"Being busy does not always mean real work. The object of all work is production or accomplishment and to either of these ends there must be
forethought, system, planning, intelligence, and honest purpose, as well as
perspiration. Seeming to do is not doing." Thomas Alva Edison (1847-1931)

Instructor: Hilary Smallwood
Office: Weber 18C
Course Web Page: Information about the course can be found on RamCT.
Homework assignments and other helpful information will be posted on RamCT.
Prerequisite: Algebra proficiency
MATH 126. Students who have not completed MATH 126 by 4 PM Friday, 6/18, must drop.
Corequisite: MATH 124. MATH 124 is an enforced prerequisite for MATH 161.
You must complete MATH 124 to be allowed to take MATH 161
Registration Deadlines: Register for both lecture and lab.
Last day to satisfy prerequisites: Friday, June 18
Last day to add: Monday, June 21
Last day to "free" drop: Monday, June 21
Last day to W-drop: Monday, July 12
Last day to apply for Repeat/Delete for this term: Monday, July 26
Textbook: Weir, Hass, and Giordano. Thomas'Calculus, Eleventh Edition. Pearson/Addison Wesley, 2005. You are expected to study the text as the primary source of information. Class sessions supplement the text.
Calculator: You will need an advanced scientific/graphing calculator. You will be expected to use your calculator to complete Calculator Labs described below. Occasionally quiz questions may require the use of a calculator. It is highly recommended that you bring your calculator to class every day.
Course content: Limits, continuity, differentiation, and integration of elementary functions with applications. This material is found in Chapters $1-6$ of the text.
Course goals: The goals of this course are for you to

- understand the concepts of calculus (explain "why?" and "what's going on?");
- become proficient with the techniques, calculations, and procedures characteristic of calculus;
- be able to use techniques from calculus to model "real-world" situations and solve "applied" problems; and
- be able to write complete, well-organized, logically correct solutions to problems and responses to questions.

Special Needs: If you have special needs, including needing special accommodations for taking exams, please discuss your situation with me as soon as possible.

Midterm exams: There will be two midterm exams given during class. These are tentatively scheduled for Friday, June 25, and Tuesday, July 20. Mid-term exams will be scored on the basis of 125 points. An alternate exam time can be scheduled for students who have an unavoidable, documentable time conflict with any midterm exam. Please contact me as soon as possible with any of these conflicts.
Final Exam: The final exam will be Friday, August 6 during class time. The final will cover the entire course and will be scored on the basis of 250 points. Attendance at the final exam is required. (Don't ask to take the final early or late!)

Homework: There will be two parts to the Homework in this course, Textbook and Conceptual.
Textbook Homework: Homework from the textbook will be assigned and scored weekly from several sections of the text. Homework will usually be due on Thursdays at the beginning of the class. Each assignment will be scored on the basis of 20 points. Ten points will be assigned for completeness (a serious, coherently presented attempt on every problem). Ten points will be assigned for correctness as follows. Five problems will be chosen from the entire assignment to be graded. These five problems will be worth 2 points each. To earn a score of 2, a solution must be conceptually correct and clearly and completely presented. Missing homework or homework not stapled will be scored 0 points. Late homework will not be accepted.

Conceptual Homework: Once each week to two weeks, a short list of conceptual problems will be handed out. These questions will require written responses and will be similar in nature to concept quiz and conceptual exam
questions. The purpose of these assignments is to help you understand and grasp the concepts in this class as well as to give you practice at writing effective responses to these types of questions. Each Conceptual assignment will be worth 20 points and will be graded for correctness as well as clarity and completeness of your legibly written response.

Overall, your combined homeworks will be worth 100 points of your final grade.

Concept Quizzes: There will be several short Concept Quizzes designed to assess your understanding of important concepts and your ability to communicate your understanding clearly. Some of these quizzes will be computational, but many of them will require you to write in full sentences to explain some concept. Exams will include questions like those on the Concept Quizzes. Concept Quizzes will be graded by standards similar to those used to grade conceptual questions on exams. Concept Quizzes will count 70 points toward your final grade.
Missed Concept Quizzes can be made up only in the case of absence because of participation in official university activities, documentable illness, or other extenuating circumstances.

Calculator Labs: There will be three laboratory investigations that require using a graphing calculator to explore concepts from calculus. A lab write-up is required for each investigation. Calculator labs will count 30 points toward final grade.

Grading Standards: The 700 points possible in this course are calculated as follows:

$$
\begin{aligned}
\text { Point Total }= & \text { Homework }(100 \mathrm{pts})+\text { Concept Quizzes }(70 \mathrm{pts})+\text { Calculator Labs }(30 \mathrm{pts}) \\
& +2 \text { Midterm exams }(250 \mathrm{pts})+\text { Final exam }(250 \mathrm{pts})
\end{aligned}
$$

Final grades will be determined from point totals using a grading scale no more restrictive than the following:

| $\%$ | Points | Grade |
| :---: | :---: | :---: |
| $90 \%-100 \%$ | $630-700$ | A |
| $80 \%-89 \%$ | $560-629$ | B |
| $65 \%-79 \%$ | $455-559$ | C |
| $55 \%-64 \%$ | $385-454$ | D |
| less than $55 \%$ | $0-384$ | F |

Plus/minus grades may be assigned in exceptional situations. A grade of incomplete (I) will be assigned only in extenuating circumstances (beyond the student's control and could not reasonably have been anticipated or avoided) and with approval of the Undergraduate Director.

Repeat/Delete: Undergraduate students may repeat a course in which they have received an unsatisfactory grade with only the grade earned when the course is repeated counting toward the GPA. However, this option can be used in no more than three courses totaling no more than 10 credits. If you are not succeeding in a course it is almost always better to $W$-drop than to use the Repeat/Delete option. (One of the few exceptions is when dropping the course would result in a loss of financial aid.)
In cases where extenuating circumstances prevent you from successfully completing a course, an incomplete (I) grade might be a possibility. See the CSU General Catalog (available on line) for the University Repeat/Delete Policy. Do not hesitate to seek advice from me or your Academic Adviser.

Policy on Academic Honesty: The University Policy on Academic Integrity (see CSU General Catalog) is enforced in this course. Misrepresenting someone else's work as your own and possessing unauthorized reference information in any form are examples of cheating. Students judged to have engaged in cheating may be assigned a reduced or failing grade for the assignment or the course and may be referred to the Office of Conflict Resolution \& Student Conduct Services for additional disciplinary action.

# MATH 160 Topic Outline \& Tentative Schedule <br> Summer Semester, 2010 

Week 1 6/14-6/18 Ch 2 Limits and Continuity

Week $2 \quad 6 / 21-6 / 25$

Week 3 6/28-7/2

Week 4 7/5-7/9
Ch 3 \& 4 Differentiation and Applications of Derivatives No class Monday 7/5

Ch 4 Applications of Derivatives

Ch 5 Integration
Second midterm exam Tuesday, 7/20

Week 7 7/26-7/30
Ch 5 Integration

Week 8 8/2-8/6

