Math 1312: Calculus II (ONLINE)
CRN: 10840
Fall 2026

Professor: Dr. Maria Pia Beccar Varela
mpvarela@utep.edu
(915) 747-8038

Office Hours: Virtually WF: 3:30pm-5pm, follow this link, that will be also posted in Blackboard:

https://utep-edu.zoom.us/j/8468692182?pwd=aGRTZmxLdTdHQ1FoRXAyc0tSYTlFZz09

Students will also be able to ask questions by using the `Ask my teacher' feature in WebAssign.

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

Course Information: What this class is about and what we will do

COURSE DESCRIPTION

The primary goal of Math 1312 is to prepare students for solving problems involving integrals, exponential and logarithmic functions, areas, volumes, sequences and series and model applications for solving real-world problems.

Prerequisite Courses: C or better in Math 1411. (“S” is acceptable)

COURSE OBJECTIVES OR EXPECTED LEARNING OUTCOMES

At the end of this course, students will be able to have a clear understanding of the following concepts and techniques:

1. Use integration to find the area between curves, volumes, center of mass, and average value of a function among other applications.
2. Evaluate integrals by using integration by parts, trigonometric substitutions, or change of variable.
3. Evaluate rational functions’ integrals by the method of partial fractions
4. Recognize improper integrals, their convergence and whenever it is possible, evaluate them.
5. Work with sequences and determine the convergence of sequences and limits.
6. Work with series and determine the ratio of convergence, study convergence by using comparison, p-series and alternating series tests.
7. Determine the interval of convergence for power series, apply Taylor’s theorem to find polynomial approximations for functions.

Contents: Chapter 7 - Applications of Integration. Chapter 8 - Integration Techniques, L'Hopital's rule. Chapter 9 - Infinite Series, Taylor expansions.

REQUIRED AND SUGGESTED MATERIALS

Required Textbook: Calculus by Larson, 12th Edition (available as e-book and hardcover) with an Enhanced WebAssign Access code. ISBN-13: 978-0357749135

Required:
You must have the Enhanced WebAssign access code. This gives you the 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.

Required: WebAssign account

WebAssign is an online Course Management System of Cengage, the publisher of our text. You must have reliable internet in order to take an online course. You will use the instructions below to access and register for WebAssign. You will have a two-week free trial so that you may access your coursework immediately.

Instructions to access and register for WebAssign:
To enter your course on WebAssign on August 24th, 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 as shown below:

   utep XXXX XXXX

3) Verify the section number and instructor name, then enter your information. Please make sure that you use your miners email and that you remember the password that you create.
4) The next time you log in, click on "Log In" and enter your miners email and the password that you created. You are required to purchase an access code to log in as soon as possible and definitely before this grace period ends. If you purchased 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.

Suggested: Technology/Materials: TI-83 or TI-89 Calculator

TECHNOLOGY REQUIREMENTS

Blackboard
Blackboard will be our primary platform. Inside of the Blackboard course you will be able to see announcements, grades, and course materials.

You will need to have regular access to a computer and/or laptop and you may want to use a webcam, and a microphone during our office hours.

Your cell phone is not sufficient 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.

Ensure your UTEP e-mail account is working and that you have access to the Web and a stable web browser. Google Chrome and Mozilla Firefox are the best browsers for Blackboard; other browsers may cause complications. When having technical difficulties, update your browser, clear your cache, or try switching to another browser.

Check that your computer hardware and software are up-to-date and able to access all parts of the course.

If you do not have a word-processing software, you can download Word and other Microsoft Office programs (including Excel, PowerPoint, Outlook and more) for free via UTEP's Microsoft Office Portal. Click the following link for more information about Microsoft Office 365 and follow the instructions.

IMPORTANT: If you encounter technical difficulties beyond your scope of troubleshooting, please contact the UTEP Help Desk as they are trained specifically in assisting with technological needs of students. Please do not contact me for this type of assistance. The Help Desk is much better equipped than I am to assist you!

COURSE ASSIGNMENTS AND GRADING

Assignments for this course: 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.

Two midterm exams, a comprehensive final exam, quizzes and homeworks will be given.

A comprehensive course schedule is attached to this syllabus. Semester highlights are included below:

- August 24 First Day of Classes
- September 9 Census Day (Last day to drop without a W)
- October 30 Drop Day (Last day to drop with a W)
- November 26-27 Thanksgiving Holiday (University closed)
- December 3 Last Day of Class Meetings
- December 7 - 11 Final Exam Week

Grading Policy: You will be graded on homework, quizzes, the two midterm exams, and the final exam

10% Webassign Homework
15% Webassign Quizzes
20% Exam I
20% Exam II
35% Final Exam

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

Course Communication: How we will stay in contact with each other

Because this is an online class, we won't see each other in the ways you may be accustomed to: during class time, small group meetings, and office hours. However, there are a number of ways we can keep the communication channels open:

- **Office Hours**: We will not be able to meet on campus, but I will still have office hours for your questions and comments about the course. My office hours will be held virtually using this link:

  https://utep-edu.zoom.us/j/8468692182?pwd=aGRTZmxLdTdHQ1FoRXAyc0tSYTlFZz09

  and during the following times:
  Wednesdays: 3:30-5 p.m. Mountain Time
  Fridays: 3:30-5 p.m. Mountain Time

The Teaching Assistant (TA) will also offer office hours, that will be posted in Blackboard, we will also send an announcement with the link.

- **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.
- **Announcements**: Check the Blackboard announcements frequently for any updates, deadlines, or other important messages.

NETIQUETTE

As we know, sometimes communication online can be challenging. It's possible to miscommunicate what we mean or to misunderstand what our classmates mean given the lack of body language and immediate feedback. Therefore, please keep these netiquette (network etiquette) guidelines in mind. Failure to observe them may result in disciplinary action.

- 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.

- Respect and courtesy must be provided to classmates and to the instructor at all times. No harassment or inappropriate postings will be tolerated.
- Always consider audience. This is a college-level course; therefore, all communication should reflect polite consideration of other's ideas.
- When reacting to someone else's message, address the ideas, not the person. Post only what anyone would comfortably state in a face-to-face situation.
- Blackboard is not a public internet venue; all postings to it should be considered private and confidential. Whatever is posted on in these online spaces is intended for classmates and instructor only. Please do not copy documents and paste them to a publicly accessible website, blog, or other space.

Course Policies: What do you need to do to be successful in the course

ATTENDANCE AND PARTICIPATION

Attendance in the course is determined by participation in the learning activities of the course. You are expected to work toward completion of the course assignment daily. You are expected to check Blackboard and your miners email regularly for announcements as well as the WebAssign Announcement section.
Because these activities are designed to contribute to your learning each week, they cannot be made up after their due date has passed.

COURSE DROP POLICY

Drop Policy

The Drop Date for this semester is Friday, October 30th, 2026, 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 sending an email from your official UTEP email account to records@utep.edu by October 30th before 5:00 PM MDT. When you email, be sure to do so from your miners email account and include your full name, student ID number, and full class details such as the course name, number, and CRN. Please note that the College of Science will remain

aligned with the University and **will not approve any drop requests after that date**.

LATE WORK AND MAKE-UP POLICY

Homework
An automatic homework extension can be requested within 7 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 the time the extension is requested. Note, this means that **time due** 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.

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.

University Sponsored Events:
These include conferences, student athletes’ competitions, etc… 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. Failure to do so, will result in the forfeiture of points.

Exams
A make-up exam will only be given in extraordinary circumstances such as, severe illness, and with appropriate documentation (e.g. doctor’s note).

ALTERNATIVE MEANS OF SUBMITTING WORK IN CASE OF TECHNICAL ISSUES

I strongly suggest that you submit your work with plenty of time to spare in the event that you have a technical issue with the course website, network, and/or your computer. I also suggest you save all your work (answers to discussion points, homeworks, quizzes, exams) in a separate Word document 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. You can email me your back-up document as a last resort.

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.

ACCOMMODATIONS 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.

SCHOLASTIC INTEGRITY

Academic dishonesty is prohibited and is considered a violation of the UTEP Handbook of Operating Procedures. It includes, but is not limited to, cheating, plagiarism, and collusion. Cheating may involve copying from or providing information to another student, possessing unauthorized materials during a test, or falsifying research data on laboratory reports. Plagiarism occurs when someone intentionally or knowingly represents the words or ideas of another as ones' own. Collusion involves collaborating with another person to commit any academically dishonest act. Any act of academic dishonesty attempted by a UTEP student is unacceptable and will not be tolerated. All suspected violations of academic integrity at The University of Texas at El Paso must be reported to the Office of Student Conduct and Conflict Resolution (OSCCR) for possible disciplinary action. To learn more, please visit HOOP: Student Conduct and Discipline.

COPYRIGHT STATEMENT FOR 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.

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.

Course Resources: Where you can go for assistance

UTEP provides a variety of student services and support:

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.
- University Writing Center (UWC): Submit papers here for assistance with writing style and formatting, ask a tutor for help and explore other writing resources.
- 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.

Class Procedures: overview

We will use WebAssign primarily for this course. Blackboard will be used for additional instructor resources like office hours and announcements.

1. On the first day of class, August 24th, you must use the WebAssign Class Key that I will provide to you to create your account on WebAssign and start working on your assignments. (See attendance policy.)

2. The first assignment to complete is: **Getting Started with WebAssign – Calculus.** This assignment details how to enter your answers on WebAssign.
3. Once you complete that first assignment, I suggest you follow the course calendar to work on the rest of the assignments daily. The homework is designed to help you learn the material with 5 attempts at each problem. The quizzes are designed to help you test your knowledge of the material in a limited time frame. The exams are a major portion of your grade so be sure to log on and complete your exams during the times they are open.
4. The quizzes are timed at 90 minutes each. Once you click on the quiz, you will have 90 minutes to finish it. Once you start the quiz, the timer begins and keeps going even if you log out, so be sure that you have an uninterrupted 90 minutes before you click on the quiz. The password for every quiz is the word **ready**.
5. Each of the two semester exams are timed exams. Once you click on the exam, you will have 2 hours to finish 6 questions. Once you start the exam, the timer begins and keeps going even if you log out, so be sure that you have an uninterrupted two hours before you click on the exam. The password for each exam is the word **ready**.
6. The final exam is also a timed exam. Once you click on the final exam you will have 2 hours and 45 minutes to finish 8 questions. Once you start, the timer begins and keeps going even if you log out, so be sure that you have an uninterrupted two hours and forty-five minutes before you click on the exam. The password for your comprehensive final exam is the word **ready**.
7. It is essential that you try to keep up with the calendar that accompanies the syllabus. There are no extensions on quizzes or exams without a documented reason, so you need to keep up on the homework so that you can be successful on the exams.
8. You can get extensions for the homework assignments. You have ten days to request the extension, but once you have requested it you only have two days from the time you accepted the extension to complete the assignment. Note, the time due will not necessarily be 11:59PM. In order to request an extension for a homework assignment, the deadline had to pass. Click on Past Assignments and then click on “Ask for Extension” on the assignment you wish to extend. If you view the answer key first, the system will not let you request the extension. Homework extensions come with no penalty,

however the best thing to do is to get your work done on time. If you rely too much on taking extensions, you will get too far behind and not be prepared for quizzes and exams when they come. You cannot ask for extensions after the last day of class.

9. **Resources**: You can click on resources at the bottom of your WebAssign homepage and you will be able to access PowerPoint lectures from the publisher as well as the Cengage lecture videos for each section that we cover. These are great resources.

I hope this will help to get you started in the course. You should be able to start working on the WebAssign assignments beginning Monday, August 24th. Please log in on August 24th and get started on the course.
Please let me know if you have any questions. Good luck in the course!

Dr. Maria Pia Beccar Varela

Weekly Calendar (Subject to Change)

This calendar provides an overview of the course. More details and an excel schedule are available in Blackboard. The due date for Quizzes is ALWAYS Monday at 11:59 PM (MST), the due date for Exams is ALWAYS Wednesday at 11:59 PM, the final exam is due on Tuesday, December 9th. The password for ALL quizzes and exams is the word: ready. No late work will be accepted.

	Topic	Readings Due	Assignments Due	Notes
Week 1 8/24-8/28	Class introduction, read and discuss syllabus, first assignments Section 7.1: area of a region	Read syllabus, getting started with WebAssign, section 7.1	*Getting started with WebAssign due 8/26	
Week 2 8/31-9/4	Sections 7.1, 7.2 area of a region between curves and volumes	Section 7.2	*HW 7.1 due 8/30 *HW 7.2 due 9/3	*
Week 3 9/7-9/11	Section 7.3 Volumes: disk and shell methods	Section 7.3	*Quiz 1 due 9/7 Sections 7.1-7.2 *HW 7.3 due 9/12	September 9th Census day (last day to drop w/o a W)
Week 4 9/14-9/18	Section 7.4 Arc length surface of revolution	Section 7.4	*HW 7.4 due 9/13 *Quiz 2 due 9/14 Sections 7.3, 7.4	
Week 5 9/21-9/25	Section 4.5 Integration: substitution method	Review for Exam 1 Section 4.5	*Practice Exam 1 due 9/22 *Exam 1 9/23 *HW 4.5 due 9/24	
Week 6 9/28-10/2	Sections 8.1, 8.2 Integration: substitution and integration by parts methods	Sections 8.1, 8.2	*HW 8.1 due 9/27 *HW 8.2 due 9/30	

Week 7 10/5-10/9	Sections 8.3, 8.4 Trigonometric integrals, substitution and applications	Sections 8.3, 8.4	*HW 8.3 due 10/4 *HW 8.4 due 10/7	
Week 8 10/12-10/16	Section 8.5 Partial fractions	Section 8.5	*Quiz 3 due 10/12 Sections 8.1-8.4 *HW 8.5 due 10/14	
Week 9 10/19-10/23	Section 5.6 limits and L'Hopital's Rule	Section 5.6	*HW 5.6 due 10/18 *Quiz 4 due 10/19 Sections 8.5-5.6	
Week 10 10/26-10/30	Section 8.7 Indefinite integrals and tables	Section 8.7 Review Exam 2	*HW 8.7 due 10/24 *Practice Exam 2 due 10/27 *Exam 2 10/28	October 30th Last W, last day to drop with a W
Week 11 11/2-11/6	Sequences, geometric and telescopic series, integral test	Sections 9.1, 9.2, 9.3	*HWs 9.1 and 9.2 due 10/31 and 11/1 *HW 9.3 due 11/4	
Week 12 11/9-11/13	Comparison test	Section 9.4	*Quiz 5 due 11/9 Sections 9.1-9.3 *HW 9.4 due 11/11	
Week 13 11/16-11/20	Alternating series test, ratio and root tests	Sections 9.5, 9.6	*HW 9.5 due 11/15 *HW 9.6 due 11/18	
Week 14 11/23-11/28	Taylor polynomial approximation, power series	Sections 9.7, 9.8	*HW 9.7 due 11/22 *HW 9.8 due 11/25	Thanksgiving Holiday: November 26-27
Week 15 11/30-12/4	Last week of classes	Review Final Exam	*Quiz 6 due 11/30 Sections 9.4-9.8	December 3 Last Day of Class Meetings

Week 16 12/7-12/11	Finals Week	Final Exam	*Practice Final Exam due 12/6 *Final Exam due 12/8	**December 7 - 11** **Final Exam Week**