

# THE UNIVERSITY OF TEXAS AT EL PASO

## COLLEGE OF SCIENCE

DEPARTMENT OF MATHEMATICAL SCIENCES

### COURSE BASICS

Course Number: MATH 2313 CRN 23169

Course Title: Calculus III

Credit Hours: 3

Term: Spring 2023

Meeting and Location: None – course is entirely online via WebAssign and Blackboard

Prerequisite Courses: Math 1312 with a grade of at least “C” or placement by testing services

### INSTRUCTOR INFORMATION

Instructor: Charles Mundy-Castle

### Contact

Instructor email: [cfmundycastle@utep.edu](mailto:cfmundycastle@utep.edu)

Math Department: [mathdept@utep.edu](mailto:mathdept@utep.edu)

Emails will be answered daily Monday through Friday. Emails received after 5 PM may not be answered until the next weekday. I will reply as soon as I can.

### Student Office Hours:

Student office hours are a time where you can get individualized help from me. I am available to answer questions about course content and address any concerns you have about the class. During scheduled times, you may drop in without an appointment. You are not required to attend the student office hour sessions if you do not have questions. If you do need help, and cannot attend during the scheduled time, please email me to schedule an appointment.

Office hours are only held during normal university scheduling. Please allow one business day for the return of emails. Evening and weekend emails will be attended to during regular business hours. Other times at the discretion of the instructor.

During off-scheduling (Finals week) or condensed scheduling (late start, closed university) hours will be adjusted appropriately.

My office hours are Tuesday and Thursday 9:00am-10:00am (Mountain Time) or by appointment. Office hours will be held virtually, via Zoom, using this link:

[Zoom Office Hours Spring 2023](#)

## REQUIRED TECHNOLOGY AND MATERIALS

### Textbook

Calculus by Larson, 11th Edition (available as e-book and hardcover) with an Enhanced WebAssign Access code.

ISBN-10: 1-337-27534-4

ISBN-13: 978-1-337-27534-7

### *Required*

You must have the Enhanced WebAssign access code. This gives you full access to both the assignments and the e-book.

### *Optional*

A hard copy of the textbook is available, but not required for the class. The e-book is adequate and comes with the required access code.

### *Calculators*

Basic Scientific Calculator (a calculator without graphing, derivative or integration capabilities)

### Online Components

You are required to have a WebAssign account and the Enhanced WebAssign access code.

Ensure your UTEP e-mail account is working and you have consistent internet access and a stable web browser. [Mozilla Firefox](#), [Google Chrome](#), and [Safari](#) are the most supported browsers for both Blackboard and WebAssign.

You will need to have regular access to a computer or laptop. There may need to be more than a cell phone for doing coursework. You will need to download or update the following software:

- [Microsoft Office](#) (available for free through UTEP),
- [Adobe](#),
- [Windows Media Player](#) or [QuickTime Player](#), and
- [Java](#).

### Blackboard

Blackboard will be our primary platform. Inside the Blackboard course you will be able to view announcements (also sent to your email), notes, and any video I find applicable to the course.

### Weekly:

This course is designed using a weekly format—that is, each week is “packaged” as a single module so that all the materials, worksheets, and lecture videos are in one area for a given week.

\*All work will be completed on WebAssign, from homework and quizzes to the final exam.

### WebAssign

WebAssign is an online Course Management System of Cengage, the publisher of our text. You must have reliable internet to take this course. Use the instructions below to access and register for

WebAssign using your official *UTEP email account*. You will have a 14-day free trial to access your coursework immediately.

Instructions to access and register for WebAssign:

To enter your course on WebAssign on January 17, go to [www.webassign.net](http://www.webassign.net) and follow these steps:

- 1) Click on "Enter Class Key."
- 2) Enter the class key given by your instructor, be sure to include all three sections given:

**utep 6698 0427**

- 3) Verify the section number and instructor name, then enter your information. Please make sure you use your UTEP miners email and remember the password you create.
- 4) The next time you log in, click on "Log In" and enter your *UTEP miners e-mail* and the password you created.

You must purchase an access code to log in as soon as possible and before the grace period ends. If you bought a new book from the UTEP bookstore, the code should have come with it. When entering the code, enter all the words and characters in the boxes appropriately.

## COURSE OVERVIEW

### Course Objectives (Learning Outcomes)

Students are expected to have a clear understanding of the ideas of Calculus as a solid foundation for subsequent courses in mathematics and other disciplines as well as for direct application to real world situations.

### Class Activity Settings

#### Homework Assignments

All homework will be completed on WebAssign. Each question has 5 attempts. I recommend you get help after the 3rd incorrect submission rather than waiting until you are out of attempts to get help. The Ask Your Teacher feature of WebAssign is the best way to ask questions about your homework as it shows me the entire problem. You are encouraged to use this as your first method of contact whenever you have homework questions.

#### Quizzes

After each chapter, you will have a 90-minute timed quiz over that material. The quizzes will be available on WebAssign 72 hours prior to the due date specified on the course calendar.

The password for all quizzes is the word **ready**.

Each question has 3 attempts. If you choose to start a quiz less than 90 minutes before the due date, the quiz will conclude at the due date and your answers will be auto submitted.

Final Exam

The final exam will be available for three days during final exam week. This exam is a comprehensive exam and is required for all students. Remember, the final exam is worth 30% of your overall grade. The final exam is timed at 165 minutes (2hr 45min) and will have an accessible scientific calculator.

The password for the final exam is the word **ready**.

The final exam will open on Monday May 8<sup>th</sup>, 2023 at 12:01 AM and closes on Wednesday, May 10<sup>th</sup>, at 11:59 PM Mountain Time.

### *Timed Assignments:*

For all timed assignments, the clock begins once you open the assignment. This clock will not stop for any reason, not even if you log out. For this reason, it is important to check for any updates on your computer prior to beginning the timed assignments. The due date will change to reflect the time limit for timed assignments once you begin the quiz or exam.

### Grading

Your grade will be determined as follows:

Homework	30%
Quizzes	40%
Comprehensive Final	30%

Letter grades are determined according to the following scale:

#### **Grade Score**

A	90-100
B	80-89
C	70-79
D	60-69
F	<60

### Assignment Types

Your assignments will consist of regular sectional homework assignments, chapter quizzes, and a comprehensive final exam. All work will be completed on WebAssign.

### Campus Schedule

A comprehensive course schedule is attached as the last pages of this syllabus. Semester highlights are included.

- January 17<sup>th</sup> First Day of Classes
- February 1<sup>st</sup> Census Day (Last day to drop without a W)
- March 13<sup>th</sup> – 17<sup>th</sup> Spring Break – no classes
- March 30<sup>th</sup> Drop Day (Last day to drop with a W)
- March 31<sup>st</sup> Cesar Chavez Day – no classes
- April 7<sup>h</sup> Spring Study Day – no classes

- May 4<sup>th</sup> Last Day of Class Meetings
- May 5<sup>th</sup> Dead day
- May 8<sup>th</sup> – 12<sup>th</sup> Final Exam Week

## Drop Policy

***The Drop Date for this semester is Thursday, March 30th, before 5:00 PM MT. No drops will be approved after this date or time.***

## Incomplete Grade Policy

Incomplete grades may be requested only in exceptional circumstances after you have completed at least half of the course requirements. Talk to me immediately if you believe an incomplete is warranted. If granted, we will establish a contract of work to be completed with deadlines.

## Course Communication

We will meet twice weekly. If you would like to meet with me prior to class, please give me 24-hour notice. Other than that, here are ways we will communicate:

- **Student Office Hours:** I will have office hours for your questions and comments about the course. These will be virtual. See Blackboard for more information about times and availability.
- **Ask Your Teacher:** The Ask Your Teacher feature of WebAssign located on the top right of each question, is the best way to ask questions about your homework as it shows me the entire problem. You are encouraged to use this as your first method of contact whenever you have homework questions. This feature should only be used for homework related problem. My TA and I answer check it daily.
- **Course Messages:** Course messages in Blackboard is the best way to reach me for class related items or questions that are not homework specific. I will respond to Blackboard Course Messages daily and always before checking regular UTEP email. This is most definitely your best option at getting my response more quickly.
- **Email:** UTEP e-mail is a way to contact me. I will make every attempt to respond to your e-mail within 24-48 hours of receipt. When e-mailing me, be sure to email from your UTEP student account and please put the course number in the subject line. In the body of your e-mail, clearly state your question. At the end of your e-mail, be sure to put your first and last name, and your university identification number.
- **Announcements:** Check the Blackboard announcements frequently for any updates, deadlines, or other important messages. All Blackboard announcements will also be sent as an email to your UTEP account, but the announcements section will always archive these messages.

## ADDITIONAL COURSE POLICIES AND STATEMENTS

### Make-up Policy

#### Homework

An automatic homework extension can be requested within seven days after the due date. To do so, log in to WebAssign and click on My Assignments. Scroll to the assignment you want to extend and click Request Extension. Select "Automatic" and "Accept" the extension. The new due date will be 48 hours from when the extension is requested. No penalty will be applied to problems submitted after the original due date.

You may not view the answer key to a homework assignment before requesting the automatic extension.

### Quiz

There are no automatic extensions for quizzes. Quizzes are available before their due date. Please make plans to take the quiz early if you have a conflict.

If you feel like you have some extenuating circumstance or have an excused absence that will keep you from completing the assignment or quiz promptly, please get in touch with me immediately and be prepared to show supporting documentation.

### *University-Sponsored Events:*

These include conferences and student competitions, among others. The student needs to inform me of any traveling conflicts before they leave and make adequate arrangements to make up the missed material within one week of returning. Please do so to avoid the forfeiture of points.

### Final Exam

A make-up exam will only be given in extraordinary circumstances, such as severe illness or death in the immediate family, and with appropriate documentation (e.g., doctor's note).

### Attendance

You are expected to work toward completion of the course assignments daily. While I will not be grading your attendance, I will be checking on your progress in class. Failing to complete tasks is equivalent to being absent. Failure to complete assignments for several weeks may result in you being dropped from the course. You are expected to check Blackboard and your UTEP miners email regularly for announcements.

### Academic Integrity

The University policy is that all suspected cases or acts of alleged scholastic dishonesty must be referred to the Dean of Students for investigation and appropriate disposition. Any student who commits an act of scholastic dishonesty is subject to discipline. Scholastic dishonesty includes, but is not limited to cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, and any act designed to give an unfair advantage to a student or the attempt to commit such acts.

Each student is responsible for notice of and compliance with the provisions of the Regents' Rules and Regulations, which are available for inspection electronically at <https://www.utsystem.edu/offices/board-regents/regents-rules-and-regulations>.

All students are expected and required to obey the law, comply with the Regents' Rules and Regulations, with System and University rules, with directives issued by an administrative official during his or her authorized duties, and observe standards of conduct appropriate for the university. A student who enrolls at the university is charged with the obligation to conduct himself/herself in a manner compatible with the university's function as an educational institution.

Any student who engages in conduct that is prohibited by Regents' Rules and Regulations, U. T. System or University rules, specific instructions issued by an administrative official or by federal, state, or local

laws is subject to discipline, whether such conduct takes place on or off-campus or whether civil or criminal penalties are also imposed for such conduct.

### Course Netiquette

All correspondence with your instructor, TA, and other students should be conducted in an appropriate and professional manner. Please be considerate of your tone and word choice when conducting correspondence.

### Accommodations

The University is committed to providing reasonable accommodations and auxiliary services to students, staff, faculty, job applicants, applicants for admissions, and other beneficiaries of University programs, services and activities with documented disabilities in order to provide them with equal opportunities to participate in programs, services, and activities in compliance with sections 503 and 504 of the Rehabilitation Act of 1973, as amended, and the Americans with Disabilities Act (ADA) of 1990 and the Americans with Disabilities Act Amendments Act (ADAAA) of 2008. Reasonable accommodations will be made unless it is determined that doing so would cause undue hardship on the University. Students requesting an accommodation based on a disability must register with the UTEP Center for Accommodations and Support Services (CASS). Contact the Center for Accommodations and Support Services at 915-747-5148, or email them at [cass@utep.edu](mailto:cass@utep.edu), or apply for accommodations online via the CASS portal.

### COVID-19 Precautions

Please stay home if you have been diagnosed with COVID-19 or are experiencing COVID-19 symptoms. If you are feeling unwell, please let me know as soon as possible, so that we can work on appropriate accommodations. If you have tested positive for COVID-19, you are encouraged to report your results to [covidaction@utep.edu](mailto:covidaction@utep.edu), so that the Dean of Students Office can provide you with support and help with communication with your professors. The Student Health Center is equipped to provide COVID 19 testing.

The Center for Disease Control and Prevention recommends that people in areas of substantial or high COVID-19 transmission wear face masks when indoors in groups of people. The best way that Miners can take care of Miners is to get the vaccine. If you still need the vaccine, it is widely available in the El Paso area, and will be available at no charge on campus during the first week of classes. For more information about the current rates, testing, and vaccinations, please visit [epstrong.org](http://epstrong.org)

Please contact me immediately if you fall ill during the semester so that we can work together to formulate a strategy to help you get caught up as soon as you are physically able.

### Military

If you are a military student, or a military affiliated student, thank you for your service and/or thank you for sharing your family member with the country. If you have the potential of being called to military service or training during the semester, you are encouraged to contact me as soon as you receive your orders so that we can make appropriate arrangements.

## Copyright

### Course Materials

All materials used in this course are protected by copyright law. The course materials are only for the use of students currently enrolled in this course and only for the purpose of this course. They may not be further disseminated.

## COURSE RESOURCES

Where you can go for assistance as UTEP provides a variety of student services and support:

### Academic and Technology Resources

- **[Help Desk](#)**: Students experiencing technological challenges (email, Blackboard, software, etc.) can submit a ticket to the UTEP Helpdesk for assistance. Contact the Helpdesk via phone, email, chat, website, or in person if on campus, Academic Resources.
- **[UTEP Library](#)**: Access a wide range of resources including online, full-text access to thousands of journals and eBooks plus reference service and librarian assistance for enrolled students.
- **[Math Tutoring Center \(MaRCS\)](#)**: Ask a tutor for help and explore other available math resources.

### Individual Resources

- **[Military Student Success Center](#)**: Assists personnel in any branch of service to reach their educational goals.
- **[Center for Accommodations and Support Services](#)**: Assists students with ADA-related accommodations for coursework, housing, and internships.
- **[Counseling and Psychological Services](#)**: Provides a variety of counseling services including individual, couples, and group sessions as well as career and disability assessments.



## Tentative Course Schedule

\*Subject to change with notice

Week	Dates	Sections	Due Date
1	1/17-1/22	11.1 Vectors in the Plane	20-Jan
		11.2 Space Coordinates and Vectors in Space	24-Jan
2	1/23-1/29	11.3 The Dot Product of Two Vectors	27-Jan
		11.4 Cross Product of Two Vectors in Space	31-Jan
3	1/30-2/5	11.5 Lines and Planes in Space	3-Feb
		11.6 Surfaces in Space	7-Feb
4	2/6-2/12	11.7 Cylindrical and Spherical Coordinates	10-Feb
		Quiz 1 - Chapter 11 opens on Feb 11 at 12:01 AM	13-Feb
5	2/13-2/19	12.1 Vector-Valued Functions	17-Feb
		12.2 Calculus of Vector Functions	21-Feb
6	2/20-2/26	12.3 Velocity and Acceleration	24-Feb
		12.4 Tangent Vectors and Normal Vectors	28-Feb
7	2/27- 3/5	12.5 Arc Length and Curvature	3-Mar
		Quiz 2 - Chapter 12 opens on March 4 at 12:01 AM	6-Mar
8	3/6-3/12	13.1 Introduction to Functions of Several Variables	10-Mar
		13.2 Limits and Continuity	21-Mar
Spring Break	3/13-3/19		
9	3/20-3/26	13.3 Partial Derivatives	24-Mar
		13.4 Differentials	28-Mar
10	3/27-4/2	13.5 Chain Rules for Functions of Several Variables	31-Mar
		13.6 Directional Derivatives and Gradient	4-Apr
11	4/3-4/9	13.7 Tangent Planes and Normal Lines	7-Apr
		Quiz 3 - Chapter 13 opens on April 8 at 12:01 AM	10-Apr
12	4/10-4/16	14.1 Iterated Integrals and Area in a Plane	14-Apr
		14.2 Double Integrals and Volume	18-Apr
13	4/17-4/23	14.3 Change of Variables	21-Apr
		14.4 Center of Mass and Moments	25-Apr
14	4/24-4/30	14.5 Surface Area	28-Apr
		14.6 Triple Integrals and Applications	2-May
15	5/1-5/7	14.7 Triple Integrals	4-May

		Quiz 4 - Chapter 14 opens on May 2 at 12:01 AM	4-May
16	5/8-5/12		
		Final Exam open May 8 <sup>th</sup> at 12:01 AM - May 10 <sup>th</sup> 11:59 PM.	11-May