

Practical information

Class hours: TR 8:00–9:20am

Class room: MA 012

Instructor: Lars Winther Christensen

Office: MA 227

Office hours: M 3–5pm, TR 11am–12:30pm, W 10–11am

Phone: 742-2566

Email: lars.w.christensen@ttu.edu

Course website: <http://www.math.ttu.edu/~lchrste/teaching.html>

Course description

Extension, to functions of several variables, of the concepts introduced in Calculus I.

Prerequisites: Math 1352 or consent of department.

Required Text: *Calculus* 4th Edition by Strauss, Bradley, and Smith.

Learning Outcomes: Students develop skills in differentiation and integration needed to solve problems in 3-dimensional space. In particular, the students will master the concepts of

- tangent and normal vectors, and their geometric and physical interpretations,
- partial derivatives, tangent planes, directional derivatives, gradients, and their computation
- three-dimensional integration, and how to compute such integrals,
- vector fields, divergence, and curl, and how to calculate them.

Learning Assessment

Graded assessment is done through homework, quizzes, and exams. A number of non-graded assessment techniques will also be used. These include direct questioning, problems to be solved in class, and discussions during office hours. Additionally, problems will be assigned for student self-assessment. **Free tutoring** is available in the Missouri Club, M–F 10am–5pm in MA 106.

Tentative course organization

Intro and review	27 Aug
Chapter 10	30 Aug–13 Sep
Chapter 11	18 Sep–11 Oct
Chapter 12	16 Oct–8 Nov
Chapter 13	13 Nov–4 Dec
Review	6 Dec

Quizzes and exams

Quizzes	6 Sep, 20 Sep, 4 Oct, 18 Oct, 8 Nov, and 29 Nov
In-class exams	27 Sep, 23 Oct, and 15 Nov
Final exam	10 Dec (common final, 10am–12 noon)

Other important dates

Labor Day holiday	3 Sep
Last day to drop a course and receive a refund	12 Sep
Last day to drop a course and receive a partial refund	24 Sep
Fall Break	12 Oct
Last day to declare pass/fail or drop a course	30 Oct
Thanksgiving vacation	21–25 Nov

Grades and grading

Six quizzes and three in-class exams are given during the semester. **Calculators** are not allowed during quizzes, final, and in-class exams. Homework will be assigned 12 times during the semester, usually on WebWork¹ and due on Mondays. You are encouraged to work on these problems in groups and take advantage of the Missouri Club.

Grading policy. On quizzes, exams, and written homework, partial credit for correct steps will be awarded even if the final answer is wrong. Full credit will be given only if the final answer and all intermediate steps are correct. A correct final answer per se does not guarantee any credit. Homework is not accepted after the deadline. In general, in-class exams and quizzes cannot be made up; the final exam serves as make-up for in-class exams that were missed for legal reasons. Results and grades are posted at <http://www.webct.ttu.edu>. Homework (10 assignments), quizzes (5), and exams (4) are counted towards the final grade with weights as follows:

Homework	20%
Quizzes	15%
In-class exams	45% (15% each)
Final exam	20%

Final grades will be assigned based on the following percentages

A+ 100–97%	A 96.9–93%	A÷ 92.9–90	
B+ 89.9–87%	B 86.9–83%	B÷ 82.9–80%	
C+ 79.9–77%	C 76.9–73%	C÷ 72.9–70%	
D+ 69.9–67%	D 66.9–63%	D÷ 62.9–60%	F 59.9–0%

General Policies

Civility in the classroom. You are expected to be courteous to me and your fellow students. This means that your cell-phone should be turned off during the class; you shall not chat with your friends during class, eat meals or snacks, or cause a distraction in any other way. Please see more information on-line at www.studentaffairs.ttu.edu/vpsa/publications/civility.htm.

Religious holy days. You are allowed to take the time to travel and observe a religious holy day. Prior notice should be given at least 1 day before the absence.

Officially approved trips. Students are allowed to miss class for trips officially sanctioned by TTU. The student must notify the instructor of upcoming trips and present written authorization.

Students with Disabilities. Any student who, because of a disability, may require special arrangements in order to meet the course requirements should contact the instructor as soon as possible to make any necessary arrangements. Students should present appropriate verification from Student Disability Services during the instructor's office hours. Please note instructors are not allowed to provide classroom accommodations to a student until appropriate verification from Student Disability Services has been provided. For additional information, you may contact the Student Disability Services office at 335 West Hall or 806-742-2405.

Academic Integrity. It is the aim of the faculty of TTU to foster a spirit of complete honesty and a high standard of integrity. Any attempt of students to present as their own any work that they have not honestly performed is regarded by faculty and administration as a serious offense and renders the offenders liable to serious consequences, possibly suspension. Please refer to the Texas Tech University Catalog p. 49 for more information on this subject.

¹ The address is <http://webwork.math.ttu.edu/webwork2/m2350f07lchristensen/>. Login with your eraider name and password "Changeme". Remember to change your password the first time you log in.