

**Instructor:** W Mio

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**Office Hours:** TR 2:00-3:00 pm, 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 and enjoyable 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 if the student presents sufficient evidence of extenuating circumstances. 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.

**Honor Code.** The Academic Honor System at The Florida State University is based on the premise that each student has the responsibility 1) to uphold the highest standards of academic integrity in the student's own work, 2) to refuse to tolerate violations of academic integrity in the University community, and 3) to foster a high sense of integrity and social responsibility on the part of the University community. A copy of the University Academic Honor Code can be found in the current Student Handbook and you are bound by it in all your academic work.

**American Disabilities Act.** Students with disabilities needing academic accommodations should register with and provide documentation to the Student Disability Resource Center (SDRC), and bring a letter from the SDRC to the instructor indicating their needs. This should be done within the first week of classes.

**Test 1:** Thursday, February 3.

**Test 2:** Thursday, March 3.

**Test 3:** Thursday, April 14.

**Final exam:** Thursday, April 28, 7:30-9:30 am.