Calculus I Fall 2019

# **Course Information**

Course Number:	Math 1496	
Course Name:	Calculus I	
CRN:	18586 & 22572	
Location:	Arkansas Hall 110 (Tuesday and Thursday)	
	MCS 220 (Monday, Wednesday, Friday)	
Class Hours:	9:25-10:40am (Tuesday and Thursday)	
	10:00-10:50am (Monday, Wednesday, Friday)	
<b>Textbook:</b> Required: Calculus (Early Transcendental Functions 7e) by Ron Larson		
	Edwards. ISBN 978-1-337-55251-6	
	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
Office Location:	MCS 231
E-mail:	jbeyerl@uca.edu
Phone:	501-450-5681

# **Course Description**

As a prerequisite for nearly all upperdivision 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

#### **Grading Policy**

#### Make Ups

Make-up tests and quizzes will only be given for official university events or personal emergencies. In the former case the test must be taken before official test date, in the latter case a short letter explaining why you missed the test, why this justifies a make-up, and supporting documentation must be turned in by the day you're able to return to class. In the event that a make-up is justified, it must be taken before you are able to return to class. At his discretion, the instructor may choose to administer a make-up or use the final exam to replace the make-up.

#### • Borderline Grades

Borderline grades will be determined at the instructor's discretion based on the final exam and/or the quality of your work throughout the course.

#### Oral Problem Presentations

Oral problem presentations are in Dr. Beyerl's office. Each student will sign up for a time to meet with the instructor. The problems will be similar, but get slightly more challenging each day.

#### First Activity

Are you reading the syllabus? You're supposed to, it details what to expect from the next 14 weeks! E-mail the instructor before 8am on Monday the 26<sup>th</sup> and let him know you read the syllabus to receive credit for the first activity.

#### Homework

Homework problems will be mentioned but not assigned. It is your responsibility to assure you know the material and can solve problems without assistance.

#### Activities

Activities are given most Tuesday and Thursday meetings. Most activities will be worksheets due that day at the end of class. Some activities will be algebra review, given out on an individual as-needed basis.

RESIDENTIAL COLLEGE

# • STEM Residential College Activities

As part of the STEM residential college, you should complete a number of activities that promote the values of the residential college. See the separate handout for details.

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#### Projects

The focus of the two projects will be study skills pertaining to this mathematics course.

#### Student Learning Outcomes Assessment

On the last week of school there will be a cumulative assessment. It will not count for a grade, but instead will count toward a small (5%) bonus on the final exam.

#### Test Average

In order to pass the course, your test average or final exam must itself be passing ( $\geq 60\%$ ).

Test 1	10%
Test 2	15%
Test 3	15%
Quizzes	5%
Activities	10%
Oral Problem Presentations	10%
STEM Residential College Activities	10%
Projects	5%
Final Exam	20%

# **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 28 <sup>th</sup>
Oral Problem Presentation 1	September 2-6
Oral Problem Presentation 2	September 16-20
Test 1	Thursday September 19 <sup>th</sup>
Oral Problem Presentation 3	October 7-11
Test 2	Tuesday October 15 <sup>th</sup>
Oral Problem Presentation 4	October 18 - November 1
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 8 <sup>th</sup>
Oral Problem Presentation 5	November 18-22
Test 3	Thursday November 21st
Student Learning Outcomes Assessment	Wednesday December 4 <sup>th</sup>
Final Exam	Tuesday December 10 <sup>th</sup>
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#### **Outside of class resources**

- The Textbook
  - o Description of material
  - o Example and exercise problems
  - Homework problems
- Blackboard
  - Quiz/test solutions
  - Notes from class
- Office Hours
  - o Individual help
  - Availability changes every day. See <a href="https://ucamath.youcanbook.me/">https://ucamath.youcanbook.me/</a>.
- The Math Resource Lab
  - Study Area
  - Tutors available throughout the day
- Previous course materials
  - o <a href="http://faculty.uca.edu/jbeyerl/courses.html">http://faculty.uca.edu/jbeyerl/courses.html</a>
- Academic Success Workshops (Tuesday or Thursday at X period)
  - o <a href="http://uca.edu/studentsuccess/academic-success-workshops/">http://uca.edu/studentsuccess/academic-success-workshops/</a>
- Peer Coaching (time management skills, study skills, motivation!)
  - o http://uca.edu/studentsuccess/successcoaching/
- Communication Skills (oral and written)
  - o http://uca.edu/cwc/

#### **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 miss more than two weeks of class meetings throughout the term, 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.

# **Building Emergency Plan Statement**

An Emergency Procedures Summary (EPS) for the building in which this class is held will be discussed during the first week of this course. EPS documents for most buildings on campus are available at http://uca.edu/mysafety/bep/. Every student should be familiar with emergency procedures for any campus building in which he/she spends time for classes or other purposes.