**MATH 150B • Calculus II (21466) • MW 7:00 – 9:05 PM**

**Spring 2013 Syllabus**

**Instructor:** Paul Sjoberg, *Mathematics Department*

**Office:** North Science – 627–04

**Phone:** (714) 992-7410

**Email:** psjoberg@fullcoll.edu

**Web Page:** [http://staffwww.fullcoll.edu/psjoberg](http://staffwww.fullcoll.edu/psjoberg)

**Required Materials:**

ISBN-10: 0538735523

**Calculator:** Graphing calculator. TI-84 strongly recommended. TI-89 or above will not be allowed.

**Paper:** All graded work must be done on 8.5 x 11 in. or letter size paper. Work done on other sizes or spiral notebook paper will not be graded.

**Course Description:** This is a second semester course covering applications of growth and decay, applications of integration, integration techniques, L'Hôpital’s Rule, improper integrals, sequences and series, conics, parametric equations, and polar coordinates. Graphing calculators will be used for selected topics.

**Prerequisite:** MATH 150A Calculus or equivalent, with a grade of "C" or better.

**Student Learning Outcomes:** Upon successful completion of Math 150B, Calculus II, the student will be able to: 1) Determine various geometric measurements including area of a region between curves, volume of a solid, arc length of a curve, or area of a surface of revolution by constructing and calculating a definite integral. 2) Analyze an integral to determine an appropriate method of integration, and apply that method to determine the antiderivative. 3) Analyze an infinite series to determine an appropriate test for convergence, and apply that test to determine whether the series converges or diverges.

**What to Expect:** This course is a continuation of the first semester of Calculus, Math 150A. You will be expected to use material learned in the first semester as if it were covered in this course. The better your skills are in limits, differentiation and integration, the easier you will find comprehending the material in this course. If you are rusty in those areas, it will be your responsibility to review. As with every new math course, homework is an important part of the learning process. The homework is supposed to be challenging and you are expected to struggle. *Do not use the student solutions manual to circumvent this process.* If a student puts considerable amount of effort into this class but does not pass, it is usually due to reliance on the solutions manual. Plan on spending at least 4 hours per week on out-of-class studying. Setting a regular schedule can be very effective.

**Contacting Me:** The best way to contact me outside of office hours is by using email or by calling my office number and leaving a voicemail message. My office hours are **Monday 2:30 – 4:30 PM, Tuesday 9:05 – 10:05 PM, Wednesday 9:05 – 10:05 PM, and Thursday 3:00 – 4:30 PM.**
Homework: I will assign and collect homework daily. Late homework will NOT be accepted. Your homework must be neat and organized, with the original problem, all of the necessary work, and the final answer circled or boxed. Disorganized and/or messy assignments with misleading information or correct answers that “magically” appear from incorrect work will receive no credit. Each section will be graded on a 5 points scale based on completeness. I encourage you to discuss the homework with classmates. However, you will be on your own during exams and quizzes, and the homework is designed to be preparation for these situations.

Quizzes: Quizzes consisting of problems from the homework will be given periodically. There will be NO make-ups. In most cases, quizzes will be given during the first 15 - 20 minutes of class. If you are not in class in time to take the quiz, you will receive a zero on the quiz and you will not be able to make it up. Please try to make it to class on time.

Exams: There will be 4 exams during the semester and one comprehensive final exam. Tests must be taken on the designated date. Make-up tests will not be given. In the event that it will help your grade, you may replace your lowest test score with your score* on the final exam.

Grades: Exams will be graded using the following scale. A: 90 – 100%, B: 80 – 89%, C: 70 – 79%, D: 60 – 69%, F: Less than 60%.

Your grade will be determined using the following scale:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework</td>
<td>10%</td>
</tr>
<tr>
<td>Quizzes</td>
<td>15%</td>
</tr>
<tr>
<td>Tests</td>
<td>55%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>20%</td>
</tr>
</tbody>
</table>

Calculators: A graphing calculator is required. I strongly recommend the TI-84 graphing calculator since this is the calculator I will be using during in-class demonstrations. A calculator may be permitted for use on some quizzes and tests. If you do not have a calculator at the time of the quiz/test, you may NOT share one with a classmate. TI-89 or above (or equivalent model) will not be allowed. You may not use your cell phone calculator on quizzes or tests.

Student Honesty Policy: Cheating at the college level is a very serious offense. If I observe you cheating on any test or quiz, after the first incident you will receive a zero and a warning. If there is a second incident, you will receive another zero and the college administration will be contacted. A zero score on an exam that is the result of cheating will not be replaced by the final exam score.

Attendance: Attendance will be taken each class meeting. If you are absent for three total days during the semester and you do not contact me, you will be dropped from the course.

Fullerton College Policies: The Fullerton College Catalog and the Class Schedule contain a number of policies relating to students that are important to you. Please be sure that you have read these publications thoroughly. You may purchase copies of these publications at the campus bookstore, or you may read them online at the Fullerton College website, www.fullcoll.edu

*If you receive a zero on an exam for cheating, you may not replace that score with your score on the final exam