MAT 210: Brief Calculus

Fall A 2026, (3 credit hours)

Course Description:

Differential and integral calculus of elementary functions with applications.

Course Learning Outcomes:

1. Apply algebraic and graphical methods to evaluate limits and rates of change.
2. Explain and compute derivatives, including using standard differentiation rules, and employ them in business applications.
3. Apply Sum, Difference, Constant Multiple, Product, Quotient and Chain Rules to find derivatives of power, logarithmic and exponential functions.
4. Find critical points and points of inflection and use them to locate maxima and minima.
5. Use differential calculus to solve optimization problems.
6. Find antiderivatives of sums and differences of constant multiples of power, exponential and logarithmic functions.
7. Apply Fundamental Theorem of Calculus to evaluate definite integral.
8. Use definite integrals to determine net change and to solve applications in business and economics.

Prerequisites:

MAT 117 (College Algebra) with a grade of at least a C or a satisfactory placement test score

General Studies Gold Syllabus Statement:

This course fulfills the ASU Mathematics General Studies requirement. Students completing a Mathematics course will be able to:

1. Demonstrate an understanding of mathematical relationships from multiple perspectives, such as functions from graphical, numerical, and analytic points of view.
2. Apply mathematical skills in the solution of real-life problems.

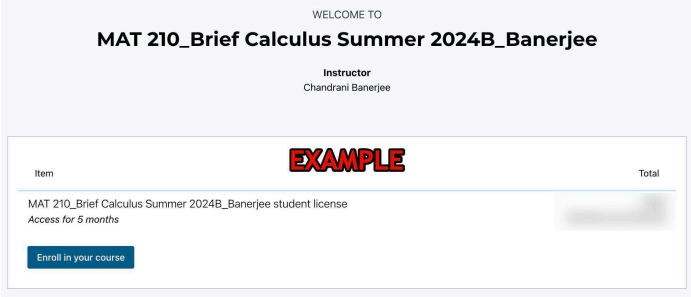
Required Materials and Technology

Textbook: This course utilized gapped notes provided to students through ASU's inclusive access program. Print copies can be picked up or shipped from the bookstore (see below). Additionally, students may print their own gapped notes using the link from Canvas course navigation.

Edfinity: This course utilizes Edfinity, an online homework system for homework, quizzes, and exams. You will need to purchase an Edfinity license and enroll in our Edfinity course to complete the assignments. Use the latest version of Google Chrome or Firefox on a Windows or Mac computer. Other browsers, such as Safari, may not work correctly when accessing Edfinity through Canvas.

To enroll in our Edfinity section, please follow the steps below:

1. **Open Edfinity from Canvas:** In Canvas, select “Edfinity” from the course level left-side, vertical navigation (you may need to click the icon, ☰, to expand the menu).
2. **Enroll in the Canvas-connected Edfinity Course:** Your first time opening an Edfinity link from Canvas, you'll be invited to enroll.



3. **Payment Method:** You will receive a two-week free trial for Edfinity. After the trial ends, you must either:
   - pay the $46 access fee using a debit or credit card, or…
   - if you are using financial aid or scholarship funds, purchase an access code through the ASU bookstore ($60): https://www.bkstr.com/arizonastatestore/product/edfinity-with-office-hours-610030-1. The access code will be emailed to you within 1 business day of purchase

Gapped Notes

This course requires the use of MAT 210 Gap Notes. The cost of this material, $27.50, plus tax, will be added to your student account if you’re still enrolled after the semester’s drop deadline. Access to the Gap Notes is required to take this course, so no opt-out option is provided.

Accessing Your MAT 210 Digital Course Materials

To access your digital course materials, please follow the steps below:

1. Visit **https://asu.laddigital.com/login (linked in Canvas course navigation)**
2. Enter your **ASU email address**.
3. Check your email for a registration link, then click the link to complete your profile and finish setting up your account.
4. Once you're logged in, click **Add Course** and select **MAT 210**.
5. Your course materials will appear on your dashboard.

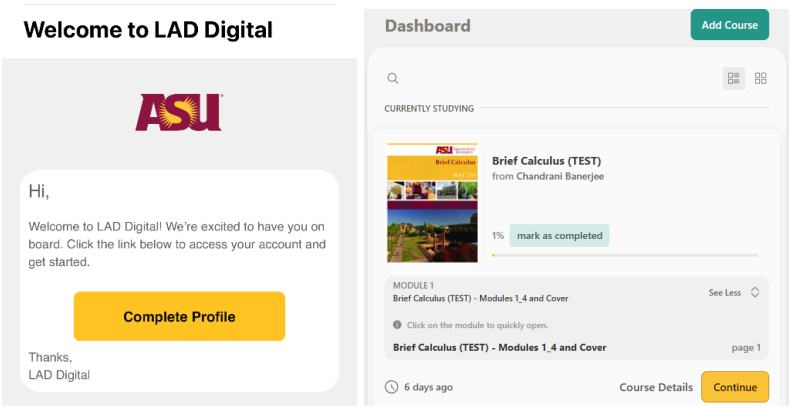
You can access your course materials directly through the online reader or click **Course Details** to download and save the course pack for offline use.

Downloaded materials may be printed for personal use. Digital annotation features, including pencil tools, can be used when viewing the file in a compatible PDF application. Be sure to save any notes made while using the pack. For support, please contact support@lad.pub.

In addition to the digital version, you're entitled to the print version at no extra charge. You can order a copy online and will only pay for the shipping. Use this link:

https://www.bkstr.com/arizonastatestore/product/mat-210-gap-notes-762242-1

Add the pack to your cart. At checkout, you'll be prompted to enter your address for shipping, and then prompted for payment info. Orders will typically ship within 24-48 hours.



Calculator:

This course will use a free online scientific calculator created by Desmos:
https://www.desmos.com/scientific

Technology—Computer, External Camera, and Internet Access:

You will need the following:

- Computer with microphone, speaker, and reliable internet
- Camera to provide side-angle view during exams, e.g., USB connected webcam or smartphone with Honorlock app installed.
    - Directions for Setting Up a Side-Angle Camera View
    - Information about Honorlock Mobile Applications—Test Taker Experience
- Chrome Web browser with the Honorlock browser extension installed

Note: This course uses online proctoring via Honorlock and requires a laptop or desktop computer. Chromebooks, tablets, Hybrid Devices, and mobile devices are not supported.

Course Time Commitment and Participation:

You should expect to spend a minimum of 15 hours per week learning the material and completing the assigned coursework. Although there are no scheduled in-person meetings for this course, this is not a self-paced course. All assignments have specific due dates. Please post your questions in Ed Discussion or come to office hours (Zoom link and time provided on the syllabus page) if you need help. You should also regularly check your ASU email and Canvas course site for updates and information.

Note: Students who do not register in Edfinity and submit HW 1.1-1.3 by Sunday, Aug 23, may be dropped from the course on Monday, Aug 24.

Complete the module,
"Exam Proctoring—Honorlock Acknowledgement,"
to access course instructional material.

Instructional Content

Lecture Videos: The provided video lectures will prepare you to solve the homework problems independently. The video lectures are grouped by lesson. For each homework assignment, there will be at least one set of gapped notes (see below) for you to use with the associated lecture videos.

Gapped Notes: This class uses "gapped" lecture notes to support your learning.
Gapped notes will be posted at the top of every homework assignment page with the lecture videos. To use the gapped notes, print the notes or download the notes to a tablet device and fill them in as you watch the video lecture. Filled-in versions of the notes ("key" versions) will also be posted in Canvas so you can check your notes.

Grade Distribution

Activity	Percentage
Homework	20%
Midterm Exams: Exam 1: 1.1-1.4, 2.1-2.3 Exam 2: 3.1-3.5 Exam 3: 4.1-4.4 Exam 4: 5.1-5.3 Exam 5: 6.1-6.2, 7.1	60% (each exam 12%)

Final Exam - Cumulative	20%
Practice Exams (Extra Credit)	3%

Honorlock Practice (Extra Credit) - 1%

Grading Scale (percentage)
A+ = [97,100) A = [93,97) A- = [90,93) B+ = [87,90) B = [83,87) B- = [80,83) C+ = [77,80) C = [70,77) D = [60,70) E = [0,60)

Assignments and Exams

Honorlock Practice: Two assignments have been created to prepare you for proctored exams and help avoid academic integrity violations:

1. PART 1 - Honorlock Practice: Proctored Edfinity Assignment
2. PART 2 - Honorlock Practice: Screenshot Upload

The **Part 1** assignment is available through Honorlock—it requires a password that is filled by Honorlock after authenticating your identity and setup. The assignment reinforces important information about completing an online exam and requires you to practice correctly setting up your webcam before Exam 1. **As part of the assignment, you will need to take a computer screenshot of your Honorlock session, including your webcam feed.**

The **Part 2** assignment is not proctored and accessed directly in Edfinity. It can only be completed after Part 1. Part 2 is for uploading your screenshot captured during Part 1. Your screenshot will be manually reviewed and approved by your instructor. If the screenshot does not show that your webcam was positioned to include your face, both hands, workspace, monitor and surrounding area, you will be asked to submit a new screenshot that shows you can correctly setup your webcam before you take the first exam. Additionally, you must position your computer so that the back of the device is against a wall.

Honorlock practice assignments should be completed first. Your webcam setup must be approved before you begin Exam 1.

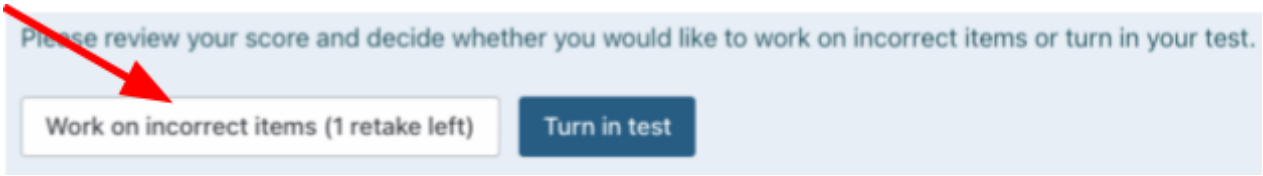
Homework: Like athletes practicing for competitions, homework is the time when you learn, improve your skills, and cement your understanding. Homework is designed for you to learn the material by practicing and applying the concepts, preparing you to perform well on the exams. Homework assignments in this course are completed in Edfinity. For each problem, you have 10 attempts to complete. If you don't solve the problem correctly after the first or second time, continuing to guess is not a good strategy because it does not contribute to your learning. Instead, at that point, ask a question to clarify the misunderstanding that is preventing you from getting the answer. For more practice at any time, you can also use the "practice similar" option on each problem.

HW Due Dates: Homework assignments are due each **Sunday at 11:59 pm** (AZ time). Follow the course schedule for the exact due date for each assignment.

Early submission for 5% extra credit: Homework assignments submitted at least 24 hr before the deadline will receive a 5% bonus for the assignment grade.

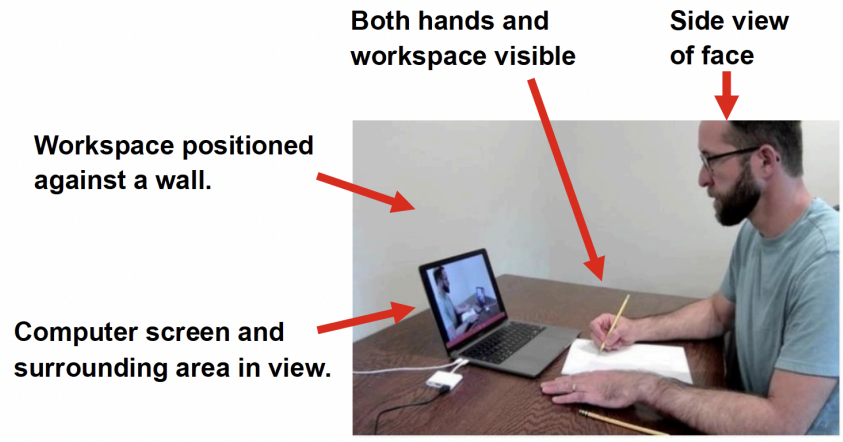
Exams: The five exams and final exam are proctored by Honorlock and completed in Edfinity. You can only take each of the five exams once and will have **50 minutes** to complete the exam. **Note:** The exams require the Chrome web browser and Honorlock Chrome extension. Be sure to review the information about Honorlock provided in the *Start Here* module in Canvas.

Edfinity exams have a "Retake" function. When you click "Submit test" before the time expires, Edfinity will show your score and give you the option of either "Retake test" or "Turn in test".



If you have time remaining in the exam period and click on "**Work on incorrect items**," the test will reopen and provide you a second attempt for all incorrect problems. All attempts—both your initial answers and retake corrections—must be completed within a single 50-minute exam session. Before taking the first exam, see the Canvas pages about exams for screenshots and more information.

Camera Requirement for exams:
You are required to set up a side-angle camera that provides a clear view of **your face, hands, workspace, and monitor at all times during the exam**. This can be done either using a smartphone or an external web camera. Instructions on how to set up your phone or an external web camera can be found here.
Note that you must position your external camera so that the back of the device is against a wall and the area around your monitor is clearly in view. Here is an example of an acceptable camera view:



REQUIRED—Official Photo on File with ASU:
All online students are required to have a **photo on file with the University**. Your instructor must be able to compare your likeness in your uploaded University photo and your Honorlock exam recording. If there is no picture provided to ASU for comparison, your exam grade may be entered in Canvas as "0". You can upload a photo through this website for free: https://webapp4.asu.edu/cardservices. Call the ASU helpdesk if you need assistance.

Make-up Exams: Make up exams are given at the discretion of the instructor and only in the case of verified medical or other documented emergencies. Students should notify the instructor **before** the exam is given if possible. If the event is not an emergency, the instructor must be notified in advance to request a make-up. The instructor is not required to accommodate you.

Lowest Midterm Exam Drop Policy: Your lowest Midterm Exam score will be dropped provided you do not have any academic integrity violations.

Final exam: This course has a cumulative final exam, which will focus on concepts and applications of calculus. The final exam is also proctored by Honorlock and completed in Edfinity. You will have 1 attempt of a single session of **120 minutes** to complete the exam. The exam correction function will still allow a single correction of incorrect problems within the exam session. The Final Exam will not be dropped under any circumstances.

Practice exams(extra credit): Each exam will have two practice exams (A and B) designed to simulate the real exam experience. They are at the same level as exam questions, but are not necessarily the same questions you will see on an exam. The practice exams follow the same format as the actual exam, including one submission with corrections allowed and a 50-minute time limit. You may take each practice exam as many times as you wish, and extra credit will be awarded based on your highest score on each practice exam. These practice exams are given in Edfinity but do not require Honorlock. They are meant to help you reinforce your learning, build confidence, and check your readiness for the actual exam.

Review for Exams: The problems used in the practice exams will also be available in non-test mode so that you can practice them without the time limit or submission restrictions. However, extra credit is awarded only for scores earned on the timed practice exams.

Class Schedule:

Dates	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
8/17-8/23							HW 1.1-1.3 due
8/24-8/30			Edfinity Honorlock Practice Quiz				HW 1.4 2.1-2.3 due
8/31-9/6		**Exam 1 opens**	**Exam 1 and Practice Exam 1 due**				HW 3.1-3.5 due
9/7-9/13		**Exam 2 open**	**Exam 2 and Practice Exam 2 due**				HW 4.1-4.4 due
9/14-9/20		**Exam 3 opens**	**Exam and Practice Exam 3 due**				HW 5.1-5.3 due
9/21-9/27		**Exam 4 opens**	**Exam 4 and Practice Exam 4 due**				HW 6.1-6.2, 7.1 due
9/28-10/4		**Exam 5 opens**	**Exam 5 and Practice Exam 5 due**				HW 7.2-7.4 due
10/5-10/11				**Final Exam opens**	**Final Exam and Final Practice Exam due**		

Communication

Ed Discussion: For questions about course content, we will use Ed Discussion. This system is designed for quick and efficient assistance from both your classmates and the professor. Rather than emailing questions to the teaching staff, post your math questions in Ed Discussion. Please use the discussion space for course-related questions and comments only.

Communicating with your instructor: ASU email is an official means of communication among students, faculty, and staff. Faculty and students are expected to read and respond to emails in a timely fashion. If you have questions of a personal nature, please email your instructor using your ASU email account.

Support

Tutoring: W.P. Carey students have access to free subject area tutoring services. Please visit the Subject Area Tutoring page for more information.

ASU Online students have access to Tutor.com, a dedicated tutoring resource designed specifically for you. Please visit the 24/7 Tutoring link in Canvas or the ASU Online Tutoring page for more information.

Disability Accommodation: If you are a student with a disability and need assistance or special accommodations, contact Student Accessibility and Inclusive Learning Services (SAILS) https://eoss.asu.edu/accessibility. Students requesting accommodations for a disability must register with SAILS, and must submit appropriate documentation to the instructor from SAILS. For more information, please review the policy at https://public.powerdms.com/ASU/documents/1560607)

Technical support: For technical assistance 24 hours a day, 7 days a week, visit the ASU Experience Center.

Policies

ASU Online Course Policies:
View the ASU Online Course Policies here.

Copyright: Students must refrain from uploading to any course shell, discussion board, or website used by the course instructor or other course forum, material that is not the student's original work, unless the students first comply with all applicable copyright laws; faculty members reserve the right to delete materials on the grounds of suspected copyright infringement. For more information, see the Computer, Internet, & Electronic Communications Policy at https://public.powerdms.com/ASU/documents/1540286). All course content, including lectures, are copyrighted materials. Students may not share outside the class, upload, sell, or distribute course content or notes taken during the conduct of the course (see ACD 304-06, "Commercial Note Taking Services" for more information).

Academic Integrity/Anti-Plagiarism Policy: Academic honesty is expected of all students in any materials intended to be used for an academic evaluation, including, but not limited to: all examinations, papers, presentations, laboratory work, academic transactions, and records. The possible sanctions for academic integrity violations include but are not limited to, appropriate grade penalties, course failure (indicated on the transcript as a grade of E), course failure due to academic dishonesty (indicated on the transcript as a grade of XE), loss of registration privileges, disqualification, and dismissal. For more information, see http://provost.asu.edu/academic-integrity. Plagiarism of any kind will not be tolerated. Students must take the exams independently without assistance from other students or AI tools.

Artificial Intelligence: The use of ChatGPT and other generative AIs on assignments or exams in this course is not permitted.

Grade Appeals: You should discuss any grade disputes with your instructor first. If the dispute is not resolved with the instructor, per the University Policy for Student Appeal Procedures on Grades, the student may appeal to the director of the School of Mathematical and Statistical Sciences.

Prohibition Against Discrimination, Harassment, and Retaliation

Title IX is a federal law that provides that no person be excluded on the basis of sex from participation in, be denied benefits of, or be subjected to discrimination under any education program or activity. Both Title IX and university policy make clear that sexual violence and harassment based on sex is prohibited. An individual who believes they have been subjected to sexual violence or harassed on the basis of sex can seek support, including counseling and academic support, from the university. If you or someone you know has been harassed on the basis of sex or sexually assaulted, you can find information and resources at http://sexualviolenceprevention.asu.edu/faqs

As a mandated reporter, I am obligated to report any information I become aware of regarding alleged acts of sexual discrimination, including sexual violence and dating violence. ASU Counseling Services, https://eoss.asu.edu/counseling, is available if you wish to discuss any concerns confidentially and privately.

Accommodation for Religious Practices: The university community should, in all its activities, be sensitive to the religious practices of the various religious faiths represented in its student body and employees. Students should notify faculty at the beginning of the semester about the need to be absent from class due to religious observances. For more information, visit https://public.powerdms.com/ASU/documents/1541225)

The instructor reserves the right to make changes to this syllabus as necessary.