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Textbook: The textbook for this course will be Calculus, 8th edition, by D.
Varberg, E. Purcell, and Steven E. Rigdon, Prentice-Hall (1999), ISBN
0-13-081137-8.

Course content: There are two main themes in Calculus II. The first is to study
techniques for evaluating integrals. As part of this, we will learn about the
logarithm function and the inverse trigonometric functions. The second is the use of
series to define functions, such as sine, cosine, and the exponential function. While
students may feel that they are familiar with the trigonometric, exponential
functions and their inverses, there is still much to learn. For example, how do we
accurately compute the sine or the logarithm? Some may argue that this is of no
interest, since our calculators can do this without effort. However, I think it is
interesting to be able to answer the question: How does it work? In addition, the
techniques that we use to construct these functions are used to construct new
functions needed to solve other problems in science and engineering.

Grading: There will be three hour exams and a final, each will be worth 100
points. You will be given three longer assignments which will be worth a total of 50
points. A homework grade of 100 points will be based on weekly homework,
possibly including presentation of problems in recitation. I expect that you will
need 90% for an A, 80% for a B, 70% for a C and 60% for a D. Thus, you will need
to earn at least 495 points out of the total of 550 points to obtain an A, 440 for a B,
385 for a C and 330 for D.

Cheating: Copying or cheating on exams and is not allowed. The minimum
penalty for cheating is a failing grade in this course. I expect that students will
collaborate on the longer assignments. However, you should not take credit for an
assignment unless you make a substantial contribution to the solution. You are
encouraged to work together on homework, but you should not turn in as your work
a solution which you copied from another student. Students who do not make the
effort to understand the homework will probably have difficulty on exams.

Homework: A list of suggested problems is given on the syllabus. Specific
assignments will be made from each section as we cover the section. These
assignments will be collected and partially graded by the teaching assistants.
Students should clearly present their solutions to the assigned problems.
Students who desire practice on a topic should use the suggested problems as a guide
to select additional problems to work. If you have difficulty with a problem, please
see the lecturer or your teaching assistant to find out how to work the problem.

Exams: There will be three exams on Tuesday evenings from 7:30 to 9:30. The

dates for these exams are on the calendar. Please make sure you have these dates free. The room for these exams will be different from your lecture and recitation room. The room will be announced in class. The final will be given in the lecture room.

Longer assignments: We hope to complete three longer assignments. You will work in groups on these projects and your group will turn in one written report. Groups must have 1 to 3 members. All members of a group will receive the same grade. We will devote most of one recitation to each project. You will need to arrange for additional time out of class to complete each project.

MA194: Calculus II is a four credit course, but meets for more than four hours per week. In order to receive credit for the extra class time, you are strongly encouraged to enroll in MA194. You should enroll in the same section number for both MA194 and MA114.

MA194 will be graded on a pass/fail basis. If you have zero, one or two unexcused absences you will pass MA194 if you have three or more unexcused absences, you will fail MA194. **Please tell your TA about any excused absences as soon as possible**. Excused absences due to university activities should be mentioned in advance. Absences due to illness or emergency should be reported as soon as you return to school.

Attendance: Go to class. If you don't want to go to class, drop the course now. Attendance will be taken in recitation in order to determine your MA194 grade.

Missed assignments: No late work will be accepted for any reason. If you miss an assignment for illness or other emergency, tell the lecturer, Brown, as soon as you return to school. If you miss recitation for a scheduled activity, tell your TA as soon as you know you will miss class so that you can be given an excused absence. Missed assignments will be given a grade of 0 and we will compensate for excused absences when we assign final grades.

Please try to take all exams at the regularly scheduled times. If you must miss an exam talk to Brown to arrange a makeup.

Calculators: You are encouraged to have a graphing calculator to use in class, on homework and during exams. Your instructors will be using TI-82's. On exams, you may not use a machine which performs symbolic manipulation. In particular, no TI-89's, TI-92's, no laptop computers and no machines with a keyboard.

Web site and library: There will be a primitive web-site for this course at http://www.ms.uky.edu/∼rbrown/ma114. This site will contain handouts and assignments. There will also be a notebook on reserve in the Math Library in the basement of the Patterson Office Tower. This notebook will contain solutions to exams, longer assignments and some of the homework.

Problems: If you have any questions about this course, contact your TA or instructor. If they cannot resolve a problem, you may see the course coordinator for MA114, the departmental ombudsperson or the university ombudperson.