Math 227 Calculus II
Pacific University Spring 2010

Class Time and Location
MWF 1:00-2:05, Price 214.

Instructor Information
Michael Boardman
Price 209, 352-1496
boardman@pacificu.edu
http://www.math.pacificu.edu/~boardman
Office hours: M 9-10, T 11-12, W 11:45-12:35, Th 9:30-10:45

Textbook

Prerequisite
To be enrolled in this course, you should have passed Math 226 with a C or higher or earned a 4 or 5 on the AP-Calculus AB exam.

Math 227 as a Prerequisite
Math 227 is required for Mathematics, Physics, and Chemistry majors. It is also a prerequisite for Math 228, Multivariable Calculus, and Math 311, Ordinary Differential Equations.

Primary Course Goals
- Understand what a definite integral represents.
- Be able to describe the relationship between differentiation and integration.
- Know the difference between a definite and indefinite integral and when to use either.
- Be able to use integration in appropriate applications.
- Use symbolic anti-differentiation techniques to calculate integrals of functions, when possible.
- Know when and how to use technology to assist in determining both definite and indefinite integrals.
- Understand the basis of and be able to use several different numerical techniques of integration including endpoint and midpoint sums and Simpson’s rule.
- Understand the differences in accuracy and utility of different numerical integration techniques.
- Be able to work with improper integrals.
- Have a working knowledge of sequences and series of real numbers.
- Be able to apply convergence tests to determine if a series converges.
- Be able to explain what a series approximation to a function is and why it is useful.
- Be able to construct Taylor series expansions of functions.
- Be able to recognize Taylor series expansions of some common functions including exponential and trigonometric functions.
- Be able to manipulate known Taylor series to find series for other functions.
- Be able to graph curves in polar coordinates.

Homework
Homework is assigned and collected weekly. Both completeness and accuracy will determine homework grades. Homework is due at the beginning of class on the due date. No late homework is accepted under any circumstances.

Projects
Several projects involving the use of Maple will be assigned. Projects are due at the beginning of class on the due date. No late projects are accepted under any circumstances.

Quizzes
We will have somewhere from 5 to 7 quizzes this term. Quizzes are tentatively scheduled in the course calendar, but may be moved. No make-up quizzes are given.
**Exams**
We will have two exams and a final exam. See the class calendar for tentative dates of the in-class exams. The final exam is **Saturday, May 15 8:30am-11:00am**. You must take the final at this time.

**Grades**
In determining your course grade, coursework is weighted as follows:

- Homework 10%
- Projects 10%
- Quizzes 15%
- Midterms 35%
- Final Exam 30%

The following scale is used to determine final course grades. This scale may change at the end of the term. If so, the cutoffs will not raise.

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<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tr>
<td>A</td>
<td>[92,100]</td>
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<td>A-</td>
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<td>B+</td>
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<td>D</td>
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<td>F</td>
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**Important Dates**
- Feb 12: Add Deadline
- Feb 12: Drop w/o “W” Deadline
- Mar 20-28: Spring Break
- Apr 19: Last day to Drop Courses
- Apr 28: Senior Projects Day
- May 12: Last Day of Classes
- May 15: 8:30-11:00 pm Final Exam
- May 22: Commencement

**Other Policies**

**Attendance**
You are expected to attend all classes. If you cannot make a particular class day, please see a classmate to get notes on material covered. Be aware the make-ups are not available for quizzes or exams. Also, homework is due by the beginning of class on the due date. If you are ill, or away from class for a university event, you may have someone turn in your homework for you.

**Academic Honesty**
Pacific University has no tolerance for academic misconduct. It is university policy that all acts of misconduct be reported to the Dean’s Office. Any act of academic misconduct in this course will result in an “F” for the course. Further sanctions may be imposed by the university, including suspension or dismissal from the university. Forms of academic misconduct include but are not limited to plagiarism, fabrication, cheating, tampering with grades, forging signatures, and using electronic information resources in violation of acceptable use policies. All work in this course is expected to be your own. There may be assignments in which you will be allowed to work with a partner or partners, in which case you will equally participate in the completion of the assignment.

**Learning Support Services for Students with Disabilities**
If you have documented challenges that will impede your learning in any way, please contact EDNA GEHRING the Director of LSS at ext.2107 or gehringe@pacificu.edu The Director will meet with students, review the documentation of their disabilities, and discuss the services that Pacific offers and any ADA accommodations for specific courses.