MA 126 **Calculus II** Spring 2008

**Instructor:** Yorck Sommerhäuser

**Office:** ILB 421

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**Office hours:**
Tuesday, 12:45-2:15, Wednesday 11:15-2:15, Thursday, 12:45-2:15

**Prerequisites:** Calculus I (MA 125) or an equivalent course

**Textbook:** J. Stewart, Calculus: Early transcendentals, 5th ed., Brooks/Cole, Belmont, 2003

**Course description:** The course is a continuation of Calculus I. We define definite integrals and explain the fundamental theorem of calculus. We then cover the basic integration techniques like the substitution rule and integration by parts. These techniques are then applied to length, area, and volume computations. Finally, we treat various aspects of series.

**Objectives:** The goal of the course is to introduce the student to integral calculus, both theoretically and practically. Practically, the student will acquire the skill to compute the fundamental integrals. Theoretically, the student will learn the basic notions and theorems, like the concept of Riemann sums, the fundamental theorem of calculus, or the substitution rule. In this way, the student's ability to think logically is enhanced, and he develops an understanding how a theory is systematically developed.

**Coverage:** We cover the majority of the material from Chapter 5-11 in the textbook, with the exception of Chapter 9, which is not treated. Furthermore, Appendix E is covered.

**Attendance:** Attendance is required and contributes to the final grade. Four classes may be missed without affecting this grade. Absence in more than half of the classes results in failing the whole course.

**Exams:** There will be two midterm exams and a comprehensive final exam. No make-up exams will be offered. Calculators and other electronic devices may not be used during the exam. The midterm exams take place on Thursday, February 14 as well as Thursday, March 20. The final exam takes place on Thursday, May 1, from 10:30 to 12:30.

**Homework:** The daily homework assignment will consist of a reading assignment and a problem assignment. The homework problems and the textbook

examples that appear in the reading assignment form the basis for the quiz problems and the test problems.

**Quizzes:** Every week, there will be a short quiz. No make-up quizzes will be offered. However, the two lowest quiz grades will be dropped.

**Grading weights:**
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|---|---|
| Attendance: | 5 % |
| Quizzes: | 15 % |
| Midterm exams: | 25 % each |
| Final exam: | 30 % |

**Grading scale:**
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|---|---|
| A: | 85 % |
| B: | 75 % |
| C: | 65 % |
| D: | 55 % |

**Policies:** Eating, drinking, and smoking is not permitted in the classroom. The use of electronic devices such as laptops, i-pods, cellphones, or calculators is not allowed unless explicitly stated by the professor.

**Tutoring:** The tutoring laboratory in ILB 456 provides additional help for this course.

**Disabled students:** If you have a specific disability that qualifies you for academic accommodations, please notify me and provide certification from the Office for Special Student Services, which is located in Room 270 of the Student Center (Tel. 460-7212).