

University of Tennessee

Math 241 Calculus III

Meets: MWF 9:15 AM - 10:05 AM, T 8:10 AM - 9:25 AM

at zoom <https://tennessee.zoom.us/j/8217664472>

Syllabus Fall 2020

Welcome to Our Calculus III Class

Course Description: Multidimensional (usually 3D) Calculus.

Prerequisites: Math 142, 148 or Calculus II.

Instructor: Dr. Wenbo Li

Office Hours and Location: Office hours are hosted on zoom on Monday 3:30-5pm, Thursday 10-11:30am, and other times by appointments. Face-to-face discussions are also possible by appointments, and usually I will be at my office Walters F225 during my office hours on Thursday.

Ways to contact: wli50@utk.edu, or messages on canvas.

Course Communications: I will post course materials, grades, and class announcements on Canvas. You are always welcome to contact me through email or canvas. Homework grades will be on Webassign.

Student Learning Outcomes: Upon completion of Math 241, students will be able to

- Understand basic properties of vectors and vector-valued functions in multidimensional spaces.
- Find parametric equations of curves and evaluate their corresponding arc lengths, velocity vectors, and acceleration vectors.
- Compute derivatives, including partial derivatives, using chain rules.
- Find maxima and minima of functions of several variables.
- Compute multiple integrals in rectangular, cylindrical, and spherical coordinates and using changes of variables.

- Apply Green's Theorem, Stokes' Theorem, and the Divergence Theorem in the computation of integrals.

Textbook: *Calculus, Early Transcendentals (8th edition)*, by Stewart, published by Cengage Learning. We will be covering selected sections from Chapters 12-16. The eBook for this course is free and can be accessed at WebAssign by registering with a university email address and the class key – **utk 9758 2693** and then clicking on the picture of the book at the bottom of the course home page.

Assessment and Evaluations Methods:

Homework (14%) + Quizzes (14%) + Midterm exams (42%) + Final (30%)

Homework: there are online homework assignments through **WebAssign**. Homework grades will be posted on WebAssign as well. Please make sure to finish it before the deadline. Contact me if you have any issues with WebAssign. Discussions are permitted for homework, but copying answers from other people or the internet is definitely not allowed.

Quizzes: there will be seven **take-home quizzes**. They will be due at the end of the dates written on the schedule at the end of syllabus. Quizzes will be uploaded to canvas a few days before the deadline. You need to finish the quiz and send your answers (maybe as a scanned file) to me through email or canvas. You are required to show all your work. You have to do the quizzes independently. Don't ask other people for help.

Midterms: there will be three midterm exams, the format of the midterms will be the same as the final exam (seems to be not determined yet by the department). I plan to have in-class exams in the following way: I will upload the exam problems at the time our class begins. Then you need to finish the exam by writing down your solutions on paper, and you have to send the scanned version of your solutions back to me at the end of the class. The number of problems would be a little bit less compared to a normal test due to the inconvenience. We will also meet on zoom so you could ask me if you are not sure what the questions ask you to do.

Final: a comprehensive exam covering all the materials we learn this semester. The final exam will be on Dec 4 (Friday) 3:30 pm to 6 pm. The time here includes the setup time before the exam and the time needed to submit your answers after the exam. Guidance from school will come later.

Letter grades will be based on the following scale:

Grade	A	B+	B	C+	C	D+	D	F
%-Score	90+	87-89	80-86	77-79	70-76	67-69	60-66	0-59

I reserve the right to change this scale, provided the change benefits all students. All grades will be made available online.

Calculator/Technology Policy: not allowed for exams.

If a student is found using a computational or electronic device during an exam, then the instructor reserves the right to give the student a grade of zero on that assessment. Students may use computational and electronic devices while completing homework and take-home quizzes. However, in order for a student to receive full credit on a given problem, the student must provide sufficient and natural logical reasoning in their response. A solution containing a bizarre computation or implication suggests that the author of the solution may have relied too heavily on an electronic resource. The instructor reserves the right to give a student a grade of zero on a homework submission containing such a solution.

Learning Environment and Classroom Expectations/Etiquette:

Everyone is expected to maintain an atmosphere that fosters a positive learning environment.

- Attendance to every class is mandatory.
- Questions are welcomed

Make Up Policies: Late homework or quiz submission is not acceptable unless for a valid reason. Make ups for the in-class exams and final will be given only if a student can present evidence that an absence was caused by serious illness, a death in the immediate family, religious observance, or participation in University activities at the request of University authorities. For an illness, you should present a signed statement from a doctor that your illness was sufficiently serious to make you miss class. A note saying only that you visited the doctor or the Health Center may not Suffice. Furthermore, please let me know before the exam or the deadline if you cannot make it.

Math Tutorial Center

Free tutoring is provided for all 100 level and most 200 level math courses including this course. I am not sure how well this would work online. You may give it a try

Campus Syllabus:

STUDENTS WITH DISABILITIES -- <http://sds.utk.edu>

“Any student who feels he or she may need an accommodation based on the impact of a disability should contact the Student Disability Services (SDS) at 865-974-6087 in 100 Dunford Hall to document their eligibility for services. Student Disability Services will work with students and faculty to coordinate reasonable accommodations for students with documented disabilities.”

ACADEMIC INTEGRITY

Each student is responsible for his/her personal integrity in academic life and for adhering to UT's Honor Statement. The Honor Statement reads: "An essential feature of the University of Tennessee, Knoxville is a commitment to maintaining an atmosphere of intellectual integrity and academic honesty. As a student of the university, I pledge that I will neither knowingly give nor receive any inappropriate assistance in academic work, thus affirming my own personal commitment to honor and integrity."

SOCIAL DISTANCING & COVID-19 PROCEDURES

Students are required to wear face masks at all times and maintain social distancing (6 feet between individuals in traditional classrooms, or, in instructional laboratories and similar settings, only a few minutes in closer proximity when absolutely necessary to achieve learning objectives). Students who are feeling ill or experiencing symptoms such as sneezing, coughing, or a higher than normal temperature will be excused from class and should stay at home.

Instructors have the right to ask those who are not complying with these requirements to leave class in the interest of everyone's health and safety. In the event that a student refuses to comply with these requirements, the instructor has the right to cancel class.

Additionally, following other simple practices will promote good health in and out of the classroom, such as frequent and thorough hand washing, wiping down desks and seats with disinfectant wipes whenever possible, not sharing personal items such as pens and cell phones, and avoiding crowded hallways and other enclosed spaces.

The Volunteer Creed reminds us that we bear the torch in order to give light to others. As Volunteers, we commit to caring for one another and for the members of the communities in which we live, work, and learn. This semester, the University asks that we all demonstrate the Volunteer spirit by following these and other health guidelines and requirements.

How to be Successful in this Course:

- Take notes and ask questions.
- Think, work smarter and discuss with classmates.
- Review and rework problems that you got wrong.
- Start preparing for exams early.

If the instructor finds it necessary to make informational changes (e.g. office hours, schedule adjustments) due to students' needs or unforeseen circumstances, students will be notified in writing/email of any such changes.

Key Dates - Fall 2020: [UT Calendar](#)**Math 241 Projected Schedule Fall 2020**

	Section	Other Information (Keep updating)
8/19	12.1	
8/21	12.1-12.2	
8/24	12.2-12.3	
8/25 (T)	12.1-12.3	Recitation
8/26	12.4-12.5	
8/28	12.5	Quiz 1 Due.
8/31	12.6	
9/1 (T)	12.4-12.6	Recitation
9/2	13.1-13.2	
9/4	13.2-13.3	Quiz 2 Due.
9/7	13.3	
9/8 (T)	13.4	
9/9	13.1-13.4	Recitation
9/11	Review	
9/14	Exam 1	Cover sections 12.1-13.4.
9/15 (T)	14.1-14.2	
9/16	14.3	
9/18	14.5	
9/21	14.4	
9/22 (T)	14.1-14.5	Recitation
9/23	14.6	
9/25	14.6-14.7	Quiz 3 Due.
9/28	14.7-14.8	
9/29 (T)	14.8	
9/30	14.6-14.8	Recitation
10/2	15.1	
10/5	15.2	Quiz 4 Due on 10/3.
10/6 (T)	15.3	
10/7	15.1-15.3	Recitation
10/9	Review	
10/12	Exam 2	Cover sections 14.1-15.3.
10/13 (T)	15.4	

10/14	15.6	
10/16	15.7	
10/19	15.8	
10/20 (T)	15.4-15.8	Recitation
10/21	15.9	
10/23	15.9	Quiz 5 Due.
10/26	16.1	
10/27 (T)	15.9-16.2	Recitation
10/28	16.2	
10/30	16.3	Quiz 6 Due.
11/2	16.4	
11/3 (T)	16.5	
11/4	16.2-16.5	Recitation
11/6	Review	
11/9	Exam 3	Cover sections 15.4-16.5.
11/10 (T)	16.6	
11/11	16.6	
11/13	16.7	
11/16	16.6-16.7	Recitation
11/17 (T)	16.8	
11/18	16.9	
11/20	16.8-16.9	Recitation. Quiz 7 Due.
11/23	Review	
11/24 (T)	Review	
12/4 Friday	Final Exam	3:30 pm - 6 pm Comprehensive Exam: GOOD LUCK!!!