Central Washington University

Mathematics Department
400 E. University Way
Ellensburg, WA 98926

Math 172 Calculus I AndrewR@cwu.edu

CRN #91079 Spring 2022

Number of credits: 5

Optional Textbook: **Boelkins, M. (2018).** ***Active Calculus*** **(2nd ed.). Grand Valley State University Libraries. ISBN: 978-1724458322**

Recommended Materials: Desmos graphing application

Additional optional materials: Graphing Calculator (TI-83/84 preferred), pencils, erasers, lined paper or graph paper, notebook, and large eraser.

Course Description: Theory, techniques, and applications of differentiation and integration of the elementary functions. Basic Skills Section C – Math.

Prerequisites: MATH 154 with a grade of C or higher, or an appropriate test score on the mathematics placement exam.

Math Mission Statement: In support of liberal education, scientific careers, teacher preparation, and actuarial science, the mathematics department prepares students for quantitative and symbolic reasoning and advanced mathematical skills through general education, service, major, and graduate programs.

Attendance: Although this course is online, I do expect regular participation with discussion groups and periodic check-ins. You have until **11:59 p.m., September 27th, 2022**, to be eligible for a refund. If you have to be absent for some emergency, be sure to contact me at the earliest possible time.

Grade: Grades will be assigned using 90% - 100% = A 80% - 90% = B 70% - 80% = C 60% - 70% = D; + and – grades apply if your score is within 2%.

Homework: Homework will be assigned primarily within Active Calculus, Desmos, and via canvas.

Active Calculus: Each section has homework exercises and I have additional resources connected to the material covered in Active Calculus such as recorded lectures, articles, and additional assignments. The majority of lectures will be from activities from the Active Calculus textbook. The assignments are typically very short (4 - 6 minutes) and can be done multiple times.

Desmos is an app and website where you can graph functions, plot data, evaluate equations, explore transformations, and much more—all for free. Each section (or the majority of) in Active Calculus will have a Preview activity that I expect you to complete and will be reviewed in lecture. Each of the desmos activities will have a class code that you will need to enter from student.desmos.com. I will have a link to each activity throughout the term.

Canvas: Periodically I will give assignments found in Canvas that will be submitted into Canvas.

Late work: You can submit work after the due date with instructor approval and a penalty between 20% - 50% penalty and an additional. Exceptions are given pending only with instructor approval.

Homework advice: Success in math goes hand-in-hand with completing the homework assignments. When doing your homework, feel free to ask for help. The Math tutor center is an excellent resource that is available to all CWU students. You can access math tutoring at https://www.cwu.edu/academic-success/schedule-appointment. Khan Academy is an excellent resource. The homework is assigned to provide you with enough practice to retain the ideas and techniques you're learning. Doing homework daily gives you the advantage of taking in smaller amounts of information at a time and getting help early when you need it. This is the class to begin to develop good study habits. If you need help outside of the classroom there are several options available to you: get a second opinion from a classmate, an assistant in the Math tutor center, or from me via canvas or e-mail.

Exams: There will be several exams given throughout this course. All will have no make-ups, if you know you will not be able to attempt/complete an exam, it is your responsibility to arrange to take the exam before it is given. The lowest exam as well as two lowest quizzes will be dropped from your overall grade.

Grading: Grades will be based on

Assignments		
In-Class Activities	8% per unit	Total: 24%
Weekly Homework Sets	8% per unit	Total: 24%
Preview Assignments	4.5% per unit	Total: 13.5%
Exams	9.5% each	Total: 27.5%
Final	10%	Total: 10%

Assignments: Assignments will be given throughout the term in the form of in-class activities, homework, and often assignments will be given that preview assignments.

In-class Activities: The majority of the assignments will be completed in-class and will cover the major concepts in differential calculus.

Homework: Homework will be assigned through Canvas using a program called MyOpenMath. Homework is opened every Sunday until it's due date listed in Canvas (typically Friday).

MyOpenMath: The majority of work will be completed in Canvas using an open education resource called MyOpenMath.

Preview: As we cover major concepts there will be preview activity either completed in class or completed prior the lecture covering topics or skills that will be necessary.

Late work: Exceptions are given pending with instructor approval, but otherwise you have three late passes which can be used on homework and preview assignments.

Office Hours/Appointments: Unless otherwise stated in Canvas or in the weekly announcements, I will maintain office hours throughout the term (11:00 a.m. every Monday). If you would like to set up an appointment outside of this time please contact me and I am happy to accommodate you.

Disability Resources Statement: 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.

Academic Honesty: Consult university policies (CWUP 5-90-040(22), CWUR 2-90-040(22), and WAC106-125-020) for student conduct, cheating, plagiarism, and other academic expectations. CWU's policies and recommendations for academic misconduct will be followed, leading to disciplinary action up to and including failing the course.