

THE UNIVERSITY OF TEXAS AT EL PASO

COLLEGE OF SCIENCE

DEPARTMENT OF MATHEMATICAL SCIENCES

COURSE BASICS

Course Number: MATH 2313: CRN 17655
Course Title: Calculus III
Credit Hours: 3
Term: Fall 2023
Meeting and Location: MW 7:30am-8:50am Liberal Arts 202.

INSTRUCTOR INFORMATION

Instructor: Dr. Leobardo Valera
Office Location: CCSB 2.0902F

Contact

Instructor e-mail: lvalera@utep.edu, copy to leobardovalera@gmail.com

Only Emergency: **Text: (915) 267-7564**

Math Department: mathdept@utep.edu

E-mails will be answered between 9:00am-6:00pm. E-mails received outside of these windows will be addressed during the next time period or at my discretion, whichever is sooner.

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 sessions if you do not have questions. If you need help and cannot attend during the scheduled time, please e-mail me to schedule an appointment.

Office hours are only held during normal university scheduling. Please allow one business day for the return of e-mails. Evening and weekend e-mails will be attended to during regular business hours and other times at the instructor's discretion.

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

REQUIRED TECHNOLOGY AND MATERIALS

Textbook

Calculus 12e, Ron Larson and Bruce Edwards with a WebAssign access code.

Required

You must have the 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.

Calculator

A Scientific Calculator with the permutation/combination key is required (example: TI-30XIIS). A graphing calculator similar to a TI-83 or TI-84 is recommended. You may use a free online graphing utility and calculator such as [Desmos Graphing Calculator](#)

Online Components

You are required to have a WebAssign homework account.

Ensure your UTEP e-mail account is working and that you have consistent access to the internet and a stable web browser. [Mozilla Firefox](#), [Google Chrome](#), and [Safari](#) are the most supported browsers for both Blackboard and WebAssign. UTEP HelpDesk continues to offer you technical support at you can test your Internet connection from your location and make sure your upload and download speeds are at least 1-2 Mbps. www.fast.com

You will need to have regular access to a computer or laptop. Your cell phone is not sufficient for doing coursework, since the homework program is not optimized for mobile viewing.

- Microsoft Office (available for free through UTEP [UTEP Microsoft Office 365](#)),
- [Adobe](#),
- [Windows Media Player](#) or [QuickTime Player](#), and
- [Java](#).

Modules:

This course is designed using a modular format—that is, for each chapter or part of the book, all the materials, lecture handouts, resources, are grouped together in one ‘module.’

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 (from the start of classes) so that you may access your coursework immediately.**

Instructions to access and register for WebAssign:

To enter your course on WebAssign go to 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 1502 8079](#)

- 3) Verify the section number and instructor name, then enter your information. Please make sure that you use your UTEP miners e-mail 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 are required to purchase an access code to log in as soon as possible and before the grace period ends. Please note that your class key is different from your access code. When entering the code, enter all the words and characters in the boxes appropriately.

COURSE OVERVIEW

Course Objectives and Learning Outcomes

Upon completing the course, you will identify the components that make a finite-dimensional real vector space and its associated operations. You will construct vector-valued functions connected with the parametrization of curves, surfaces, and solids. You will calculate the partial and directional derivatives of functions of several variables. Besides, you will get familiar with the theorems of continuity and the differentiability of functions of several variables. You will solve optimization problems by applying derivative tests and the Lagrange multiplier method.

You will sketch and parametrize regions in R^n for small n . Moreover, you will comprehend interactions among rectangular, polar, cylindrical, and spherical coordinate systems. Additionally, you will apply integration methods such as changing the order of integration, parametrization of regions, and variable change to compute area, volume, work, mass, and momenta.

Calculus III is a natural continuation of calculus I and II, so you must review those materials regularly.

Activities and Assignments:

You will find all assignments on www.webassign.net. Please use Mozilla Firefox, Google Chrome, or Safari since WebAssign works best with these browsers. All work, including homework, quizzes, and exams, will take place through WebAssign.

Three unit exams and a comprehensive final exam will be given. You will have an optional retake opportunity for each of the unit exams. The higher of the two scores will be used.

Resources:

You will have course PowerPoint and video access through the Resources section of WebAssign and Blackboard. You can click on resources at the bottom of your WebAssign homepage. You will be able to access PowerPoint lectures from the publisher and the Cengage lecture videos for each section that we cover. In Blackboard, I will provide Worksheets for each section that include notes and practice problems.

Tutoring

The MaRCS tutoring center offers free tutoring for math classes; their website has more information:

<https://www.utep.edu/science/math/marcs/>

There are several useful features in WebAssign designed to give extra help. These include "Watch it" and "Master it" links. These are publisher created and are enabled for any homework question in which they are available.

I am also available during office hours to help with questions.

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 the first method of contact whenever you have homework questions.

Quizzes

After each chapter covered, you will have a 60-minute timed quiz with five (5) questions from that material. The quizzes may contain problems you have not seen previously, but they will be based on the same concepts.

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

Each question has 5 attempts. If you choose to start a quiz less than 60 minutes before the due date, the quiz will conclude at the due date, and your answers will be auto-submitted. Be sure to keep an eye on your time to help prepare for exams (the per question time is less for an exam)

Exams

To review for each exam, keep thorough notes about your homework and quizzes. You will see similar problems on the exam. The regular unit exams will be available on WebAssign for 24 hours on the date specified by the course calendar and listed below, and will have a link to an online scientific calculator. The final exam has special settings, which you can find below. You have two (4) attempts at each problem. You may use other online resources, such as calculators and graphing utilities, but be aware the 'Watch it,' 'Master it,' and 'Ask My Teacher' features of WebAssign will not be available. **You may not ask another person or answer website (e.g., CourseHero, Chegg, etc.) for help and it will be handled as a (possible) violation of Academic Integrity if you do**

- Exam 1: Wednesday September 27rd
 - covers 11.1-11.7 and 12.1-12.5
- Exam 2: Monday November 6th
- Exam 3: Wednesday, December 06th
 - covers 14.1-14.7
 - covers all material for semester

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

The exam is timed at 165 minutes (two hours) once you begin, but if you choose to start an exam less than 165 minutes before the due date, the exam will conclude at the due date, and your answers will be auto-submitted. Also, be aware of the UTEP help desk hours (8am – 5pm) on weekdays and your instructor's availability during the exam, so you can plan properly.

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 before 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 Policy

You will be graded on homework, quizzes, in-class exams, and a final exam

10%	Homework Assignments
15%	Quizzes
25%	Exam I
25%	Exam II
25%	Exam III

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

Drop Policy

The Drop Date for this semester is Friday, Nov 03, 2023, before 5:00 PM Mountain Time. No drops will be approved after this date or time.

Students who decide to drop the course must process a drop form by e-mailing records@utep.edu by November 3rd before 5:00 PM MDT. Please note that the College of Science will remain aligned with the university and **will not approve any drop requests after that date.**

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:

Email: UTEP e-mail is the best 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.

ADDITIONAL COURSE POLICIES AND STATEMENTS

Make-up Policy

Homework

An automatic homework extension can be requested within 2 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 72 hours from the time the extension is requested. Note, this means that **due time** will also change. No penalty will be applied to problems submitted after the original due date.

You may not view the answer key to a homework assignment prior to requesting the automatic extension for it.

****All homework and quizzes must be completed prior to the opening window of the final exam****

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 in a timely manner, please contact me right away and be prepared to show supporting documentation – such as a university travel letter, medical documentation, military orders, etc.

University Sponsored Events:

These include conferences, student-athletes' competitions, etc. The student needs to inform me of any traveling conflicts before leaving and plan to make adequate arrangements to make up the missed material with one week of returning. Failure to do so will result in the forfeiture of points.

Exams

An opportunity to take an exam (or retake exam) outside of the designated window will only be granted in extraordinary circumstances such as severe illness or death in the family, and with appropriate documentation (e.g., doctor's note, military orders, notice of representation on UTEP events such as athletics).

Alternative Means of Submitting Work in Case of Technical Issues

I strongly suggest that you submit your work with plenty of time to spare if you have a technical issue with the course website, network, and/or your computer. I also suggest you save all your work (answers to homework, quizzes, and exams) in a separate Word document or hand-written notebook as a back-up. This way, you will have evidence that you completed the work and will not lose credit. If you are

experiencing difficulties submitting your work through the course website, please contact the [UTEP Help Desk](#).

Attendance Policy:

You are expected to work toward the completion of the course assignments daily. Attendance in this course is measured by the completed tasks. Failing to complete tasks in a timely manner is equivalent to being absent. Failure to complete assignments for two or more weeks without appropriate communication may result in you being dropped from the course. You are expected to check Blackboard and your UTEP miners e-mail regularly for announcements as well as the WebAssign Announcement section.

Academic Integrity Policy:

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.

I strongly discourage the use of sites such as Chegg, CourseHero, etc. in this class. If found to have consulted or contributed any material related to this class, you will be automatically reported to the Office of Student Conduct and Conflict resolution as this could be considered a violation of the H.O.O.P. The HOOP can be found here [Handbook of Operation Procedures](#)

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 [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.

As you will be taking online exams this semester, please take a moment to review this list of activities considered cheating by the Office of Student Conduct and Conflict Resolution (OSCCR). [Ways to Cheat](#)

Course Netiquette Policy:

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.

Accommodation Policy:

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 , or apply for accommodations online via the CASS portal.

COVID-19 Precautions

To reduce the spread of COVID-19, any person who is sick, feels ill, or experience symptoms consistent with COVID-19 should stay home and should get tested for COVID-19. If anyone tests positive, they must self-isolate and report their results to COVIDAction@utep.edu where an Environmental Health and Safety representative will contact the individual and offer additional guidance and instructions.

Testing options at UTEP can be found via the link. [Covid Testing Website](#)

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 Statement:

If you are a military student with 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.

Copyright Statement:

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.

Class Recordings

The use of recordings will enable you to have access to class lectures, group discussions, and so on in the event you miss a synchronous or in-person class meeting due to illness or other extenuating circumstance. Our use of such technology is governed by the Federal Educational Rights and Privacy Act (FERPA) and UTEP's acceptable-use policy. A recording of class sessions will be kept and stored by UTEP, in accordance with FERPA and UTEP policies. Your instructor will not share the recordings of your class activities outside

of course participants, which include your fellow students, teaching assistants, or graduate assistants, and any guest faculty or community-based learning partners with whom we may engage during a class session. You may not share recordings outside of this course. Doing so may result in disciplinary action.

COURSE RESOURCES

Where you can go for assistance 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.

Week	Dates (Monday - Wednesday)		Lecture 1	Lecture 2
1	28-Aug-23	30-Aug-23	Syllabus + Pre-Req Review	11.1-11.2-11.3
2	4-Sep-23	6-Sep-23	11.4-11.5	11.6-11.7
3	11-Sep-23	13-Sep-23	12.1	12.2-12.3
4	18-Sep-23	20-Sep-23	12.4	12.5
5	25-Sep-23	27-Sep-23	Review Exam 1	Exam 1
6	2-Oct-23	4-Oct-23	13.1	No class
7	9-Oct-23	11-Oct-23	13.2	13.3
8	16-Oct-23	18-Oct-23	13.5	13.6
9	23-Oct-23	25-Oct-23	13.7	13.8
10	30-Oct-23	1-Nov-23	13.9	Review Exam 2
11	6-Nov-23	8-Nov-23	Exam 2	14.1
12	13-Nov-23	15-Nov-23	14.2	14.3
13	20-Nov-23	22-Nov-23	14.4	14.5
14	27-Nov-23	29-Nov-23	14.6	14.7
15	4-Dec-23	6-Dec-23	Review Exam 3	Exam 3