## HONORS CALCULUS II

Instructor: W MioEmail: mio@math.fsu.eduOffice: 111 LOVPhone: 644-5596Web: http://www.math.fsu.edu/~mio/Office Hours: M 1:30-2:30 pm, W 10:30-11:30 am, or by appointment.

Eligibility. Admission to the honors program and any of the following:

- (1) credit for MAC 2311 (Calculus I) with a grade of C- or better, or appropriate transfer credits;
- (2) AMP scores of A4 and T3, with a calculus score of 19 or higher;
- (3) AP (AB) score of 3 or higher. However, students with an AP score of 3 are strongly encouraged to retake Calculus I.

Text. Calculus (Early Transcendentals) by J. Stewart, Thomson - Brooks/Cole, 6th edition.

**Course Content.** Chapters 7-11. The material is naturally divided into three segments: (1) techniques of integration using both analytical and numerical methods; (2) an introductory study of sequences and series, concepts that may be new to many students; (3) an introduction to differential equations, including applications such as the logistic model of population growth. On the first day, we will revisit some Calculus I material. If the concepts and techniques discussed are not really fresh in your mind, I urge you to review the material immediately. This is definitely NOT to discourage you; quite the opposite, it is to ensure that you will have a productive semester. You are expected to know: (a) the definition and various interpretations of the derivative of a function; (b) all basic techniques of differentiation, including the chain rule; (c) the definition and basic interpretations of integrals; (d) the fundamental theorem of calculus.

**Course Objectives.** This course is the second part of the calculus sequence. In Calculus I, you were introduced to the three fundamental notions upon which calculus is built: limits, derivatives and integrals. Our main objectives this semester are: (1) to deepen the comprehension of these notions through conceptual discussions and applications of calculus to practical problems; (2) to learn methods of integration and techniques to analyze the convergence of sequences and series.

**Grading.** There will be three tests, several short quizzes and a final exam. Your work will be weighted as follows: tests - 20% each; cumulative quizzes - 20%; final exam - 20%. Letter grades will be based on numerical grades in the usual way (A: 90-100; B: 80-89; C: 70-79; D: 60-69, with +/- grades assigned at the discretion of the instructor). A grade of I will not be given to avoid a D or an F, or to provide additional study time. Failure to process a course drop will result in a course grade of F.

**Exam Policy.** No makeup exams will be given. An absence from a quiz or a test may be excused according to the university attendance policy below. Absences from tests due to family social events will not be excused. If a test absence is excused, the final exam grade will be used in its place. For an excused quiz absence, the grade of the first subsequent test will be used.

**University Attendance Policy.** Excused absences include documented illness, deaths in the family and other documented crises, call to active military duty or jury duty, religious holy days, and official University activities. These absences will be accommodated in a way that does not arbitrarily penalize students who have a valid excuse. Consideration will also be given to students whose dependent children experience serious illness.

## Exam Dates

Test 1: Tuesday, September 27 Test 2: Thursday, October 27 Test 3: Thursday, December 1 Final exam: Monday, December 12, 7:30-9:30 am

Academic Honor Policy. The Florida State University Academic Honor Policy outlines the University's expectations for the integrity of students academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members throughout the process. Students are responsible for reading the Academic Honor Policy and for living up to their pledge to "...be honest and truthful and ... [to] strive for personal and institutional integrity at Florida State University." (Florida State University Academic Honor Policy, found at http://dof.fsu.edu/honorpolicy.htm)

**American With Disabilities Act.** Students with disabilities needing academic accommodation should:

- (1) register with and provide documentation to the Student Disability Resource Center; and
- (2) bring a letter to the instructor indicating the need for accommodation and what type. This should be done during the first week of class.

This syllabus and other class materials are available in alternative format upon request. For more information about services available to FSU students with disabilities, contact the:

Student Disability Resource Center 874 Traditions Way 108 Student Services Building Florida State University Tallahassee, FL 32306-4167 (850) 644-9566 (voice) (850) 644-8504 (TDD) sdrc@admin.fsu.edu http://www.disabilitycenter.fsu.edu/

**Free Tutoring from FSU.** For tutoring and writing help in any course at Florida State University, visit the Academic Center for Excellence (ACE) Tutoring Services comprehensive list of tutoring options – see http://ace.fsu.edu/tutoring or contact tutor@fsu.edu for more information. High-quality tutoring is available by appointment and on a walk-in basis. These services are offered by tutors trained to encourage the highest level of individual academic success while upholding personal academic integrity.

**Syllabus Change Policy.** "Except for changes that substantially affect implementation of the evaluation (grading) statement, this syllabus is a guide for the course and is subject to change with advance notice."