

Course Information

Course Number:	Math 1496
Course Name:	Calculus I
CRN:	22572
Location:	N/A – Online Asynchronous course
Class Hours:	
Textbook:	Required: Calculus (Early Transcendental Functions 7e) by Ron Larson and Bruce Edwards and WebAssign access. Optional/Supplemental: Calculus for Cats by Amdahl and Loats.
Prerequisites:	C or better in MATH 1390 and C or better in MATH 1392 OR C or better in MATH 1580

Instructor Information

Name:	Dr. Jeffrey Beyerl
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Course Description

As a prerequisite for nearly all upper-division mathematics, this course is a requirement for majors and minors in mathematics and other majors in the natural sciences and engineering. The content includes the study of limits, continuity, derivatives, integrals, and their applications.

Office Hours

My availability changes every day. Go to the website below for up to date availability. When you schedule an appointment, please specify what you're coming for.

Walk-ins are also welcome: if my office door is open, I'm available. However, if somebody with an appointment comes, they will receive priority.

Office Hours Website: <https://ucamath.youcanbook.me/>

**Course Objectives and Requirements**

The primary objective in this course is to develop the theory and computational skills for the three main topics in calculus:

- Limits
- Derivatives
- Integrals

Online Asynchronous course

This course is both online asynchronous. Online means that the entire course can be done remotely without coming to campus. If you do choose to come to campus, you are welcome to use the resources available on campus. Asynchronous means you can complete the course at times that are convenient for you. (There are still due dates each week, however)

Grading Policy

Graded assignments are assigned points which are weighted by the category they fall under. Below each expected item is described.

- **Coursework Category (25%)**
 - Exercise work completed during video lectures (Marked for completion only)
 - Homework in *Skills Practice* on WebAssign (Marked for accuracy with 100 attempts)
 - Quizzes in *Skills Practice* on WebAssign (Marked for accuracy with 1 timed attempt)
 - Everything else not explicitly described below.
- **Video Problem Presentation Category (25%)**
 - Presentation itself
 - Peer review
 - One video problem presentation roughly every two weeks
- **Written Problem Project Category (25%)**
 - Project itself
 - Peer review
 - One written problem project roughly every two weeks
- **Applied Problem Project Category (10%)**
 - Project itself
 - One applied problem project roughly every one to two weeks
- **Skills Test Category (10%)**
 - Administered in WebAssign, marked for accuracy with 1 timed attempt. Use of Respondus Lockdown browser is required
 - One skills test roughly every two to three weeks
- **Final Exam Presentation (5%)**
 - Details will be released toward the end of the semester.

- **Calculation of Grades**

Grades will be calculated using the cutoffs below.

A	$\geq 90\%$
B	$\geq 80\%$
C	$\geq 70\%$
D	$\geq 60\%$
F	$< 60\%$

Example of a grade calculation.

Suppose you have the scores below. There will be many more in a real semester, but hopefully this will illustrate how to calculate your grade.

- 5/5, 5/5, and 3/5 on exercises.
- 10/10, 10/10, and 10/10 on homework.
- 1/2, 0/2, and 1/1 on quizzes
- 100/100, 85/100 on video problem presentations
- 80/100 on written problem projects
- 95/100 and 100/100 on applied problem projects
- 92/100 on skills tests
- 85/100 on the final exam presentation.

Step 1: Calculate your average in each category:

Category	Coursework	VPP	WPP	APP	Tests	Final
Items	5/5, 5/5, 3/5, 10/10, 10/10, 10/10, 1/2, 0/2, 1/1	100/100 85/100	80/100	95/100 100/100	92/100	85/100
Total	45/50	185/200	80/100	195/200	92/100	85/100
Average	90%	92.5%	80%	97.5%	92%	85%

Step 2: Weight each average by the given weighting to get the net contribution to your score:

Category	Coursework	VPP	WPP	APP	Tests	Final
Average	90	92.5	80	97.5	92	85
Weighting	25%	25%	25%	10%	10%	5%
Net	22.5	23.125	20	9.75	9.2	4.25

Step 3: Add up your net contribution to get your course grade:

$$22.5+23.125+20+9.75+9.2+4.25=88.825$$

Step 4: Convert to a letter grade.

88.825% is $\geq 80\%$ but not $\geq 90\%$, so it is a B.

Note that these steps can easily be performed in Excel or Google Sheets. You may want to set up a spreadsheet to keep track of your grades. I will calculate your grades for you at two points in the semester: once shortly before the withdrawal deadline, and once after the final due date.

Student Learning Objectives

Upon completion of the course, student will be able to:

- Evaluate limits algebraically.
- Evaluate derivatives using basic rules.
- Evaluate limits, continuity, and derivatives graphically.
- Use concepts from calculus to locate extrema over a closed interval.
- Evaluate antiderivatives, integrals, and definite integrals using basic rules.
- Use definite integrals to find areas of given regions.

Important Dates

Last day to Drop Drop means the course is not on your record	August 25 th
Week 1 items due	Sunday August 29 th
Week 2 items due	Sunday September 5 th
Week 3 items due	Sunday September 12 th
Week 4 items due	Sunday September 19 th
Week 5 items due	Sunday September 26 th
Week 6 items due	Sunday October 3 rd
Week 7 items due	Sunday October 10 th
Week 8 items due	Sunday October 17 th
Week 9 items due (Light week because of fall break)	Sunday October 24 th
Week 10 items due	Sunday October 31 st
Last day to Withdraw Withdraw means the course is on your record with a "W" but does not factor into your GPA. Talk to your professor, advisor, and financial aid officer before withdrawing.	November 5 th
Week 11 items due	Sunday November 7 th
Week 12 items due	Sunday November 14 th
Week 13 items due	Sunday November 21 st
Week 14 items due (Very light week because of Thanksgiving break)	Sunday November 28 th
Week 15 items due (Light week because its the last week of classes)	Thursday December 2 nd
Final Project due	Thursday December 9 th

Outside of class resources

- The Textbook
 - Description of material
 - Example and exercise problems
- Blackboard
 - Course content
- Office Hours
 - Individual help
 - Availability changes every day. See <https://ucamath.youcanbook.me/>.
- The Math Resource Lab
 - Study Area
 - Tutors available throughout the day
 - (I don't yet know if they're going to have a virtual tutoring option)
- Academic Success Workshops (Tuesday or Thursday at X period)
 - <https://uca.edu/studentssuccess/online-learning-success/>
- Peer Coaching (time management skills, study skills, motivation!)
 - <http://uca.edu/studentssuccess/successcoaching/>
- Communication Skills (oral and written)
 - <http://uca.edu/cwc/>

Late Work

Any late work will be accepted no questions asked for a penalty: 20% if it is only late by a couple days, 50% if it is very late. Note that late assignments may not be graded in a timely manner.

Excused Absences

Because this course is asynchronous, there are few reasons for missing due dates. However, sometimes “life happens”. If there is some extenuating circumstance that warrants a due date extension, contact me and I will work with you to make a reasonable accommodation.

Examples:

- You are the best man at a wedding that takes place on a due date and fail to turn something in. This is not an excused absence because you knew about the wedding ahead of time and should have completed that work beforehand. There will be no accommodation, but you can turn in the work as late work for a penalty.
- You are traveling home from a wedding on the due date. You completed the work beforehand but wanted to check over it on the flight home before submitting it. However, you got caught in the rain and your laptop was destroyed so you couldn't access your work until you get home to your desktop computer. A reasonable accommodation for this would be a 24 hour extension.
- You were the one getting married at the wedding, but your would-be spouse left you at the altar. The ensuing emotional distress has made it tough to focus on your classes or really anything else. A reasonable accommodation for this would be a one-week extension.

Attendance Policy

Your active participation in this course is expected and required for you to learn the material and earn a passing grade. If you do not turn in anything from an entire week, I will e-mail you to check on you. If you go two weeks without doing anything, you may be administratively dropped from the course.

Academic Integrity Statement

The University of Central Arkansas affirms its commitment to academic integrity and expects all members of the university community to accept shared responsibility for maintaining academic integrity. Students in this course are subject to the provisions of the university's Academic Integrity Policy, approved by the Board of Trustees as Board Policy No. 709 on February 10, 2010, and published in the Student Handbook. Penalties for academic misconduct in this course may include a failing grade on an assignment, a failing grade in the course, or any other course-related sanction the instructor determines to be appropriate. Continued enrollment in this course affirms a student's acceptance of this university policy.

Academic integrity is taken seriously: cheating on a test will result in a failing grade in the course; allowing another student to copy off of your test will result in a one-letter-grade penalty.

Americans with Disabilities Act Statement

The University of Central Arkansas adheres to the requirements of the Americans with Disabilities Act. If you need an accommodation under this Act due to a disability, please contact the UCA Office of Disability Services, 450-3613.

Title IX disclosure:

If a student discloses an act of sexual harassment, discrimination, assault, or other sexual misconduct to a faculty member (as it relates to “student-on-student” or “employee-on-student”), the faculty member cannot maintain complete confidentiality and is required to report the act and may be required to reveal the names of the parties involved. Any allegations made by a student may or may not trigger an investigation. Each situation differs and the obligation to conduct an investigation will depend on those specific set of circumstances. The determination to conduct an investigation will be made by the Title IX Coordinator. For further information, please visit: <https://uca.edu/titleix>. *Disclosure of sexual misconduct by a third party who is not a student and/or employee is also required if the misconduct occurs when the third party is a participant in a university-sponsored program, event, or activity.

Sexual Harassment and Academic Policies Statement

All students are required to familiarize themselves with the University of Central Arkansas policy on sexual harassment and on academic policies. These policies are printed in the Student Handbook.