

# Applied Calculus (MATH 10283-030) in Fall 2012

<b>Room</b>	<b>Time</b>
TUC 245	MWF 11–11:50 AM
<b>Instructor</b>	<b>E-mail</b>
Loren Spice	l.spice@tcu.edu
<b>Office</b>	<b>Office hours</b>
TUC 315	MTuW 12 n–12:50 PM F 10–10:50 AM and by appointment

**TCU Online**  
tcuglobal.edu

## Textbooks

- Lial, Hungerford, and Holcomb, *Mathematics with applications* (3rd custom edition, or 11th edition).
- Rittby, *Preparation for Applied Calculus and Applied Calculus extras* (2nd custom edition).

**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.

<b>Homeworks</b>	<b>Midterms</b>	<b>Finals</b>
10% daily + 15% weekly	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.

## Course goals

- Use the language of mathematics to describe real-world phenomena.
- Master the concepts of *derivatives* (rate of change, or slope) and *integrals* (total change, or area).
- Build a calculus toolbox for use in solving both calculation problems and word problems.

We will try to cover most of Chapters 11–12, and some of Chapter 13, from *Mathematics with applications*. Specific topics include the limit definition of the derivative; derivative rules; applications of the derivative; anti-differentiation; and applications of the integral.

*See reverse for course details.*

# Applied Calculus (MATH 10283-030) in Fall 2012

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

**Calculators** 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. 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 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.

Daily homeworks consist of calculational / algorithmic problems. You may work with classmates, but you must write up your own work **independently**. Daily homeworks are due by the **end** of office hours or the **beginning** of class, whichever is later, on the class after they are assigned. The lowest daily-homework grade will be dropped.

You will work on weekly homeworks with a small group of 3 to 5 people. You will choose your first group, and the instructor will assign new groups after each exam. Each group must hand in **one** weekly homework. See "Group Homework Roles" on the course web-page for the group-homework format and other details.

Weekly homeworks consist of longer, more challenging problems. They will mostly be word problems. They are due by the **end of office hours** (currently 1 PM) on Monday. If class does not meet on Monday, then the weekly homework will be due by the end of office hours on Wednesday.

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 grades.

**Midterms** These will be held in class on Fridays: **September 21; October 19; and November 16.**

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.

**Final** The final exam will be **Friday, December 14, 11:30 AM–2 PM**, in a location to be announced. This is the **last day** of finals; but 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.