

# Syllabus for MATH 160 - Introduction to Applied Calculus

## Professor Keough, Fall, 2009

*Abbreviated Version*

### Course Description

MATH 160 is an introductory study of differential and integral calculus with an emphasis on techniques and applications. The course is designed for students in the biological, management, social and behavioral sciences.

The main topics to be studied during the semester are: a review of basic functions, including the exponential and logarithmic functions; the derivative and its use as a rate of change; the algebra of derivatives; applications of derivatives; and definite integrals and their applications.

### Prerequisites

High school Algebra I and II and Plane Geometry. It is assumed that the skills you learned in these classes are current.

### Textbook

*Applied Calculus for the Managerial, Life, and Social Sciences, A Brief Approach, Eighth Edition*, by Soo T. Tan, Brooks/Cole (Cengage Learning) Publishing (ISBN-13: 978-0-495-38754-1).

The course covers the following content: Chapter 1 (all) ; Chapter 2 (all); Chapter 3 (all, however Section 3.4, 3.6, and 3.7 will be covered only as time permits); Chapter 4 (all); Chapter 5 (all, hopefully); and Chapter 6 (all, hopefully).

### Graphing Calculator

A graphing calculator comparable to the TI-83 or TI-84 is required for the course. You'll use it for exams and assignments, and you should have it with you in class every day.

### When and Where We Meet

Our class meets every Monday and Wednesday between August 31 and December 9, with the *only* exceptions being September 7 (Labor Day) and November 25 (Thanksgiving recess). We meet in **Henson Hall room 109**, with Section 012 gathering from 4:00 to 5:15 PM, and section 151 from 5:30 to 6:45 PM.

Your attendance is expected at these classes. If you miss a class, it is *your* responsibility to get notes from class from a fellow student, and copies of any handouts either from the class website or from me at my office.

### Class Website

We will use **Blackboard/WebCT** as our official means of communication. Log in to [myclasses.salisbury.edu](http://myclasses.salisbury.edu) using your usual username and password. You'll find a calendar of class coverage and assignments, info on your grades, a link to this document, and whatever else we can provide.

### Examinations and Assignments

**Exams.** The following are the dates for exams.

- Exam #1 (in-class): **Monday, September 28**
- Exam #2 (in-class): **Monday, October 26**
- Exam #3 (in-class): **Monday, November 23**
- Final Exam:
  - for Section 012: **Friday, December 18, beginning at 4:30 PM** (2 hour, comprehensive exam)
  - for Section 151: **Thursday, December 17, beginning at 7:00 PM** (2 hour, comprehensive exam)

*The complete syllabus is available on the class website and students are expected to be familiar with it, especially the section on Policies and Procedures.*

Students are expected to take exams on the assigned dates and with the section of the class in which they are registered. *There are no makeup exams.*

**Assignments.** Homework assignments will be made at every class. They will fall into two categories:

- *Suggested Exercises* are problems that you should work out, preferably in writing in a notebook that you'll keep for the semester. Complete solutions for these exercises will be made available on the class website usually right away so you can compare them against what you've done.
- *Required Exercises* are problems for which you are expected to write up your own solutions and pass in (usually) at the next class. Complete solutions for these exercises will be supplied only after the assignment is turned in.

All exercises will be posted on our class website at [myclasses.salisbury.edu](http://myclasses.salisbury.edu) as we go through the semester. Please refer to the assignments page for all details.

All *Required Exercises* in this semester's assignments are to be handed in *at the start of class; late assignments will not be accepted.* For students with official University commitments which interfere with submission times, alternative delivery arrangements can be made, but *only with my prior agreement.*

Assignments should be neatly written, without cross-outs, and on paper with clean edges. Difficult-to-read papers will not receive full credit, even if all the mathematics appears to be correct. Show all of your work – a paper that consists of answers only will never receive full credit, even if the answers are all correct. Write complete sentences when asked to do so (e.g., don't answer a qualitative question by writing "It's 4.")

Selected portions of the *Required Exercises* will be graded and each assignment will count 5 points. At the end of the semester, we'll drop the two lowest assignment grades and average those remaining to generate your homework grade contribution.

## Semester Grading

The three, in-class exams will count **20%** each. The cumulative, 2 hour final exam will count **30%**. Your assignment scores will count **10%**. Your final, letter grade will be determined primarily from this scale, with minor adjustments for whatever else I know about your situation, including the quality of your attendance record.

## Office Hours/Getting Help

Professor G. E. Keough

Henson Science Building Room 130, 410.543.6467 (recommendation: use email!)

**Monday:** 11:00 – 12:45; 3:00 – 3:45

**Wednesday:** 11:00 – 12:45; 3:00 – 3:45

**Friday:** 11:00 – 12:45

*I expect to be available on some Tuesdays this semester (I will announce availability for these as we go through the semester). I can be available for a short time after I finish class on Mondays and Wednesdays at 6:45. I am not on campus on Thursday.*

*The complete syllabus is available on the class website and students are expected to be familiar with it, especially the section on Policies and Procedures.*