



MAT 265: Calculus for Engineers I

Fall B 2023 (3 credit hours)

Professor: David Polletta

Virtual Office Hours: T/TH 1:00pm – 2:30pm (MST)

Email: dpollett@asu.edu

Zoom Link: <https://asu.zoom.us/j/9805715332>

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

Course Information

Course Overview: This course is designed to develop both basic theoretical and solid working understanding of limits and continuity, differential calculus of functions of one variable and integration. You will be introduced to instantaneous rate of change (derivative) at a point and as a function, differentiation formulas, applications of differentiation, accumulation (definite integral) through approximate accumulation (Riemann Sums), and antiderivatives (indefinite integral).

Prerequisites: MAT 170 with C grade or better **OR** Mathematics Placement Test with a score of 60% or higher and the Advanced Mathematics Placement test with a score of 38 or higher (or ALEKS score of 67% or higher).

Note: Credit is only allowed for MAT 265 or MAT 270.

Class Participation

Inactive students who do not complete the first two learning activity assignments by Sunday, October 15, will be dropped from the course on Monday, October 16.

- **Please be sure to regularly check your ASU email, canvas and course site for updates and information.**
- There are no scheduled in-person meetings for this course.
- **This is *not* a self-paced course.** Exams and Quizzes have specific due dates. Learning Activities and quizzes can be done early.
- Please email questions or come to office hours (Zoom link and time above) if you'd like further explanations or examples.

Course Materials

Course Access: online at my.asu.edu or asu.instructure.com

Textbook: This class does NOT use a textbook. Instead, you'll be provided with a series of video lectures, gapped notes, and opportunities to apply new ideas with immediate feedback in learning activities.

Graphing Calculator: A graphing calculator is required for this course.

- Recommended: TI-Nspire & TI 83/84 or Casio 9850GB Plus.
- Symbolic algebra calculators **cannot be used** for assignments or exams
 - e.g., Casio FX2, Casio 9970Gs, TI-89, TI-92, or the TI- Nspire CAS.

Computer and Internet Access: You will need the following digital tools.

- Computer with webcam, microphone, speaker, and reliable internet
- [Chrome Web browsers](#)

Note: This course uses online proctoring via Honorlock. This requires a laptop or desktop computer; Chromebooks, tablets, Hybrid Devices, and Mobile Devices are not supported. Additionally, all online students are required to have an official photo on file with the University. Upload a photo for free, with this link:
<https://webapp4.asu.edu/cardservices>.

Plan for Success

- Complete the corresponding gapped notes while you watch the lectures
- Complete the learning activities linked at the bottom of learning activity pages
- Create a study schedule
- Ask questions as they come up using the course discussion boards, or via e-mail
- Access ASU Online Student Resources

This course is designed to help you to learn how to learn. The definition of real learning is that you can take the information you learned in one context and use it to solve a problem in another context, i.e., you are a problem solver. Developing problem-solving skills in this class does require you to do quite a lot of practice with the content.

The best way for you to learn calculus is by doing the learning activities that go with the lectures.

Canvas Discussion Board

For questions about course content, we will use the Discussion Board in Canvas. The system is highly catered to getting you help fast and efficiently from classmates, the TA, and the professor. Rather than emailing questions to the teaching staff, I encourage you to post your questions on the discussion board. Please use the discussion space for content related course questions and comments only.

Grading Distribution

- 10% – Learning Activities
- 15% – Module Quizzes
- 10% – Practice Exams
- 20% – Exam 1 (Modules 1 – 3)
- 20% – Exam 2 (Modules 4 – 6)
- 25% – Final Exam (Comprehensive)

Grading Scale

97 – 100% A+	93 – 96.9% A	90 – 92.9% A-
87 – 89.9% B+	83 – 86.9% B	80 – 82.9% B-
77 – 79.9% C+	70 – 76.9% C	
	60 – 69.9% D	
	0 – 59.9% E	

Assignments

Gapped Notes: This class uses "gapped" lecture notes to support learning. Gapped notes are posted at the bottom of the topic overview page. There are multiple sets of gapped notes in each module. You will use one file for multiple lecture videos.

- **Fill in the Blanks:** You can print the notes OR download the notes to a tablet device to fill them in as you watch the lecture.
- **“KEY” Versions:** The completed, “KEY,” versions of the notes will be posted in Canvas three days before the due date of each module quiz.

Lecture Videos: Recorded lectures are located within each Canvas assignment page and are designed to prepare you to independently solve the learning activity problems.

- **Accessibility:** Closed captions and transcripts are available through the video player tools.

Learning Activities: Learning activities are what you might traditionally consider homework. For this course, we are calling them learning activities because this is where learning takes place, i.e., solving problems.

- **Access:** The learning activities are organized in an external tool, “Digit.” They are accessed through links on assignment pages in Canvas by using the gray buttons at the bottom of learning activity pages. Learning activities in Digit open in a separate browser tab. You must agree to the Terms of Use to access the materials. There is no separate sign-in, payment, or account required.
- **Deliberate Practice in Problem Solving:** Assigned learning activities are a targeted set of problems for you to immediately apply the information provided in the associated lectures and gapped notes. It’s important that you solve all the problems in the set and use the immediate feedback and support resources to improve your understanding before moving on. *This is your best opportunity to learn – by doing the work and checking your understanding.*
- **Scoring:** You will receive a grade based on the number of items you “attempt.” An “attempt” means trying to answer the problem; correct OR incorrect, both earn the same credit. You have unlimited attempts for each problem and are encouraged to utilize the “Try again” feature.

Learning Activities in Digit are graded according to the number of learning activities “attempted.” For example, if there are 8 problems in the set and you attempt 4—half the problems—you will receive a score of 5 out of 10 possible points—half the points—for the assignment in the Canvas gradebook. Viewing a problem page or watching a video does not count as an attempt.

- **Grades in Canvas:** You must access the learning activity assignment in Digit from the gray button linked in Canvas for the assignment score to sync for the same assignment in the Canvas grade book. You can explore Digit and do work without using the assignment link, but your score for the assignment won't sync in Canvas until you access Digit and submit an attempt by using the connected assignment link on the Canvas learning activity page.
- **Due Dates:** Learning activities within the respective modules are due on the same date as module quizzes. It's important you complete the set of related learning activities in a module before the scheduled module quiz and related exams to be successful in this course.

Module Quizzes: You are welcome to work ahead on module quizzes. They will be administered through Canvas.

- There are seven module quizzes (unlimited attempts per quiz) assigned in the course with a due date.
- No extensions of due dates will be given.

Practice Exams: This is an opportunity to get a better sense of what to expect on the actual exam. Practice Exams allow unlimited attempts before the assigned due date.

Important Information about Exams with Honorlock

- During the test you must maintain a steady internet connection, working webcam and microphone.
- Additional information and support for using Honorlock are provided online in our Canvas course.

Honorlock Practice Quiz: This is an opportunity to earn a bit of extra credit and promote understanding of the exam monitoring and submission process before the actual high-stakes exams.

Midterm Exams: There will be two proctored midterm exams in this course that will be administered through Canvas and require use of the Chrome web browser and [Honorlock Chrome extension](#).

Final Exam: There will be a comprehensive final exam at the end of the course. The final exam will be proctored using Canvas and require use of the Chrome web browser and [Honorlock Chrome extension](#).

Exam Procedures:

Students will take three proctored exams (**two midterms and the final**) through Honorlock. Additional Honorlock support materials are provided in the Start Here module in our Canvas course.

- **Final Exam Policies:** The final exam schedule will be strictly followed except to resolve qualifying situations as described below. No changes may be made to this schedule without prior approval of the Dean of the college in which the course is offered. Specifically, make-up exams will NOT be granted by instructors for reasons of non-refundable airline tickets, vacation plans, work schedules, weddings, family reunions, and other such activities. Students should consult the final exam schedule before making end-of- semester travel plans.
- **Schedule Exceptions:** The course instructor may grant a make-up final exam in the following qualifying situations: A student has more than three exams on one day, or there is a time conflict between the course final and another final exam. This rule applies to conflicts among any combination of ASU's Downtown Phoenix, Tempe, Polytechnic, West, and/or off campus classes.
 - A documented accident or medical emergency.
 - Situations covered by [ACD304-02](#) or [ACD304-04](#).
- **Preparation:** Each exam will involve a mix of mechanical skills and conceptual reasoning. The best possible preparation for the exams is regular activity in the course, including completion of Learning Activity assignments.
- **Availability:** The exams will be open for the test time only and not available for viewing or review outside of that time window. Each exam will be available for 24 hours. **No make-ups are permitted.**
- **Technology:** You must verify that you have access to a computer system that meets the requirements for Honorlock to take the exam:
 - **Chrome web browser with [Honorlock Chrome Extension](#)**
 - **reliable high-speed internet connection**
 - **webcam and microphone**

This course uses online proctoring that requires a laptop or desktop. Tablets, Hybrid Devices, and Mobile Devices are not supported. You can find the detailed requirements at: <https://honorlock.com/students/>
- **ID:** Students must have ASU photo ID to verify identity at exam.
- **Materials:** For each exam you are allowed:
 - Calculator from the approved list (above in syllabus)
 - Scratch paper for calculations

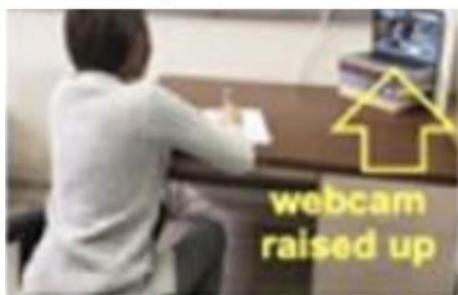
- **Time:**
 - Midterm exams: 120 minutes allowed for each of the 2 midterms
 - Final exams: 120 minutes allowed for the final exam
- **Prohibited Items:** These items are not allowed during exams.
 - No notes or reference materials
 - Use of additional recording, communication, or electronic resources e.g.,
 - You may not record yourself or capture images during an exam
 - You may not use your cell phone during an exam
 - You may not open additional browser tabs during an exam

Honorlock for the Proctored Exams

Students will take proctored exams through Honorlock, which is accessed through the Honorlock tab found in the left vertical navigation in Canvas. During exams, students are required to position their camera so that their face and hands are always in view of the camera to make sure they do not use secondary devices. Additional directions and support for Honorlock are available in the Canvas course.

Exam Monitoring Setup

Position your web camera so that you and your work are in view



note the **RAISED** web camera!

**This
is
Good!**



your face, your exam and your desk are
in full view



your exam and table **not in view**

**BAD!
move
your
camera
up
and
farther
away!**



**you are not in view, too little of
your exam and table are in view**

Anyone using a camera device for any reason during an online exam will receive a score of 0 for that exam, and possible further disciplinary measures.

Late or Missed Assignments

Notify the instructor **BEFORE** an assignment is due. Follow the appropriate University policies to request an [accommodation for religious practices](#) or to accommodate a missed assignment [due to University-sanctioned activities](#).

Tentative Course Schedule

Module 1: What is Calculus? - Oct 11 – Oct 17

Module 1 Quiz and Learning Activities: Due Oct 17 at 11:59pm (MST)

Module 2: Rules of Differentiation - Oct 18 – Oct 22

Module 2 Quiz and Learning Activities: Due Oct 22 at 11:59pm (MST)

Module 3: More Intricate Derivatives and Differentiation Rules – Oct 23 – Oct 27

Module 3 Quiz and Learning Activities: Due Oct 27 at 11:59pm (MST)

Exam 1 (Modules 1 – 3): Due Oct 30 at 11:59pm (MST)

Module 4: First Applications of Differentiation – Oct 31 – Nov 5

Module 4 Quiz and Learning Activities: Due Nov 5 at 11:59pm (MST)

Module 5: The Mean Value Theorem and Higher-Order Derivatives – Nov 6 – Nov 11

Module 5 Quiz and Learning Activities: Due: Nov 11 at 11:59pm (MST)

Module 6: Optimization – Nov 12 – Nov 19

Module 6 Quiz and Learning Activities: Due Nov 19 at 11:59pm (MST)

Exam 2 (Modules 4 – 6): Due Nov 21 at 11:59pm (MST)

Module 7: Integration – Nov 22 – Nov 29

Module 7 Quiz and Learning Activities: Due Nov 29 at 11:59pm (MST)

Final Exam (Comprehensive): Due Dec 1 at 11:59pm (MST)

Withdrawal Deadlines

- October 12, 2023 – Last day to add/drop a class without approval
- October 17, 2023 – Last day to drop a class without W
- October 31, 2023 – Course Withdrawal Deadline
- December 1, 2023 – Complete Session Withdrawal Deadline

Students Resources:

Online tutoring can be found at <https://tutoring.asu.edu/tutoring>. Online Tutoring is open Sunday-Thursday 3 p.m.-10 p.m.

- Students can view the schedule of when tutors are working for their specific class either via the website above or through Tutor Search

Accommodations: Please email me if you have any questions, concerns, or if you have a disability that will require accommodations in this class.

- To qualify for disability accommodations at ASU, students must qualify for services through the Disability Resource Center (DRC), which is located on the 1st floor of the Matthews Center Building, 480.965-1234 (V), 480.965.9000 (TTY).

Technical Support Contact Information: For technical assistance 24 hours a day, 7 days a week, please contact the University Technology Office Help Desk:

Phone: 480-965-6500

Email: helpdesk@asu.edu

Web: <http://help.asu.edu/>

For information on systems outages see the ASU systems status calendar, please visit https://asu.service-now.com/sp?id=services_status.

ASU Online Course Policies

View the [ASU Online Course Policies](#).

Intellectual Property Rights: Any (parts of) exams, assignments, reports, or solutions to these, from current or previous semesters, posted to any website not affiliated with ASU will result in academic integrity disciplinary actions against the students posting them and the students using them.

Grade Appeals:

Instructor First: Grade disputes must first be addressed by discussing the situation with the instructor. If the dispute is not resolved with the instructor, the student may appeal to the department chair per the University Policy for Student Appeal Procedures on Grades.

Prohibition of Commercial Note Taking Services:

Distribution: In accordance with ACD 304-06 Commercial Note Taking Services, written permission must be secured from the official instructor of the class in order to sell the instructor's oral communication in the form of notes. Notes must have the notetaker's name as well as the instructor's name, the course number, and the date.

Accessibility Statements

In compliance with the Rehabilitation Act of 1973, Section 504, and the Americans with Disabilities Act as amended (ADAAA) of 2008, professional disability specialists and support staff at the Disability Resource Center (DRC) facilitate a comprehensive range of academic support services and accommodations for qualified students with disabilities.

[Qualified students with disabilities may be eligible to receive academic support services and accommodations.](#) Eligibility is based on qualifying disability documentation and assessment of individual need. Students who believe they have a current and essential need for disability accommodations are [responsible for requesting accommodations and providing qualifying documentation](#) to the DRC. Every effort is made to provide reasonable accommodations for qualified students with disabilities.

Qualified students who wish to request an accommodation for a disability should contact the DRC by going to <https://eoss.asu.edu/drc>, calling (480) 965-1234 or emailing DRC@asu.edu. To speak with a specific office, please use the following information:

Tempe Campus

480-965-1234 (Voice)

Polytechnic Campus

480-727-1165 (Voice)

West Campus

University Center Building (UCB), Rm 130
602-543-8145 (Voice)

Downtown Phoenix and ASU Online

University Center Building, Suite 160
602-496-4321 (Voice)

Withdrawal Deadlines

For semester deadlines related to enrollment, withdrawal or payments, see the academic calendar available at <http://students.asu.edu/academic-calendar>

- October 12, 2023 – Last day to add/drop a class without approval
- October 17, 2023 – Last day to drop a class without W
- October 31, 2023 – Course Withdrawal Deadline
- December 1, 2023 – Complete Session Withdrawal Deadline

Withdrawal: A student may withdraw from a course with a grade of W during the withdrawal period. The instructor's signature is not required.

Failing grades (The E, EN and EU grades)

- The E grade is for students who participated in the class but did not earn enough credit to pass or attain a D grade.
- The EN grade is for students who never once participated in the class. At the instructor's discretion, any student who has not attended class during the first week of classes may be administratively dropped from the course. However, students should be aware that non-attendance would NOT automatically result in being dropped from the course. Thus, a student should not assume they are no longer registered for a course simply because they did not attend class during the first week. It is the student's responsibility to be aware of their registration status
- The EU grade is for students who participated, but then stopped part way through the course.

The grade of Incomplete: A grade of incomplete will be awarded only in the event that a documented emergency or illness prevents the student who is doing acceptable work from completing a small percentage of the course requirements. The guidelines in the current general ASU catalog regarding a grade of incomplete will be strictly followed.

The grade of XE: A grade of XE is reserved for "failure for academic dishonesty." The XE grade may be petitioned after 1 year.

ACADEMIC INTEGRITY:

Academic honesty is expected of all students in all examinations, papers, laboratory work, academic transactions and records. The possible sanctions 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/academicintegrity>.

Academic dishonesty, including inappropriate collaboration, will not be tolerated. There are severe sanctions for cheating, plagiarizing and any other form of dishonesty.

Honor Policy: The highest standards of academic integrity are expected of all students. The failure of any student to meet these standards may result in suspension or expulsion from the University or other sanctions as specified in the University Student Academic Integrity Policy. Violations of academic integrity include, but are not limited to, cheating, fabrication, tampering, plagiarism, or facilitating such activities.

Ethics: It's highly unethical to bring to your instructor's attention the possible impact of your mathematics grade on your future plans, including graduation, scholarships, jobs, etc. For the university's complete policy regarding ethics, including cheating, plagiarism and other forms of academic dishonesty, see the Student Academic Integrity Policy at the following web address: <http://provost.asu.edu/academicintegrity>.

Student Names and Pronouns: The School of Mathematical and Statistical Sciences encourages faculty to address and refer to students by their preferred name and gender pronoun. If your preferred name is different than what appears on the class roster, or you would like to be addressed using a specific pronoun, please let your instructor know.

Title IX: 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 <https://sexualviolenceprevention.asu.edu/faqs>.

Mandatory Reporting: 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 in private.

Students who receive financial aid and need to maintain minimum GPAs and/or competition rates should be aware that since there is no physical class attendance in an online class, online instructors will certify last days attended/participated based on verifiable participation only, such as submitted assignments, exams taken, participation in online discussion forum, or communicating with the instructor by email. Instructors cannot certify attendance based on your assurances that you watched videos, read PowerPoints, etc.