

Calculus III (MATH 30524-015) in Spring 2013

Room WIN 147	Time TuTh 9:30–10:50 AM F 10–10:50 AM
Instructor Loren Spice	E-mail l.spice@tcu.edu
Office TUC 315	Office hours TuTh 8:30–9:20 AM Tu 11–11:50 AM (shared) F 9–9:50 AM and by appointment

Textbook Larson and Edwards, *Multivariable calculus* (9th edition)

Course goals

- Use vectors and their algebra to describe motion and other directed, multi-dimensional quantities.
- Understand the relationships among gradients, directional derivatives, and maxima and minima of multi-variable functions.
- Use changes of variable and vector-field calculus to transform and compute multi-dimensional integrals.

We will cover most of the text. Specific highlights include vector geometry; the multi-variable chain rule; multi-variable and constrained optimisation problems; multiple integrals; vector fields; and “div, grad, curl, and all that”.

Attendance Attendance is **required**. You **must** sign the attendance sheet **each class**, or you may be marked absent. Attendance can earn up to 1 bonus point on each exam. See the expanded syllabus on the course web-page.

Grading Course components will be weighted as follows:

Homeworks	Quizzes	Midterms	Final
15%	10%	15% each (45% total)	30%

You can see your current weighted percentage on the course web-page at any time. If you think that a grade has been mis-computed, you **must** talk to me within 1 week of its being recorded.

Your course grade will be determined as follows:

Min. %	Min. Grade	Min. %	Min. Grade	Min. %	Min. Grade
90%	A-	94%	A		
80%	B-	84%	B	87%	B+
70%	C-	74%	C	77%	C+
60%	D-	64%	D	67%	D+

If you have earned less than 60% of the course credit, then you may receive an F. Exam and course grades may be curved.

See reverse for course details.

Calculus III (MATH 30524-015) in Spring 2013

Academic Conduct You must comply with the University's academic-conduct policies at http://www.catalog.tcu.edu/current_year/undergraduate/1411.htm. See the expanded syllabus on the course web-page.

Calculators and technology A graphing, but not a symbolic, calculator is **required** for the class (although it may be **forbidden** for selected problems). See the expanded syllabus on the course web-page.

Homeworks Homeworks will be posted on the course web-page after most Tuesday and Friday classes, and are due by the **beginning** of the next class after they are assigned.

Homeworks must be handed in to me **in person**. If you are not able to do so, then you may have a friend hand it in, or, in exceptional circumstances, e-mail me a scanned copy by the due time. If an Official Absence will interfere with a due date, please let me know **in advance** so that we can make an appropriate adjustment. **Late** homeworks will not be accepted.

You may work with classmates on the homeworks, but you must write up your own work **independently**. The lowest homework grade will be dropped.

You should budget about **10 hours** per week for reviewing notes and doing homework. You **cannot** earn better than a C, regardless of exam scores, without satisfactory homework and quiz grades.

Quizzes and exams Quizzes will be held in class every Friday (except for midterm weeks, and the week of Good Friday, when the quiz will be March 28). The lowest quiz grade will be dropped.

Midterms will be held in class on Thursdays: **February 14; March 21; and April 18**.

Re-scheduling of exams will be provided **only** in case of an Official Absence; or at my discretion, for extreme, documented reasons. In either case, you must tell me **one week** in advance, or as soon as is reasonably possible.

The final exam will be **Tuesday, May 7, 8–10:30 AM**, in a location to be announced. The time is set by the registrar, and **not** subject to change. **Travel plans** are not a sufficient reason to miss a final.

Disability policy This course complies with the University disability statement at <http://www.ugradcouncil.tcu.edu/forms/DisabilitiesStatement.doc>. See the expanded syllabus on the course web-page.