

Intuitive Calculus - Math 170 (5 credits) – Winter 2022

Instructor: Dr. Brent Hancock

Office Location: Samuelson 218B

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Class times: Class MTWRF 1:00-1:50pm, Samuelson 115

Office hours: Tuesdays and Thursdays 2:00-2:50 pm; Mondays and Wednesdays 11-11:50am, or by appointment (send me an email to set up a time)

- Office hour visits: Plan ahead and bring your attempted work so I can best assist you ☺

What you will need:

- (No textbook will be required – we will develop our own notes and examples in class)
- Some kind of graphing calculator (TI-83, 84, or similar)
- Access to Canvas online at <http://canvas.cwu.edu> (this is where I will post course handouts, grades, policies, announcements etc. so it is important that you log on regularly).

What you will learn (a more complete list of objectives follows on a later page):

By the end of this course, you will develop calculus skills that will enable you to:

- compute derivatives and antiderivatives of common mathematical functions
- use the derivative to find critical points and rates of change and optimize quantities
- apply derivatives and integrals to mathematical models to answer real-world questions
- explain theoretical and real-world meanings of derivatives and integrals

Where else you can get help (aside from office hours):

- University Math Center (Brooks Library 190; see <http://www.cwu.edu/learning-commons/university-math-center>)
- Yourself (read course notes, practice examples, etc.)
- Each other (study groups, etc.)

What you need to do to succeed in this class:

- Participate in class
- Form study groups and work together
 - ... but submit your own work
- Do the homework and take it seriously
- Start assignments early
- Come to office hours
- Contact me *right away* if a problem arises
- Don't be afraid to initially get things wrong. Work hard to overcome obstacles

IMPORTANT DATES:

Final Exam: Wednesday March 16 from 12:00-2:00 pm. All students must take the final exam at the scheduled time and date.

- **Martin Luther King, Jr. Day** – no class will be held Mon Jan 17.
- **President's Day** – no class will be held on Mon Feb 21.

Important policies:

- No late work is accepted without *prior arrangements* made with me due to extenuating circumstances.
- Don't cheat, and don't plagiarize. Respect the CWU Student Conduct Code (<http://app.leg.wa.gov/WAC/default.aspx?cite=106-125>)
- I follow CWU's policies and recommendations for academic misconduct.

COURSE ASSESSMENT DETAILS

Homework Practice Problems:

So that you can practice the primary skills in the course, I will post “homework” practice problems regularly on Canvas. These problems **will not be collected**, but rather I will provide an answer key for you to check your answers against in preparation for the homework quizzes and exams (see below for details on those). Although you will have access to “final answers” for these practice problems, you will be expected to show all work and your full process on the weekly homework quizzes.

Homework Quizzes:

Once per week, there will be a short 10-15 minute quiz at the beginning of class. These quizzes will very closely resemble select problems from the homework practice problems assignments. These “homework quizzes” will take place on **Fridays at the very beginning of class**, unless I announce otherwise in advance. The purpose of these quizzes is to allow you to:

- practice calculus skills from the homework in a low-stakes, in-class “testing” environment
- demonstrate your problem-solving *process* so I can give you feedback on more than your final answer

Chapter Tests and Final Exam:

We will have three chapter tests in this class, roughly equally spaced throughout the quarter. Exact exam dates will be announced in class and listed on Canvas under the corresponding weekly module. We will also have a cumulative final exam covering all the material from this course. You should bring your own graphing calculator to each exam, and please note that *you will not be allowed to use your cell phone as a calculator* during exams.

Participation:

You are expected to attend class daily and actively participate during class in a variety of ways. For example, you are expected to contribute meaningfully to small-group discussions, ask questions, present solutions, and share your ideas and questions during whole-class discussions. Your participation grade in the course will be based on both timely attendance as well as the above types of participation. *Students may NOT work on homework during class unless directed to do so. Students are also not allowed to leave class early unless we have discussed this in advance and I have given permission to do so.*

****Important Note about Excused Absences**

Please note that there will be no makeup exams or quizzes. Exceptions will only be granted if you miss an exam due to a *verifiable and documented* medical emergency or other university-authorized absence (eg. official CWU sports team obligation, participation in religious observance etc.) and have given me *appropriate advance notice*. Please consult the University student handbook for details on what is considered to be a University-authorized absence, and provide me with a written request ASAP (i.e. before the drop deadline) if you think you will have a conflict with any test dates. 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 or questions.

COURSE GRADE CALCULATION

Weight	Assessment category (grading scale)
22%	Homework Quizzes
45%	Chapter Tests (3)
25%	Final Exam
8%	Attendance and Participation

Letter grades will be assigned as follows:

A- 90.0 - 92.9%	A 93.0 - 100%	
B- 80.0 - 82.9%	B 83.0 - 86.9%	B+ 87.0-89.9 %
C- 70.0 - 72.9%	C 73.0 – 76.9%	C+ 77.0 - 79.9%
D 60.0 - 69.9%		
F 0 - 59.9%		

CWU COVID-Related Policies

In accordance with Proclamation 21.14.1, CWU has chosen to make vaccinations a priority. We believe a fully vaccinated community is the best way to protect our individual and collective health and safety. **Proof of full vaccination against COVID-19 will be required by October 18, 2021** for all employees and students. Medical and/or religious accommodation requests will be considered (by authorized university staff). **All employees and students are required to wear masks while indoors.**

CWU Face Covering Policy 2021-2022

Cloth face coverings must be worn indoors by all CWU students, employees, and visitors. The mask must cover mouth and nose, fitting as snugly as possible against the sides of the face. Students not wearing a mask will be asked to put one on; if they refuse, students will be asked to leave the classroom and building.

Disability Support 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. Disability Support Services in Hogue 126. They may also be reached via email at (DS@cwu.edu).

Respect, inclusivity, and diversity:

In my classroom, diversity and individual differences are respected, appreciated, and recognized as a source of strength. Students in this class are encouraged and expected to speak up and participate during class meetings, **and** to carefully and respectfully listen to each other. So that everyone feels comfortable participating, every member of this class **must** show respect for every other member of this class. Be good to each other.

Cell phone policy:

I will not allow cell phones or similar devices to be used during exams. This includes using your phone as a calculator. During exams, please keep all phones out of sight and silent. If I see anyone using a cell phone during an exam, I may assign that student a zero on that exam.

Changes to the syllabus:

I reserve the right to make modifications to this syllabus at any time. In the event of such changes, I will notify the class and upload a revised syllabus on Canvas.