MATH 1110: Calculus I
Syllabus, Fall 2012

Synopsis
MATH 1110 is a first-semester calculus course, giving an introduction to the concepts of derivatives and integrals of functions and the interplay between these concepts.

Credit and Prerequisites
MATH 1110 is a four-credit course. Students may not receive credit for both MATH 1110 and MATH 1106. In preparation for this course, students should have completed high school algebra and trigonometry, or a course entitled “precalculus mathematics.” MATH 1110 is designed for students with no prior experience with calculus. If you studied calculus in high school and received a score of 3 or better on the AB Advanced Placement test, you have credit for this course and should discuss your decision to take this course with your faculty advisor (see page 7 of the Course of Study, or http://www.math.cornell.edu/Courses/FSM/ap.html). In this case, you should strongly consider taking MATH 1120 or MATH 1220 instead.

Course Structure
MATH 1110 is taught in sections of about 30-40 students. Each section meets with its instructor either two times a week (TR) or three times a week (MWF). The course has a “czar,” who coordinates the course and sets the syllabus (Dr. Mary Ann Huntley) and a “czar’s assistant,” who assists with these tasks (Mr. Shisen Luo). MATH 1110 has a common syllabus, common homework assignments, and common exams. Your section instructor is your teacher for this course, and is the person who will be assigning your grade.

Course Materials
• **Graphing Calculator.** You may use a graphing calculator to help with homework assignments, but calculators will not be permitted on exams.
• **Computer/Web Access.** Outside of class you will need access to a computer with a current web browser and Internet connection. Moodle will be used for course administration: http://moodle.math.cornell.edu/moodle/course/view.php?id=52
           Here you will find the course information, week-by-week homework assignments, and more. You will use Moodle to answer Reading Questions prior to class meetings.

Grading Policy
Your grade in the course will be determined by your performance on three preliminary exams (60%, equally weighted), the final exam (25%), and your section grade (15%). These three components will be assigned letter grades and their weighted average will be your final grade.
Homework
Most of what you learn in this course will be the result of working problems and exercises that are designed to reinforce key concepts, develop skills, and test understanding of the material.

- **Problem Sets.** Written homework that cover that week’s class material is due at the end of nearly every week (Thursdays, if your class meets TR, Fridays, if your class meets MWF). Some of the problems are straightforward, others are more complex or theoretical. You may work together on your problem sets, and you are encouraged to do so. You might want to form a study group to work together on the most difficult problems. However, you must write up your solutions to the problem sets by yourself, and you must write on your paper the names of the students with whom you worked. Solutions should be written neatly and legibly in complete, mathematically and grammatically correct English sentences, and should include computational details. Papers must be stapled together! (A stapler is available in the Mathematics Library on the 4th floor of Malott.) The problem sets will be graded and returned to you in class the following week. Solutions will be posted on Moodle after the homework is due.

- **Pre-Class Reading Questions.** You are required to read the textbook section before it is discussed in class. This will help you better participate in and understand the material presented in class, and will help give you an idea of the important concepts before you see them in class. Reading Questions are on Moodle and will be due at midnight the night before nearly every day that class meets. You will only get one attempt to complete the questions, although you can open the questions and submit your answers at a later time. The reading questions will be graded based on completion. At the end of each week the answers to that week’s reading questions will be posted on Moodle.

Exams

- Prelim 1: Tuesday, September 25, 2012 @ 7:30-9:00 PM
- Prelim 2: Thursday, October 25, 2012 @ 7:30-9:00 PM
- Prelim 3: Tuesday, November 27, 2012 @ 7:30-9:00 PM
- Final Exam: Thursday, December 6, 2012 @ 2:00-4:30 PM

If you require special accommodations for exams due to a documented disability or your observance of a religious holiday, please let your instructor and the czar’s assistant (Mr. Shisen Luo, sl943@cornell.edu) know at the beginning of the semester so that alternate arrangements can be made. If you have a documented disability, you must provide documentation from Student Disability Services.

If an exam conflicts with any of your other scheduled academic or university-related activities, please inform your instructor and the czar’s assistant (Mr. Shisen Luo, sl943@cornell.edu) at least TWO WEEKS in advance so that this conflict can be worked out. The e-mail must provide the following information: (a) name and course number/activity with which there is a conflict, and (b) name and contact information for the other instructor.

There are no make-up exams after the regularly scheduled evening Prelims. If you are not able to sit for an exam due to a serious illness or family or personal emergency, you should speak with your instructor, who will then consult with the course czar about the situation. If you are excused from a Prelim, your performance on that part of the course material will be assessed based on your performance on the corresponding portion of the Final Exam.
Support
If you have difficulties, do not waste time—get help! The following out-of-class resources are available to you.

- **Office Hours.** The instructors in the course welcome students to their office hours several times per week. These hours can be used to go over specific questions or exercises, or for more general problems involving the course. The instructors want to get to know their students better and office hours provide a useful vehicle for this.

- **HW Study Sessions.** Weekly cooperative Study Group Sessions are held every Wednesday 6-10:30 PM in Malott 406 and Thursday 6-10:30 PM in Balch Hall 3330 (Carol Tatkon Center). Your friendly Course Assistants will be there to help you. HOWEVER, do NOT expect to get any answers from them! It is YOUR responsibility to go prepared, meaning that you must attempt the homework in advance. Discover fun and effective ways of learning mathematics while making new friends!

- **MATH 1011.** MATH 1011 is a course that parallels MATH 1110. It meets weekly on Wednesdays at 4:30-6:00 PM and 9:00-10:30 PM, and Fridays 2:55-4:25 PM in 251 Malott. The purpose is to review material presented in MATH 1110 classes, provide problem solving techniques and tips, and help prepare for Prelims. The course provides further instruction for students who need reinforcement. It is NOT meant to be a substitute for MATH 1110 lectures. The MATH 1011 instructor is Mr. Mark Jauquet (214 Malott, maj29@cornell.edu). Those students who wish to receive one transcript credit (credit shown on transcript but may or may not count toward degree, check with your college) must enroll in MATH 1011 using Bear Access CourseEnroll. MATH 1011 grades are S/U only. There are no exams or homework assignments in this course. Students must attend a minimum of eight sessions in order to receive an “S” grade. Everyone enrolled in MATH 1110 is welcome to attend MATH 1011 class meetings!

- **Free Tutoring.** The Math Support Center provides free tutoring and independent study capsules. Tutoring is available in 256 Malott weekdays (~10 AM-4:30 PM) and Sundays (7-11 PM, use upper entrance opposite Bailey Hall) throughout the semester. Tutoring is also available on North Campus on Tuesday and Wednesday evenings (7-9 PM) in 122 Court-Kay-Bauer. Stop by the Math Support Center to get additional help with calculus!

Course Expectations
You should plan on spending 12-16 hours per week outside of class on MATH 1110. If you are working more than that and still feel that you are not keeping up, please talk with your instructor as soon as possible. You are expected to attend class regularly. You are responsible for the material discussed in class and in the assigned reading in the text. There may be quizzes and other classroom assignments in class announced by your instructor during class meetings.

Academic Integrity
Honesty with oneself and with others is of utmost importance in life. As always, you are expected to abide by the Cornell Code of Academic Integrity: “A Cornell student's submission of work for academic credit indicates that the work is the student’s own. All outside assistance should be acknowledged, and the student's academic position truthfully reported at all times.” If there is clear evidence that a student has committed fraud to advance his/her academic status (e.g., cheating on an exam or quiz, copying homework answers from the solutions manual), your instructor will be obliged to deal with the matter in accordance with the Code of Academic Integrity and Acknowledging the Work of Others.