



MAT 210: Brief Calculus
Spring 2024
Course Syllabus
MW 3:00pm – 4:15pm, Section 11225, SANDS 101

Instructor: Mr. Toan Vo
Email: tvo02@asu.edu
Office: CLCC 218
Zoom: <https://asu.zoom.us/j/7705913319>
Office Hours:

In person:
MW: 9:00am - 10:00am
Virtual:
MW: 5pm and after
TuThF: 2pm and after
Weekends: Anytime

Please email to schedule/confirm availability

Physical Textbook OPTIONAL: None needs to be purchased as this course will use an e-book version of it via Pearson. However, if you wish to obtain a copy of your own, the course will use *Finite Mathematics and Calculus with Applications, 11th Edition*. Lial, Greenwall, & Ritchey.

eBook: The **required material** for this course will be provisioned as an e-book and made available at a discounted price significantly cheaper than if purchased directly from the publisher. If you wish to take advantage of this discounted group price, no additional action is needed for purchase. NOTE: Following the drop/add period, a charge of \$35.15, plus tax, will post to your student account under the header “Bkstr Publisher Negotiated Rate” and your access will continue uninterrupted.

If you'd rather purchase the material from an alternate source, you may choose to opt out of the program by using this link: <https://includedcp.follett.com/1233>. Enter your ASU e-mail address AS IT APPEARS IN THE ASU DIRECTORY (<http://asu.edu/directory>), then follow the instructions provided. Be aware that if you do opt-out, your access to the e-book will be discontinued via the Brytewave Link on Canvas.

To access the MyLab/Mastering access code, click on the BRYTEWAVE tool in Canas. This will generate a Pearson MyLab/Mastering code. Copy this code and paste into the appropriate box in the Canvas Pearson Access link. Please note: the ebook won't appear on your shelf until approximately 5 days prior to the start of classes. If you need assistance accessing the book or the opt-out portal, please email asuinclusiveaccess@gmail.com (*The e-Book is also fully accessible within the Pearson MyLab and Mastering shell for the course.*)

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

Calculator REQUIRED:

The calculator used for exams must be an approved calculator. Most scientific calculators are acceptable, but any graphing calculator with equation solvers, such as the TI-89 or higher or the TI-nSpire, are not allowed for exams.

Acceptable graphing calculators include TI-83 Plus or TI-84 or Casio 9850GB Plus. **Please make sure that you are well-versed in your calculator's functions before any quizzes or exams.** Cell phones or similar devices may never be used as a calculator for any quiz or exam.

Course Description:

Differential and integral calculus of elementary functions with applications.

Enrollment Requirements:

Prerequisite(s): MAT 117, 119, 170, or 171 with C or better, or Mathematics Placement Test with a score of 56% or higher, or ALEKS score of 61 or higher; Credit is allowed for only MAT 210 or MAT 251

Note: Meeting the prerequisites does **not** guarantee your success in this class. You will need to bring mathematical skills and a strong work ethic to the class in order to be successful.

Course Objectives

- Conceptualize and evaluate limits of functions.
- Evaluate and interpret average rate of change and instantaneous rate of change.
- Define and interpret derivative functions and study various differentiation rules.
- Analyze maxima and minima of functions and applications therein.
- Study basic application of derivative functions to business, economics, and physics.
- Introduce the topic of implicit differentiation and its application, i.e. Related Rates
- Introduce integration, indefinite and definite, and area under a curve.
- Discuss and implement integration techniques such as substitution and integration by parts.
- Study applications of integrals such as average function value and surplus.

Grading:

Homework:	25%
Midterm Exams (3)	54% (18% each)
Final Exam	21%

Final grades will be assigned according to the following table based on the final distribution of the above weighted averages.

97% - 100%	A+
90% - 96.99%	A
89% - 89.99%	A-
87% - 88.99%	B+
80% - 86.99%	B
79% - 79.99	B-
77% - 78.99%	C+
70% - 76.99%	C
60% - 69.99%	D
Below 60%	E, EU or EN

Grades: Any grades posted in My Lab and Mastering are informal and is simply a means of communication throughout the semester. It does NOT figure your final grade for the class (that may have different weights, dropping of scores, not including exams, etc.). Ultimately, the Canvas gradebook will be what is used to track your progress, and your official grade will be posted to your MyASU account at the conclusion of the course.

Homework: Students are expected to do all homework assignments. There is usually an assignment following every lesson/lecture.

All homework is due the Sunday of the week it is assigned.

While there will be due dates for homework, students may complete them late up to one week after its original due date with a minor 15% late work penalty on portions they did not complete.

For example, suppose you only complete 70% of an assignment on time. After the due date, you want to go back in and improve your homework score. This means there's 30% of the work that is "late", so if you now fully complete the homework late, you'll be given a total score of 70% (full points) + 30% *.85 (the 15% penalty) = 70% + 25.5% = 95.5% for that assignment.

Proctoring Exams:

It is the policy of Arizona State University that exams are officially proctored and there can be no exceptions. This applies to any exams taken during alternatively scheduled times for any reason.

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

Exams:

Three midterm exams will be given throughout the semester and a cumulative final exam. You will be allowed the following items during each exam:

- Approved Graphing/Scientific Calculator (TI-83/84; Casio 9850GB)
- One Page of Handwritten Notes on 8 ½" × 11" sheet of paper, no worked examples (must be turned in with exam)

Rules may be added or rescinded as needed.

Exam Make-up Policy:

There will be **no** make-up exams with the exception of extreme emergencies with legitimate documentation, i.e, death in the family or severe illness. If I am **contacted in advance and the absence is excusable**, then we may be able to setup an alternate time to take the exam with me.

Communication Policy:

The best methods of communication in private conversation with me are email (use your official @asu.edu email account, otherwise you risk having your email getting lost due to spam filters) or Canvas messaging. Please contact me if something arises that will directly harm your ability to succeed in the course. Do NOT contact your instructors on the basis of asking for additional extra credit, score curving, or any sort of preferential treatment (which are all possible violations of ASU Academic Standards).

Generative AI is not permitted

The use of AI tools and techniques is not permitted in this course. Use of generative AI in this course is considered a violation of [ASU's Academic Integrity Policy](#) and will result in appropriate sanctions, which include a zero on the assignment, reporting to the New College of Interdisciplinary Arts and Sciences Academic Integrity Officer (AIO), and further as specified by the AIO.

ASU Student Code of Conduct

Students are expected to follow the [ASU Student Code of Conduct](#), especially when communicating with peers, staff, and instructors. Violations of the student code of conduct may result in withdrawal from the class.

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

Academic Status Reports

This course incorporates an early alert reporting system called Academic Status Reports (ASRs) to give you helpful updates throughout the semester. An ASR will let you know if you are progressing well or if there are concerns related to your class performance. Concerns may be related to missing classes, missing assignments, or the quality of your work. ASR notifications will be sent to your ASU email address and are visible on My ASU in the My Classes box. The ASR may provide recommended actions, such as meeting with your instructor, TA, or academic advisor. If you receive an ASR, don't ignore it and keep calm (it might be good news).

Read the message, follow the suggested instructions, and don't delay. Information for making an appointment with your academic advisor can be found on My ASU in the Academic Support Team box. Students should view ASRs as confirmation of good work or use them as a catalyst to make changes, seek assistance, and improve in the course.

You can learn more about ASRs on the Academic Status Report Resources page.

<https://students.asu.edu/academic-status-report>

Assessments

Please be aware that student scores on exams or other graded work may be used to assess program goals of degrees offered by the School of Mathematical and Natural Sciences.

Attendance/Absence Policies

In addition to the instructor's general policy on absences and missed work, excused absences and conditions for making up work include [Accommodation of Religious Practices](#) and [Missed Classes Due to University-Sanctioned Activities](#). Students must notify their instructors of these absences as early as possible in the semester.

Community of Care Guidelines

ASU's response to COVID-19 for preserving and protecting every community member's health will continue to be dynamically adjusted to keep our community healthy and well. Please consult the [ASU Coronavirus website](#) and [Coronavirus FAQ](#) for up-to-date information on status, current risk, and appropriate response.

Copyright Infringement

All course content and materials are copyrighted materials. Students may not share outside the class, upload to online websites not approved by the instructor, sell, or distribute course content or notes taken during the conduct of the course [see [Academic Affairs Manual policy 304-06: Commercial Note Taking Services](#) and [Student Code of Conduct policy 5-308 F.14 Prohibited Conduct](#) (page 10) for more information]. This includes lectures, recorded lectures, and lectures administered and recorded using Zoom. 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.

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

Course/Instructor Evaluation

The course/instructor evaluation for this course will typically be conducted online 7-10 days before the last official day of classes of each semester or summer session. Your response(s) to the course/instructor is anonymous and will not be returned to your instructor until after grades have been submitted. The use of a course/instructor evaluation is an important process that allows our college to (1) help faculty improve their instruction, (2) help administrators evaluate instructional quality, (3) ensure high standards of teaching, and (4) ultimately improve instruction and student learning over time. Completing the evaluation is not required for you to pass this class and will not affect your grade, but your cooperation and participation in this process are critical. About two weeks before the class finishes, watch for an e-mail with "NCIAS Course/Instructor Evaluation" in the subject heading. The e-mail will be sent to your official ASU e-mail address.

Emergencies/Campus Power Outage

In the event of a campus power outage or other event affecting the ability of the University to deliver classes, any decision to cancel classes will be announced using the ASU emergency notification system. For this reason, it is imperative that students register with ASU's emergency notification system [LiveSafe](#). In cases where a limited number of buildings are affected, students should check the University website and/or call the School office at (602) 543-6050.

Emergency Evacuation

In the event that an evacuation occurs during the course, do the following:

- If time permits, take your personal items.
- Walk to the designated exit and down the stairwell.
- Do not use the elevators. If you are unable to walk down the stairs and require special assistance, please inform your instructor.
- Gather outside at the designated area where your instructor may take roll and account for all personnel.
- Wait for notification that it is safe to re-enter the building; if the fire alarm turns off, that does not mean it is safe to re-enter. You must wait for the "ALL CLEAR," from the fire department or appropriate ASU personnel.

It is important that any individuals who need assistance with stairs and/ or are unable to take the stairs, are identified right away, so please walk the students through the evacuation route for your course. In the event of an emergency evacuation, proceed to the designated area. The designated areas for the CLCC building are Fletcher Lawn (primary), and the breezeway between FAB and UCB (secondary). Students who cannot physically walk down the stairs will have to wait in the designated "Area of Refuge." **You will need to alert emergency personnel of the person(s) and their location."**

Final Exam Make-up Policy

ASU's [Final Exam Schedule](#) will be strictly followed. Exceptions to the schedule and requests for make-up examinations can be granted only by the Associate Director of the School of Mathematical and Natural Sciences for one of the following reasons: 1) religious conflict; 2) the student has more than three exams scheduled on the same day; 3) two finals are scheduled to occur at the same time. Make-up exams will NOT be given for any of the following reasons: non-refundable airline tickets, vacation plans, work schedules, weddings, family reunions, or other such activities. Students should consult the final exam schedule before making end-of-semester travel plans.

If there is a last-minute personal or medical emergency, the student may receive a grade of Incomplete and make up the final within one calendar month. The student must provide written documentation and be passing the class at the time to receive an incomplete. A signed [Request for Grade of Incomplete](#) must be submitted by the student and approved by the student's instructor and the Associate Director of the School of Mathematical and Natural Sciences.

Incomplete

A grade of incomplete will be awarded only if a documented emergency or illness prevents a student doing acceptable work from completing a small percentage of the course requirements at the end of the semester. The guidelines in the current general ASU catalog regarding a grade of incomplete will be strictly followed. A signed [Request for Grade of Incomplete](#) must be submitted by the student and approved by the student's instructor and the Associate Director of the School of Mathematical and Natural Sciences. **A grade of incomplete will NOT be awarded unless there is documented evidence of extreme personal or immediate family hardship.** Changes in work hours or other similar personal problems will not be approved as reasons for awarding incompletes. The Associate Director of the School of Mathematical and Natural Sciences must approve any incomplete grade requests.

Policy against Threatening Behavior

In the classroom and out, students are required to conduct themselves in a manner that promotes an environment that is safe and conducive to learning and conducting other university-related business. All incidents and allegations of violent or threatening conduct by an ASU student will be reported to the ASU Police Department (ASU PD) and the Office of the Dean of Students. Such incidents will be dealt with in accordance with the policies and procedures described in [Section 104-02 of the Student Services Manual](#).

Potentially Offensive Content

If you find any of the content in your class offensive, please bring your concerns to the instructor immediately. If raising the issue with the instructor is problematic, these concerns should be brought to the attention of the Director and Associate Director of the School of Mathematical and Natural Sciences.

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

Reasonable Accommodations for Students with Disabilities

[Student Accessibility and Inclusive Learning Services \(SAILS\)](#) provide information and services to students with any documented disability who are attending ASU. Individualized program strategies and recommendations are available for each student as well as current information regarding community resources. Students also may have access to specialized equipment and supportive services and should contact the instructor for accommodations necessary for course completion.

Grade Grievances

Any student seeking to appeal a grade must follow the following steps. This process does not address academic integrity allegations or faculty misconduct. Student grade appeals must be processed in the regular semester immediately following the issuance of the grade in dispute (by commencement for Fall or Spring semesters), regardless of whether the student is enrolled at the University. There are two stages to the grievance process: the informal process and the formal process. Each process contains a series of steps that must be followed in order. The informal process, outlined below and facilitated by the School of Mathematical and Natural Sciences, must be followed prior to escalation to the formal process:

1. A one-on-one meeting must be scheduled with the instructor. During this meeting, a student must state the reason for questioning that the grade was not given properly/in good faith. The instructor must review the matter, explain the grading procedure, and explain how the grade was determined. The student and the instructor must work toward resolution, and grade grievances should ideally be resolved at this level.
2. If the issue is unresolved, the student can appeal to the School of Math and Natural Sciences Grievances committee (MNSgrievances@asu.edu). The student must provide a written rationale and evidence that the grade was not given appropriately as well as a summary of the instructor's response/the meeting with the instructor.
3. If MNS Grievances policy do not resolve the issue, the student can appeal to the Associate Director and Director of the School of Math and Natural Sciences.
4. If the issue is not resolved at the level of the School of Math and Natural Sciences, the student can confer with the Dean's Representative in the New College of Interdisciplinary Arts and Sciences (Executive Director of Academic Services and Strategic Initiatives) who will review the case and explain the formal process to the student.

Respectful Communications

As a beacon for critical thought and the advancement of knowledge, ASU values dissenting opinions. Acknowledging that someone else's opinion matters as much as our own is the first step to creating a respectful dialogue. However, we must also distinguish between opinion, fact, and policy. Valuing and respecting those opinions that are different from our own does not mandate acquiescence or violation of policy. We expect all written, e-mail, verbal, and otherwise communications to be conducted with a respectful tone and tenor, and in compliance with established protocols and the [ASU Code of Conduct](#).

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

Title IX

It is a federal law 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 [ASU's website for Sexual Violence Awareness, Prevention, and Response](#). As mandated reporters, faculty are obligated to report any information of which they become aware regarding alleged acts of sexual discrimination, including sexual violence and dating violence. [ASU Counseling Services](#) are available if you wish to discuss any concerns confidentially and privately.

Withdrawals

Specifically, students should be aware that non-attendance will **NOT** automatically result in being dropped from the course. Therefore, if a student does not attend class during the first week or for any extended period of time during the semester, they should not presume that they are no longer registered. **It is the student's responsibility to be aware of their registration status.**

Any withdrawal transaction must be completed by the deadline date in accordance to the appropriate session at the registrar's office. If not, you will still be officially enrolled and receive a grade based on your completed work. For additional information about ASU's withdrawal policy and the possible consequences of withdrawing from a class, contact [Registration Services](#) or your academic counselor.

Table 1: Some Calendar Reminders – Session C

Event	Date
Classes Begin	January 8, 2024
Last Date to Register or add a Class	January 14, 2024
Martin Luther King Jr. Holiday Observed - Classes excused/University Closed	January 15, 2024
Last Date to Drop a Class	January 21, 2024
Spring Break- Classes excused/University Open	March 3-10, 2024
Course Withdrawal Deadline	March 31, 2024
Complete Session Withdrawal Deadline/Last Day of Classes*	April 26, 2024
Final Exams	April 29-May 4, 2024

[ASU's Full Academic Calendar](#)

*As part of a complete session withdrawal, a student must withdraw from all classes in that session. Beginning the first day of classes, undergraduate students are required to work with a Student Retention Coordinator to facilitate the withdrawal process. Please refer to the [ASU Registrar's webpage How to Drop, Add, and Withdrawal](#).

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

Tentative Lecture Schedule for MAT 210

Day	Scheduled Material
1/8: (Monday)	Introduction & Syllabus
1/10: (Wednesday)	Review of Select Precalculus Topics
1/15: (Monday)	MLK Jr. Day (NO CLASS)
1/17: (Wednesday)	11.1) Limits
1/22: (Monday)	11.1 (cont'd)
1/24: (Wednesday)	11.2) Continuity
1/29: (Monday)	11.3) Rates of Change
1/31: (Wednesday)	11.4/11.5) Definition of the Derivative/Graphical Differentiation
2/5: (Monday)	Midterm Exam 1 (Chapter 11)
2/7: (Wednesday)	12.1) Techniques for Finding Derivatives
2/12: (Monday)	12.2) Derivatives of Products and Quotients
2/14: (Wednesday)	12.3) The Chain Rule
2/19: (Monday)	12.4/12.5) Derivatives of Exponential and Logarithmic Functions
2/26: (Monday)	Midterm Exam 2 (Chapter 12)
3/4: (Monday)	SPRING BREAK (NO CLASS)
3/6: (Wednesday)	SPRING BREAK (NO CLASS)
3/11: (Monday)	13.1/13.2/14.1) Identifying Maxima and Minima
3/13: (Wednesday)	13.1/13.2/14.1 (cont'd)
3/18: (Monday)	13.3) Second Derivatives: Concavity and Test for Extrema
3/20: (Wednesday)	14.2) Applications of Extrema
3/25: (Monday)	14.4) Implicit Differentiation
3/27: (Wednesday)	14.5) Related Rates
4/1: (Tuesday)	Midterm Exam 3 (Chapter 13 & 14)
4/3: (Wednesday)	15.1) Antiderivatives
4/8: (Monday)	15.2) Substitution
4/10: (Wednesday)	15.3/15.4) Evaluating Definite Integrals
4/15: (Monday)	15.5) Area Between Two Curves
4/17: (Wednesday)	15.5) (cont'd)
4/22: (Monday)	16.1) Integration by Parts
4/24: (Wednesday)	16.2) Average Value** 16.4) Improper Integrals**

Final Exam: Thursday, May 2nd; 7:10 PM – 9:00 PM

***Extra Credit Topics, time permitting*

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