

Professor: Dr. Chris Black
Office: HEC #268 Des Moines Center
Office Hours: by arrangement
Email : blackc@cwu.edu. Email is the most reliable way to reach me.

Required Handouts provided by the professor.
Materials: Access to Desmos online graphing calculator.

ABOUT THIS COURSE:

MATH 170 presents an intuitive approach to differential and integral calculus specifically designed for students in education and the behavioral, managerial, and social sciences.

GOALS FOR COURSE:

Upon successful completion of this course, MATH 170 students will be able to:

- Find and interpret the limit of a function.
 - Discuss the continuity of a function.
 - Differentiate and integrate a variety of common functions.
 - Develop a conceptual understanding of derivatives and integrals and describe each in varying contexts.
 - Use derivatives to describe behavior of curves.
 - Solve optimization problems.
 - Calculate accumulated change using Rieman sums and techniques of integration.
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COURSE EXPECTATIONS:

Being successful in a mathematics class generally requires good study habits, hard work, patience, and proper time management. Each student is expected to attend every class meeting, to read and think about the assigned readings, to complete assignments in a timely manner, and to seek the assistance of the instructor when difficulties are encountered.

With all that is going on in the world, we are all doing the best we can. If you encounter challenges in this course, please contact me ASAP so we can seek a resolution together.

HOMEWORK:

Homework for this course will be submitted and machine scored on MyOpenMath, which is linked to our Canvas course. There is one assignment for each of the 14 sections of material in the course, and review assignments for each test. Homework is due at 11:59 pm on the day indicated on the schedule, generally once per week. Homework can be re-worked until correct. The lowest score of the 14 assignments will be dropped.

Machine scoring cannot adequately assess depth of understanding, but merely assesses procedural fluency. Additional study problems will be available on Canvas with full solutions. These problems are divided into three categories based on the three components of mathematical rigor: conceptual understanding (what?), procedural fluency (how?), and mathematical reasoning (why?).

PARTNER QUIZZES:

As the content permits, in-class quizzes will be administered to be worked through with an assigned partner or small group. Quiz dates are tentatively scheduled for T 10/18 and T 11/1.

TESTS:

There will be three in-class tests that cover the primary concepts of calculus. The first test will focus on preliminary concepts of calculus (limits and continuity, basic derivatives), the second test will focus on techniques of differentiation and the third test will focus on integration. Test dates are tentatively scheduled for F 10/21, F 11/18, and F 12/2.

We will be using a collaborative two-stage testing scheme. The first stage of the test is an individual test administered for 60 minutes during class time. In the second stage, small groups will work together to take a similar test for the remainder of the class period.

The individual score from the first part will count for 60% and the group score from the second part will count for 40% of each test.

FINAL EXAM:

The final exam will take place on Tuesday of finals week during normal class time. This comprehensive test will cover all major concepts of the course. Refer to the course outcomes (listed above) for a taste of what the final will cover. The score on the final exam will replace the score on the lowest test, if that works in your favor.

GRADING:

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| Homework: | 30% |
| Partner quizzes: | 10% |
| Tests: | 45% |
| Final Exam: | 15% |

HONOR AND RESPECT:

Each of us should consider our placement at this institution to be a privilege. We need to have respect for one another, and for ourselves. In light of these facts, cheating in any form will not be tolerated. You are encouraged to work together on homework problems, however anything you turn in with your name on it should have been written by you alone. In a course where much of your grade is determined by your proof writing, plagiarism is a concern. The word “plagiarize” is defined by Merriam-Webster as “to steal and pass off (the ideas or words of another) as one’s own: use (another’s production) without crediting the source.” This is a very serious offense and jeopardizes your position in a teacher preparation program.

MENTAL AND EMOTIONAL HEALTH AND SUPPORT:

Stress and other life circumstances that may be out of your control can make learning and focusing difficult. If you find stress or other mental health concerns make academics difficult, Central has resources to support you. I encourage you to reach out as soon as you notice you’re struggling.

- Student Counseling Services: Crisis appointments are available. Call 509-963-1391
www.cwu.edu/medical-counseling/counseling-clinic
 - Mental health crisis support outside of normal business hours: Call 1-800-273-8255 or Text HOME to 741741
 - Wellness Center: Confidential sexual assault and other victim advocacy. Call 509-963-3213 or visit www.cwu.edu/wecare, www.cwu.edu/path
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DISABILITY SERVICES:

Central Washington University is committed to creating a learning environment that meets the needs of its diverse student body. Students with disabilities should contact Disability Services to discuss a range of options to removing barriers, including accommodations: Hogue Hall 126, 509.963.2214, DS@cwu.edu, www.cwu.edu/disability-services.

ACCOMMODATION FOR RELIGIOUS OBSERVANCES:

In compliance with RCW 28B.137.010, Central Washington University makes every effort to deal reasonably and fairly with students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. Students must present written notice to their instructor within the first two weeks of class listing the specific dates on which accommodations are required. Contact the Dean of Student Success at (509) 963-1515 for further information.

STATEMENT ON DIVERSITY:

CWU expects every member of the university community to contribute to an inclusive and respectful culture for all in its classrooms, work environments, and at campus events. As a student in this course, you are expected to treat your professors, fellow students, and other people affiliated with your work at CWU with respect, regardless of their sex, race and color, religion and creed, national origin, sexual orientation, gender identify and gender expression, disability and use of assistive devices or a service animal, and veteran or military status.

EXPECTATIONS FOR STUDENT CONDUCT:

Students in this class are expected to interact with students and the professor professionally. Instances of disruptive conduct, obstructive conduct, or harassment (see definitions below from the Washington Administrative Code) will be referred to the Dean of Student Success.

Per WAC 106-125-020, the term “disruptive” or “obstructive” conduct means conduct, not protected by law, that interferes with, impedes, or otherwise unreasonably hinders the normal teaching, learning, research, administrative, or other functions, procedures, services, programs, or activities of the university. The term includes disorderly conduct, breach of the peace, violation of local or university noise policies, lewd or obscene conduct, obstruction of pedestrian or vehicular traffic, tampering with student election processes, or interfering with the orderly conduct of university investigations or disciplinary proceedings, including interfering with or retaliating against any witness, party, or other participant.

The term “harassment” means unwelcome and offensive conduct, including verbal, nonverbal, or physical conduct, that is directed at a person because of such person’s protected status and that is sufficiently serious as to deny or limit the ability of a student to participate in or benefit from the university’s educational program, or that creates an intimidating, hostile, or offensive environment for any campus community member(s). Protected status includes a person’s actual or perceived race, color, national origin, gender, disability, or other status protected by law.