Revisions must be on a new sheet of paper, and you must turn in your original graded work together with your revisions. There will be no revisions on homework sets due after the first exam.

- **Exams:** Any changes to the tentative exam schedule will be announced in advance. Make-up arrangements must be made at least one day prior to an exam unless you can document an unexpected circumstance beyond your control that prevented you from taking the exam. All make-up exams must be requested as early as possible. Exams requested more than 24 hours after the scheduled exam will be given only in extreme extenuating circumstances (e.g. hospitalization, jail . . .) When a make-up exam cannot be taken in a timely manner, typically before exams are returned to the class, I reserve the right to instead replace that portion of the course grade with the final exam grade. The final exam will include an in-class portion and a take-home portion. For the take-home portion, you must work by yourself!
- **Other Information:** Central Washington University is committed to creating a learning environment that meets the needs of its diverse student body. If you anticipate or experience any barriers to learning, discuss your concerns with the instructor. Students with disabilities should contact Disability Services to discuss a range of options to removing barriers, including accommodations. Student Disability Services is located in Hogue 126. Call (509) 963-2214 or email ds@cwu.edu for more information.

There will be regular work due during the last week of classes, potentially including a homework assignment due on Friday.