MATH 160 Sec 05 MTWF 1:00-1:50pm ENGRG E-103 **Spring 2012**

MATH 160 Course Policies and Procedures

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

"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)

Instructor: Cory Previte **E-mail**: previte@math.colostate.edu

Office Hours and location: Weber 17 as announced and posted

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

MATH 160 Web Site: http://www.math.colostate.edu/~calc/MATH160/index.html

Prerequisite: Algebra proficiency. (Many students say the algebra in this course is harder than the calculus!)
MATH 124 Logarithmic and Exponential Functions and MATH 126 Analytic Trigonometry
Students who have not completed MATH 124 and MATH 126 by 4 PM Friday, 1/20, must drop.

Registration Deadlines: Register for lecture and lab in the same time slot.
Last day to satisfy prerequisites: Friday, January 20, 2012
Last day to add: Sunday, January 22, 2012
Last day to "free" drop: Wednesday February 1, 2012
Last day to W-drop: Monday, March 19. 2012

Textbook: Weir and Hass. *Thomas' Calculus, Twelfth Edition.* Pearson/Addison Wesley, 2010
or *Thomas' Calculus, Custom Edition for CSU*, Pearson Learning Solutions, 2010.
The textbook is the primary source of information. Class sessions supplement the text. Study 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 textbook.

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 original, complete, well-organized, logically correct solutions to problems and responses to questions.

Work Load: MATH 160 is a ***very*** demanding course. Expect to study ***at least*** 2 to 3 hours outside of class for each hour in class (4 hours/week in class and 8 – 12 hours/week outside of class). Work smart. Study the textbook. Do all the homework. Use the Study Guides. Learn from your mistakes by reviewing your graded homework, quizzes, and exams. Ask questions. Join a study group. Go to office hours. Dedicated, sustained work is the key to success in MATH 160.

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 5:00 – 6:45 PM on Thursday, Feb 9, Thursday, March 8, and Thursday, April 12. These exams will be in two parts. Part A will emphasize applications and concepts. You will be expected to have your calculator for Part A. Part B will emphasize basic facts and procedures. You will *not* be allowed to use a calculator on Part B. **Bring your calculator to every exam.** (A straightedge may also be useful.)

The two parts of the midterm exams will each count 35% – 65% of the total exam score. The three midterm exams count 300 points (42.9%) toward your final grade.

Thursday evening midterm exams are a scheduled class meeting time; you are expected to take the exams at the scheduled times. 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 will be Tuesday, May 8, 2:00 – 4:00 PM. The final will cover the entire course and will count 200 points (28.6%) toward your final grade. The final will be a one-part exam and you will be expected to have your calculator available. However, most questions are to be answered without relying on a calculator. To earn credit for solving one of these problems you must show clearly how you solved it without relying on your calculator. Even when a problem is to be solved without a calculator, you may and should use your calculator to gain insight into the question and to check your work.

Attendance at the final exam is required. Don't expect 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. (However, since MATH 160 has a common final exam the time for it will not be changed.) If you have three exams on the same day, talk with instructors involved ***at least 4 weeks in advance***. Unless you are taking two calculus courses, ***you must take the MATH 160 final exam at the scheduled time.***

On-Line Homework Homework from the on-line homework management system WebWork will be assigned every week and will be typically due on Tuesdays and Fridays. WebWork exercises emphasize the computational aspects of calculus and require short answers. WebWork allows you several attempts at each problem. Final answers are usually scored right or wrong with no partial credit. WebWork homework will count 65 points (9.3%) toward your final grade. Go to http://www.math.colostate.edu/~calc/MATH160/index.html to access WebWork. **Your username is your eid, and your password is initially set as your student number.** We strongly recommend that you change your password as soon as possible to something less obvious. The deadline for completing each WebWork assignment is 11 PM on the announced due date. Work submitted after 11 PM may or may not be graded.

Conceptual Homework There will be twelve homework assignments that require understanding concepts, thoughtful analysis, and complete, written solutions/responses. These assignments will usually be due the Friday after they are assigned. These assignments will be accepted late ***only in the case of absence because of participation in official university activities, documentable illness, or other extenuating circumstances. Students who are going to miss class to participate in official university activities must make arrangements with their instructor in advance to hand in assigned homework at another time.*** Your instructor or his/her grading assistant will evaluate written homework. Homework must be stapled; otherwise, it will not be graded. Written homework and occasional in-class quizzes and exercises will count 70 points (10%) toward your final grade.

Calculator Labs: There will be six 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 65 points (9.3%) toward your final grade.

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

Point Total = WebWork homework (65 pts) + Conceptual homework (70 pts) + Lab reports (65 pts) + 3 Mid-term exams (300 pts) + Final exam (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 is F and you have a total of 385 or more points, your final grade will be 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%	630 – 700	A	55% – 59%	385 – 419	D
80% – 89%	560 – 629	B	less than 55%	0 – 384	F
60% – 79%	420 – 559	C			

Plus/minus grades will be assigned only in exceptional cases. 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 instructor, the Course Coordinator and the Undergraduate Director.

Tutoring: Free drop-in tutoring for several mathematics and science courses, including MATH 160, is offered through the Arts & Sciences Tutoring Program. This program is located in the Great Hall on the second floor of the TILT Building. For more information visit: http://tilt.colostate.edu/learning/tutorialPrograms/artSciences.cfm.

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. The last day to change your registration to repeat/delete is March 19. 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 success 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 about the course may also be discussed with Prof. Alexander Hulpke, Undergraduate Director. To see Prof. Hulpke, make an appointment in the Math Dept. 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 Integrity: We believe that integrity is an essential part of any true educational experience; integrity on the part of your instructor and integrity on your part as a student. Accordingly, students will be invited to sign an honor pledge on examinations and other assignments.

The University Policies on Academic Integrity (see CSU General Catalog and the Student Conduct Code) apply 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 these or other violations of academic integrity 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. More information can be found at http://tilt.colostate.edu/integrity.

MATH 160 Topic Outline & Schedule
Spring Semester, 2012

Week 1	1/17 – 1/20	Ch 2 Limits and Continuity	Friday, 1/20. Last day to satisfy prerequisites Sunday, 1/22, Last day to add
Week 2	1/23 – 1/27	Ch 2 Limits and Continuity	
Week 3	1/30 – 2/03	Ch 2 Limits and Continuity	Wednesday, 2/01, last day to free drop.
Week 4	2/06 – 2/10	Chs 2 & 3 Limits & Differentiation	Thursday, 2/09, 5:00 – 6:45 PM. First common midterm exam. Location tba.
Week 5	2/13 – 2/17	Ch 3 Differentiation	
Week 6	2/20 – 2/24	Ch 3 Differentiation	
Week 7	2/27 – 3/02	Ch 3 & 4 Applications of Derivatives	
Week 8	3/05 – 3/09	Ch 4 Applications of Derivatives	Thursday, 3/08, 5:00 – 6:45 PM Second common midterm exam. Location tba.
	3/10 – 3/18	Spring Break	
Week 9	3/19 – 3/23	Ch 4 Applications of Derivatives	Monday, 3/19. Last day to W-drop Last day to request Repeat/Delete
Week 10	3/26 – 3/30	Ch 4 & 5 Applications & Integration	
Week 11	4/02 – 4/06	Ch 5 Integration	
Week 12	4/09 – 4/13	Ch 5 Integration	Thursday, 4/12, 5:00 – 6:45 Third common midterm exam. Location tba.
Week 13	4/16 – 4/20	Ch 6 Applications of Dfnt Integrals	Last week to request an alternate final exam time (if you have three finals on same day).
Week 14	4/23 – 4/27	Ch 6 Applications of Definite Integrals	
Week 15	4/30 – 4/04	Ch 6 Applications of Definite Integrals	
Week 16	5/07 – 5/11	Final Exam Week	Tuesday, 5/08, 2:00 – 4:00 PM Common final exam. Location to be announced.

Classroom Expectations and Common Courtesies

1. Come to every class. Arrive at class on time. Stay through the end of the class hour.
2. Be involved and engaged in class. Listen actively. Be ready and willing to contribute (constructively) to class discussion and activities. Ask questions. Be ready to respond to questions – even if your response is "I don't know; let me think about that a minute."
   Don't read a newspaper, do homework, solve SODOKU puzzles, play games on your phone or calculator, check e-mail, visit Facebook or Twitter, surf the web, or listen to your i-pod in class.
3. ALWAYS have pencil and paper ready in class – even if you don't take notes.
4. ALWAYS bring your calculator to class – and have it available.
5. **Turn off your cell phone. Don't send or receive text messages in class.**
6. Get to know your classmates in social conversations before and after class. Avoid social conversations during class. Brief conversations about what's being discussed in class are OK.