MATH 160 sec 003 10:00-10:50A MTWF room ENGRG E103 **Fall 2008**

MATH 160 Course Policies and Procedures

"The first requisite for success is to develop the ability to focus and apply your mental and physical energies to the problem at hand - without growing weary. Because such thinking is often difficult, there seems to be no limit to which some people will go to avoid the effort and labor that is associated with it....." Thomas Alva Edison (1847-1931)

"*There is no royal road to geometry.*" (*or calculus!*) Attributed to Euclid (325 – 265(c) BCE)

Instructor: Lori Ziegelmeier **E-mail**: ziegelme@math.colostate.edu **Phone**: 970-491-3955

Office: Weber 10 **Office Hours**: Tuesday 9AM, Wednesday 2PM, Friday 11AM

Course Coordinator: Prof. Ken Klopfenstein, Weber 116, 491-6573, kenk@math.colostate.edu

Prerequisite: Algebra proficiency
MATH 126. Students who have not completed MATH 126 by 4 PM Friday, 8/29, 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 lecture and lab in the same time slot.
Last day to satisfy prerequisites: Friday, August 29
Last day to add: Sunday, August 31
Last day to "free" drop: Wednesday, September 10
Last day to W-drop: Monday, October 20

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/graphics calculator that can produce traceable graphs, draw lines tangent to a graph, zoom in on a graph, and accept simple programs. While no specific make or model of calculator is required, the calculator labs and class demonstrations will be based on the Texas Instrument TI-84®. You will be expected to use your calculator in class and to complete calculator labs described below. Some questions on quizzes and exams will require a calculator. **Please 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 as soon as practical with your instructor or the Course Coordinator.

Mid-term exams: There will be three common mid-term exams given 5:15 – 7:00 PM on Thursday, September 18, Thursday, October 16, and Thursday, November 13. These exams will be in two parts. Part A will emphasize applications and concepts. You will be expected to use your calculator on Part A. Part B will emphasize basic facts and procedures. You will *not* be allowed to use a calculator on Part B. Mid-term exams will be scored on the basis of 100 points. Each of the two parts will be scored on the basis of 40 – 60 points. **Bring your calculator to exams**.

An alternate exam time will be scheduled for students who have an ***unavoidable, documentable*** time conflict with an evening mid-term exam. Details will be announced well advance of each exam.

Final Exam: The common final exam is Wednesday, Dec. 17, 1:30 – 3:30 PM. The final will cover the entire course and will be scored on the basis of 200 points. The format of the final exam will be announced in advance.

Attendance at the final exam is required. (Don't ask to take the final early or late!) If you have three or more final exams on the same day you may negotiate a time change with the instructors involved. If the parties involved cannot find a mutually agreeable time, the Registrar's Office indicates which exams must be rescheduled. If you have three exams on the same day, talk with instructors involved at least 4 weeks in advance. Unless you happen to be taking two calculus courses, ***you must take the MATH 160 final exam at the scheduled time***.

ALEKS: Many students say, "calculus is easy; it's algebra that's hard." To do calculus successfully, you must have a solid command of algebra. The ALEKS component of MATH 160 is to help you firm up your algebra skills so you can learn calculus more easily. ALEKS is a web-based, artificially intelligent assessment and learning system. ALEKS uses adaptive questioning to quickly and accurately determine exactly what you know and don't

know in pre-calculus. ALEKS then instructs you on the pre-calculus topics you are most ready to learn. ALEKS provides one-on-one instruction, 24/7, from virtually any web-based computer. You should have ALEKS assessment scores of ***at least*** 80% well before the first midterm. The ALEKS score you have earned as of 12 midnight, Sunday, September 14, will count 75 points toward your final grade.

Homework and Quizzes: Homework will be assigned and collected frequently. There will usually be three homework assignments each week. Some homework assignments will be graded, some will be collected but not graded, and some will not be collected.

Graded homework will be scored on the basis of 10 points. Seven (7) points will be assigned for completeness (a serious, coherently presented attempt on every problem). Three (3) points will be assigned for correctness as follows. Three problems will be graded for correctness. These three problems will be graded 0 or 1 point each. To earn a score of 1, a solution must be essentially correct and clearly and completely presented. You will be assigned 7 points for each ungraded homework assignments that is handed in on time and essentially complete. Missing homework will be scored 0 points. ***Homework is due at the beginning of class and will not be accepted late.***

There will be frequent unannounced short, in-class quizzes. There will be two kinds of quizzes: Homework Quizzes and Concept Quizzes. Homework Quizzes will be based on assigned homework and will be scored on the basis of 10 points. Concept Quizzes are designed to assess your understanding of important concepts and your ability to communicate your understanding clearly. Exams will include questions similar to those on the Concept Quizzes. Concept Quizzes will be scored on the basis of 10 points. Quizzes will be evaluated using standards similar to those used to grade questions on exams.

Missed quizzes can be made up only in the case of absence because of participation in official university activities, documentable illness, or other extenuating circumstances.

The top 80% of your scores on homework and quizzes will count for your final grade. Homework and quizzes will count 100 points toward your final grade as described below.

Calculator Labs: There will be several (six to eight) laboratory investigations that require using a scientific/graphic calculator to explore concepts from calculus. A written report is required for each investigation. Lab reports will count 75 points toward final grade.

Grading Standards: The 750 points possible in this course are calculated as follows:

Point Total = Homework & quizzes (100 pts) + ALEKS (75 pts) + Lab reports (75 pts)
+ 3 Mid-term scores (300 pts) + Final exam score (200 pts)

You must earn a passing grade (D or above) on the final examination to get a grade above D in MATH 160. In other words, if your grade on the final exam grade is F, the best grade you can get in MATH 160 is D. If you earn a grade of D or above on the final exam, your final grade will be determined from your Point Total using a grading scale *no more restrictive* than the following:

90% – 100%.....	675 – 750	A	55% – 60%	412 – 449	D
80% – 89%.....	600 – 674	B	less than 55%	0 – 411	F
60% – 79%.....	450 – 599	C			

Plus/minus grades will be assigned only 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 Course Coordinator and 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 and a better choice than Repeat/Delete. See the CSU General Catalog (available on line) for the University Repeat/Delete Policy. Do not hesitate to seek advice from your instructor, the Course Coordinator, or your Academic Adviser.

Academic Appeals: Concerns about the course or any of your instructor's decisions that affect your participation in the course should first be discussed with the instructor. Issues that cannot be resolved with the instructor should be discussed with Prof. Klopfenstein, MATH 160 Course Coordinator (office: Weber 116, phone 491-6573, e-mail: kenk@math.colostate.edu). Concerns regarding the course may also be discussed with Prof. James Thomas, Interim Undergraduate Director. To see Prof. Thomas, make an appointment in the Math Department Office (Weber 101).

The University Policy on appeals of academic decisions, including grade appeals, is published under "Student Rights and Responsibilities" in the current CSU General Catalog.

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 (plagiarism) and possessing unauthorized reference information in any form that could be helpful while taking an exam are examples of cheating. Submitting work from a Solutions Manual or an on-line homework web site as your own are examples of plagiarism. 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 & Schedule
Fall Semester, 2008

Week 1	8/25 – 8/29	Ch 2 Limits and Continuity	Friday, 8/29. Last day to satisfy prerequisites Sunday, 8/31. Last day to add
Week 2	9/02 – 9/05	Ch 2 Limits and Continuity	Monday, 9/01. University Holiday
Week 3	9/08 – 9/12	Ch 2 Limits and Continuity	Wednesday, 9/10: Last day to "free" drop Sunday, 9/12: ALEKS deadline
Week 4	9/15 – 9/19	Chs 2 & 3 Tangents & Derivatives	Thursday, 9/18, 5:15 - 7:00 PM. First common midterm exam. Location tba. Class will not meet Friday, 9/19.
Week 5	9/22 – 9/26	Ch 3 Differentiation	
Week 6	9/29 – 10/03	Ch 3 Differentiation	
Week 7	10/06–10/10	Ch 3 & 4 Applications of Derivatives	
Week 8	10/13 – 10/17	Ch 4 Applications of Derivatives	Thursday 10/16, 5:15 - 7:00 PM. Second common midterm exam. Location tba. Class will not meet Friday, 10/17.
Week 9	10/20 – 10/24	Ch 4 Applications of Derivatives	Monday, 10/20. Last day to W-drop
Week 10	10/27 – 10/31	Ch 4 & 5 Antidifferentiation & Integration	
Week 11	11/03– 11/07	Ch 5 Integration	
Week 12	11/10 – 11/14	Ch 5 Integration	Thurs. 11/13, 5:15 - 7:00 PM Third common midterm exam. Location tba. Class will not meet Friday, 11/14.
Week 13	11/17 – 11/21	Ch 6 Applications of Integration	
	11/22 – 11/30		Thanksgiving Break
Week 14	12/01 – 12/05	Ch 6 Applications of Integration	
Week 15	12/08 – 12/12	Ch 6 Applications of Integration	
Week 16	12/15 – 12/19	Final Exam Week	Wednesday, 12/17, 1:30 – 3:30 PM Common final exam. Location to be announced.

Classroom Expectations and Common Courtesies

1. ALWAYS have pencil and scratch paper ready in class -- even if you don't take notes.
2. ALWAYS bring your calculator to class – and have it available (but don't play games on it during class!).
3. Don't read the paper or do SODOKU puzzles in class.
4. Turn off cell phones, pagers, etc.
5. Don't listen to your i-pod during class.
6. Avoid social conversations with classmates during class.
   Brief consultations about what's being discussed in class are OK.
7. Participate actively/attentively/constructively in class discussion. Listen. Be willing and ready to contribute (constructively). Be ready to respond to questions – even if your response is "I don't know; let me think about that a minute."