

## Summer 26 East Texas A & M Univ. Math 2415 – Calculus III

This is the syllabus for Math 2415-Calculus III, Section 01W for Summer II 2026. Please read it carefully. You will be responsible for all information given in the syllabus, and for any modification to it that may be announced in the semester.

**Instructor:** Dr. Yelin Ou

E-mail: [Yelin.ou@etamu.edu](mailto:Yelin.ou@etamu.edu)

Webpage: <http://faculty.tamuc.edu/you/>

**Office hours:** MW: 3:00-5:00pm, TR: 11:00am-12:00 noon, and by appointment. All office hours will be held virtually by Zoom meeting (A video meeting in which we can have instantaneous communication with my screen sharing so that you can see my writing in my answering your question just like you see me face-to-face). When appropriate, general questions discussed during office hours may be summarized and posted on D2L for the benefit of the class.

**Instructional Methods:** This is a fully online (web-based) class. Instruction will be delivered primarily through video lectures recorded by the instructor and posted weekly on D2L. Additional instructional methods include demonstrations, worked examples, and guided problem-solving walkthroughs designed to reinforce key concepts. Each video module has a pdf Lecture. Students will watch the recorded Lecture Video with study guidance and expectations on D2L course shell. While you have flexible time to complete and progress the study of the course material on a weekly basis, you are strongly encouraged to follow the weekly schedule closely to avoid falling behind.

**Workload and Assistance:** You should plan to spend **3 to 5 hours per day** engaging with the course material. This includes watching recorded video lectures on D2L, reading the lecture notes, completing homework assignments, and using office hours to clarify and strengthen your understanding the material. The workload may vary week to week — **exam weeks may require more time**, while other weeks may be lighter. Engaging with your classmates during **Virtual Office Hours** is highly encouraged. Collaborating with others, asking questions, and explaining concepts can significantly enhance your understanding. If you need help, don't hesitate to attend my **Zoom office hours** or reach out by email (the best way to communicate with me).

**Attendance/Engagement:** This is an online course. Attendance is monitored through regular participation in D2L, including viewing posted materials, engaging with course content, and completing, homework, and exams by the posted deadlines. Attendance is not a separate point category in the grading table; however, lack of participation may affect student success and may be reported according to university attendance procedures.

**Technology Requirements:** Students are expected to check their MyLeo email and D2L announcements regularly.

Regular access to a computer or tablet with stable internet is required. Students will need access to MyLeo, D2L Brightspace, and Zoom for course materials, announcements, grades, and office hours.

Students must be able to scan handwritten work into a single PDF file when required. A scanner or a cell phone with a scanning app, such as Adobe Scan or a similar app, is acceptable. Phones may be used for scanning permitted homework or quiz submissions, but they may not be used during proctored exams.

Access to a printer is helpful for printing handouts, reviews, or practice exams, but students are not expected to print official exams unless instructed.

**Access and Navigation:** You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or [helpdesk@etamu.edu](mailto:helpdesk@etamu.edu). If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778. Other support options can be found here:

<https://community.brightspace.com/support/s/contactsupport>

**Note:** Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a ETAMU campus open computer lab, etc.

**Text:** *Calculus*, by James Stewart, 9<sup>th</sup> Edition published by Thompson Learning Inc.

**Course Material:** The material to be covered will include selected sections from chapters 12, 13, 14, 15, and 16.

**Course Description:** Advanced topics in calculus, including vectors and vector-valued functions, partial differentiation, Lagrange multipliers, multiple integrals, and Jacobians; application of the line integral, including Green's Theorem, the Divergence Theorem, and Stokes' Theorem. Prerequisite: Math 2414.

**Course Objectives:** Upon successful completion of this course, the students will be able to

1. Demonstrate the ability to analyze and visualize curves, surfaces, and region in 2 and 3 dimensions, in Cartesian, polar, cylindrical, and spherical coordinate systems.
2. Perform calculus operations on vector-valued functions including limits, derivatives, integrals, curvature, and the description of motion in space.
3. Perform calculus operations on functions of several variables including limits, partial derivatives, directional derivatives, and multiple integrals.
4. Find and classify extrema and tangent planes of functions of two variables.
5. Apply the computational and conceptual principles of calculus to the solutions of various scientific and business applications.

**Calculator & supplies:** A graphing calculator is needed for this course. A TI 84 calculator is recommended.

**Tests:** Students will take online proctored exams via zoom meeting with video camera on during the exams.

There will be two midterm tests and a final exam for the course.

The tentative schedules for the exams are:

**Test 1:** July 15, Wednesday 4:00pm-5:15pm.

**Test 2:** July 29, Wednesday 4:00pm-5:15pm.

**Final exam:** The comprehensive final exam is scheduled on  
**Aug. 6, Thursday, 8:00am-10:00am.**

**Homework & Projects:** Homework will be assigned and collected to grade on a weekly basis. You are strongly recommended to work out homework assignments on the scheduled basis since **No one can learn mathematics without doing it!** You will be turning your homework through D2L (detailed instructions on how to scan your homework in PDF and upload to D2L has been given in an announcement on course shell). Some homework problems or the similars will be used as test questions.

**Course grades:** The course grade consists of  
Homework & Quizzes: 20%  
Two tests : 50%  
Final exam: 30%.

The letter grades will be assigned using the following scale:

A: 90-100% B: 80-89% C: 70-79% D: 60-69% F: 0-59%

**Withdrawal Policy:** Concerning the deadlines and consequences of withdrawals please check on:

[https://calendar.etamu.edu/academic?\\_gl=1\\*duyw32\\*\\_gcl\\_au\\*MTUwMDg2OTQ0OC4xNzgxMzkwMjIx](https://calendar.etamu.edu/academic?_gl=1*duyw32*_gcl_au*MTUwMDg2OTQ0OC4xNzgxMzkwMjIx)

**Academic Integrity:** I have a **NO TOLERANCE** policy for cheating and if you are caught cheating you will fail this course. Cheating in this course includes the following:

- Giving or receiving answers during an exam or quiz.
- Viewing the exam or quiz answers of others.
- Having notes/practice work available during quizzes or tests.
- Possession or access to test items before the test is given.
- Deception in getting an excused absence to obtain the undeserved opportunity to make-up work.
- Use of cell phones or text messaging technology during exams or quizzes. You may not use the calculator on your cell phones.
- Improper citations in written works, or using another person's ideas and words as your own without giving proper credit.
- **Any** method, no matter how well rationalized or accepted, which improves a person's grade by any means other than study and skillful performances on exams and/or other assignments.

Students found guilty of an act of academic dishonesty in this course will be subject to receiving an "F" in this course.

**Classroom Behavior:** "All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment" (See Student's Guidebook). A&M-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

**AI use policy:** Texas A&M University-Commerce acknowledges that there are legitimate uses of Artificial Intelligence, ChatBots, or other software that has the capacity to generate text, or suggest replacements for text beyond individual words, as determined by the instructor of the course.

Any use of such software must be documented. Any undocumented use of such software constitutes an instance of academic dishonesty (plagiarism).

Individual instructors may disallow entirely the use of such software for individual assignments or for the entire course. Students should be aware of such requirements and follow their instructors' guidelines. If no instructions are provided the student should assume that the use of such software is disallowed.

In any case, students are fully responsible for the content of any assignment they submit, regardless of whether they used an AI, in any way. This specifically includes cases in which the AI plagiarized another text or misrepresented sources.

13.99.99.R0.03 Undergraduate Academic Dishonesty

13.99.99.R0.10 Graduate Student Academic Dishonesty

**The information for students with disability:** The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact: Office of Student Disability Resources and Services, Texas A&M University-Commerce, Gee Library, Room 132, Phone (903) 886-5150 or (903) 886-5835, Fax (903) 468-8148, email: [StudentDisabilityServices@tamuc.edu](mailto:StudentDisabilityServices@tamuc.edu)

**Counseling & Help:** The Counseling Center at A&M-Commerce, located in the Halladay Building, Room 203, offers counseling services, educational programming, and connection to community resources for students. Students have 24/7 access to the Counseling Center's crisis assessment services by calling 903-886-5145. For more information regarding Counseling Center events and confidential services, please visit [www.tamuc.edu/counsel](http://www.tamuc.edu/counsel)

**Campus Concealed Carry** Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations. For a list of locations, please refer to (<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf>) and/or consult your event organizer). Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

**Getting help :** A better way to learn math is to keep progress and leave no gaps in one's study. So please get help as soon as you need it and do not wait until it is too late. You are welcome to get help from me via Zoom.

## Homework Assignment

The following homework assignments refer to problems in the 8<sup>th</sup> edition of the book. It is your responsibility to have the right edition of the book and work on the assigned homework problems.

Section 12.1: 2, 3, 6, 10, 11(a), 14, 18.

Section 12.2: 4, 5(a), (d), (e), 14, 17, 22, 24, 26.

Section 12.3: 4, 8, 18, 24, 44.

Section 12.4: 2, 4, 20, 28, 34.

Section 12.5: 2, 8, 10, 26, 28, 33.

Section 12.6: 4, 12, 20, 21-28.

Section 13.1: 2, 4, 8, 12, 32.

Section 13.2: 6, 10, 14, 17, 22, 24.

Section 13.3: 2, 8, 14, 19, 47, 50.

Section 14.1: 10, 12, 15, 16, 22, 24.

Section 14.2: 5, 6, 10, 13, 30, 31.

Section 14.3: 17, 20, 21, 41, 64, 76 (a), (f).

Section 14.4: 1, 4, 12, 13, 21, 26, 30.

Section 14.5: 3, 4, 6, 10, 23, 32.

Section 14.6: 6, 8, 9, 12, 15, 23, 44.

Section 14.7: 1, 2, 6, 7, 9, 15, 33.

Section 15.1: 4, 10, 13, 16, 28, 32.

Section 15.2: 5, 7, 10, 17, 24, 40, 57.

Section 15.3: 7, 10, 19, 24, 25, 31.

Section 15.4: 4, 5, 8, 9, 11, 12.

Section 15.5: 1, 2, 5, 9, 10, 11, 12.

Section 15.6: 3, 5, 9, 10, 11, 13.

Section 15.7: 1(a), 2(a), 3(a), 4(a), 15, 19, 21.

Section 15.8: 1(a), 2(a), 3(b), 4(b), 17, 25, 30.

Section 15.9: 3, 5, 15, 17

Section 16.1:

To be continued

## Math 2415 Weekly Schedule

	Sections to be covered	Homework Due
W1	Sections 12.1-12.6	
W2	Sections 13.1-13.3, 14.1-14.2, Review & Test 1	HW from Sections 12.1-12.6 are due before 7/13, 11 :59pm
W3	Sections 14.3-14.7, 15.1	HW from Sections 13.1-13.3, 14.1-14.3 are due before 7/20, 11 :59pm
W4	Sections 15.2-15.6, Review and Test 2.	HW from Sections 14.4-14.7, 15.1-15.2 are due before 7/27, 11 :59pm
W5	Sections 15.7-15.9, Course reviews & Final exam	HW from Sections 15.3-15.9 are due before 8/3, 11 :59pm