MATH 1451, CALCULUS 2, SPRING SEMESTER, 2012
Syllabus for Section 102, MWF 12:00–12:50, Cudahy 001.

Instructor: Dr. Paul Bankston, office 311 Cudahy Building.

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Office Hours: MWF 11:00–11:50, or by appointment.

Teaching Assistant: Casey O’Brien.

Text: Calculus, 5th ed., by Hughes-Hallett et al.

Supplementary Material: Students should have, and be able to use, the TI-89 graphing calculator. Because of its computer algebra operating system, the TI-89 is fundamentally different from (and more powerful than) the TI-86 and lower-numbered models. It is essentially the same as the TI-92. Be aware that the use of calculators may be prohibited during all or part of exams and quizzes, depending on the nature of the material being tested.

Prerequisites: MATH 1450.

Exams/Quizzes:
  • There will be three hour exams, weekly 15-minute quizzes based on assigned homework problems, and a two-hour final exam. In addition there will be a small number of online WileyPlus homework assignments. Each hour exam is worth 60 points, the eight best quizzes—each worth 6 points—are collectively worth 48 points, the WileyPlus homework problems add another 12 points, and the final exam is worth 90 points. Your grade will then be based on the percentage of points you have earned out of the 330-point total.
    Each exam will test the material covered since the last exam; but be aware that the material is inherently cumulative, that the concepts introduced later in the course are built upon those introduced earlier. The final exam will be explicitly cumulative, having a portion of it being drawn from the three hour exams.
  • The hour exams will be given during lecture times posted in the course schedule; quizzes will be given during the Thursday quiz session. The final exam is at 8:00 on Friday 05/11/12, in Cudahy 001.
  • There will be no makeup exams or quizzes without arrangements being made beforehand, and only extenuating circumstances will be considered.
Grading:

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
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<tbody>
<tr>
<td>Three hour exams</td>
<td>180</td>
</tr>
<tr>
<td>Eight quizzes</td>
<td>48</td>
</tr>
<tr>
<td>WileyPlus homework</td>
<td>12</td>
</tr>
<tr>
<td>Final exam</td>
<td>90</td>
</tr>
<tr>
<td>Total</td>
<td>330</td>
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Grading scale:

- A: 92–100%
- AB: 87–91%
- B: 78–86%
- BC: 73–77%
- C: 64–72%
- CD: 59–63%
- D: 50–58%
- F: 0–49%

Attendance and Deportment: You are expected to attend all lectures and quiz sections, and to be on time. Excessive absences will be noted, and may result in a lowered grade, or even summary withdrawal. Norms for classroom conduct are based on respect for the instructor and your fellow students. Distractive behavior—such as using cell phones, reading newspapers, sleeping, playing videos/games, or talking to your neighbor—is inappropriate. For further information, consult the online bulletin (http://bulletin.marquette.edu/undergrad/academicregulations/#attendance).

Policy on Academic Honesty: In the spring of 2006 the University approved an academic honesty policy that is applicable to all courses; details may be found at http://bulletin.marquette.edu/undergrad/academicregulations/#academichonestypolicy. Basically you're expected to do your own work, and to not copy answers from anyone else in a quiz or exam situation. Also crib notes, either in written or electronic form, are forbidden during quizzes and exams.

Withdrawal Date: The final date for voluntary withdrawal from class this semester, with a grade of AU or W, is Friday, April 13, 2012.

Course Topics We will cover most of the material from Chapters 6 through 11 of the textbook. This includes: techniques and applications of integration, plus numerical integration methods; elementary theory of ordinary differential equations; sequences and series of real numbers; power series, Taylor polynomials and series representation of functions.

Course Goals:

1. Develop habits of thinking and learning based on reasoning and understanding, rather than on memorizing and mimicking. In this course the focus is on deepening the grasp of basic concepts and techniques of differentiation and integration of functions of one real variable, and on further developing intuitions needed to apply calculus effectively in real-world situations.
2. Learn to interpret, represent, and connect the concepts of calculus in multiple ways:
   - Numerically (e.g., tables)
   - Graphically (e.g., hand sketching, using the TI-89)
   - Analytically (e.g., equations)
   - Verbally (e.g., understand and create clear explanations of ideas)
3. Use problem solving skills to:
   - Learn further concepts of (one variable) calculus
   - Apply the concepts of calculus to real-world problems
4. Further develop facility in the basic symbol manipulation skills of calculus.