

MATH 2450: Calculus III
Section 012, MWF 10:00–10:50, and M 2:00–2:50.

Course Information:

Instructor: Chris Monico
Email: c.monico@ttu.edu
Office: MA-252
Office Hours: T/Th 12:10–2:00, F: 2:00–3:00, or by appointment.
Required Text: *Calculus*, Strauss, Bradley and Smith, revised 6th Ed.

Course outline/Important Dates:

The material to be covered and the corresponding time frames are as follows:

Chapter 9 (review 9.1–4, cover 9.5–9.7)	6 hours
Chapter 10.1–10.4	5 hours
Chapter 11	11 hours
Chapter 12.1–12.6	12 hours
Chapter 13	11 hours

Exam 1	Friday 9/20.
Exam 2	Friday 10/18.
Last day to drop a course	Monday 10/28.
Exam 3	Friday 11/15.
Last day of classes	Wednesday 12/4.
Final Exam	Wednesday 12/11, 4:30–7:00.

Calculator policy: All exams will be completed without the use of a calculator.

Attendance: Class attendance is *mandatory*. It is assumed that you will attend, so I will not waste your time by taking attendance. However, keep in mind that it will be decidedly difficult for you to pass this course if you do not attend. If you arrive late to class, enter quietly. If you miss a class, it is your responsibility to find out what you missed (assignments, notes,...); either ask a fellow student or come by my office to find out. If you are absent for an exam, you will be permitted to make it up *if and only if* you are absent for one of the following reasons:

- You are out of town performing duties on behalf of the university (i.e., athletics). Advance notification is required.
- Religious holiday (see below).
- **Severe** illness, documented by a physician.
- Death in the family.
- Other extenuating circumstances, at the instructor’s discretion (I am *not* very generous with this).

Expected Learning Outcomes MATH2450 satisfies the university core curriculum requirement in Mathematics: “*Students graduating from Texas Tech University should be able to demonstrate the ability to apply quantitative and logical skills to solve problems.*” It meets the TTU general education student learning outcomes for mathematics that students will:

- Apply arithmetic, algebra, geometric, statistical and logical reasoning to solve problems.
- Represent and evaluate basic mathematical and/or logical information numerically, graphically, and symbolically.

- Interpret mathematical and/or logical models such as formulas, graphs, tables and schematics, and draw inference from them.
- Develop skills in differentiation and integration needed to solve problems in 3-dimensional space. In particular, students will master the following concepts:
 - tangent and normal vectors, and their geometric and physical interpretations,
 - partial derivatives, tangent planes, directional derivatives, and gradients, and how to compute them,
 - three-dimensional integration and how to compute such integrals,
 - vector fields, divergence and curl, and certain applications to the real world and other sciences.

Assessment of learning outcomes The expected learning outcomes for the course will be assessed through scheduled exams and homework assignments. Homework will be assigned regularly (nearly every class meeting) through the WeBWorK system. There will be no extra credit assignments in this course; your final grade will be determined by the weighted components and grading scale below.

Grade components		Grade Scale	
Homework:	10%	90–100%	A
Exam 1:	20%	80–89%	B
Exam 2:	20%	65–79%	C
Exam 2:	20%	55–64%	D
Final Exam:	30%	0–54%	F

ADA Accommodation: Any student who, because of a disability, may require special arrangements in order to meet the course requirements should contact the instructor as possible to make necessary arrangements. Students must present appropriate verification from Student Disability Services during the instructor’s office hours. Please note that instructors are not allowed to provide classroom accommodation to a student until appropriate verification from Student Disability Services has been provided. For additional information, please contact Student Disability Services office in 335 West Hall or call 806-742-2405.

Religious Holy Day Observance (OP 34.19)

1. “Religious holy day” means a holy day observed by a religion whose places of worship are exempt from property taxation under Texas Tax Code §11.20.
2. A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence. A student who is absent from classes for the observance of a religious holy day shall be allowed to take an examination or complete an assignment scheduled for that day within a reasonable time after the absence.
3. A student who is excused under Section 2 may not be penalized for the absence; however, the instructor may respond appropriately if the student fails to complete the assignment satisfactorily.