Math 3B, 2010 Summer Session B

Instructor: Rob Ackermann  
Lecture: MTWR 2:00 - 3:05  
Office: South Hall 6431D (blue side)  
Tentative Office Hours: T, W 3:15 - 5:15 and by appointment

e-mail: rackermann@math.ucsb.edu  
Website: www.math.ucsb.edu/~rackrmnn/3BSessionB2010.html

TA’s: Arielle Leitner, aleitner@math.ucsb.edu, South Hall 6432G, Office Hours TBA  
      Stepan Paul, spaul@math.ucsb.edu, South Hall 6431C, Office Hours W 11 - 12 am

Homework: We will be using webwork to assign and grade homework for this class. You can access webwork at webwork.math.ucsb.edu and clicking on “Math 3B Summer 2010 - Robert Ackermann Professor.” Your username and password will be your perm number by default.

Homework will be due twice a week at the time listed on webwork (tentatively Tuesday and Friday). Late homework will never be accepted. It is the student’s responsibility to know the due date of any assignment. If there are extenuating circumstances which prevented the completion of a homework assignment, you can e-mail the professor and he will take that into consideration when determining your final grade.

Text: The “official” text is Calculus by James Stewart, 6th edition. However, other calculus textbooks and especially older editions of Stewart’s should be fine (though some section numbers may differ from the 6th edition). You must purchase some textbook, though, as it is crucial to have a detailed reference to learn from in addition to the lectures.

Discussion: Discussion sections are mandatory and meet twice a week. Primarily you will review material from lecture and have a chance to ask questions. It is highly recommended that you look at the homework before attending discussion! 5% of your grade is based on your attendance and participation in discussion sections.

You may switch to a different discussion section if the TA’s agree to it. This is done informally. Do not try to switch on GOLD, as you risk being dropped from the course.

Absences: Missing a discussion section can be excused at the discretion of the TA. A make up midterm may be offered, but you must have a pretty spectacular, documented excuse. If you miss lecture, you are encouraged to come to office hours and ask questions about what you missed.
**Exams:** There will be a midterm and a cumulative final. The midterm will be August 23rd, and the final September 9th (last day of class). A portion of the final may also be given during your last discussion section. If you anticipate a problem you should let me know as soon as possible.

No calculators or notes are allowed during exams. Some formulas may be provided for you on the exam at my discretion. If you are unsure whether a formula will be provided or not, you should assume it will not be.

**Grading:**
- Homework: 25%
- Discussion Sections: 5%
- Midterm: 30%
- Final: 40%

A 90% overall will guarantee at least an A-, and an 80% will guarantee at least a B-, and a 70% a C-. The precise scale may be adjusted based upon class enthusiasm, ridiculously hard exams, earthquakes, tornados, etc.

**Help!** There is lots of free help available for math 3B. You have discussion sections, the professors office hours, and you TA’s office hours to ask questions. There is also help available at *mathlab, open M - R 11:00 - 4:00 and F 12:00 -3:00 in South Hall 1607*. Even if you don’t have questions yet, you can go to mathlab and work on your homework until you do.

**Tentative Schedule:** This schedule will almost certainly change as the session progresses. My intention is to cover all the topics listed below.

<table>
<thead>
<tr>
<th>Week</th>
<th>Topics</th>
<th>Book Sections</th>
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<tbody>
<tr>
<td>1</td>
<td>Review, integrals, antiderivatives, <strong>fundamental theorem of calculus</strong></td>
<td>5.1, 5.2, 4.9</td>
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<tr>
<td>2</td>
<td>u-substitution, definite integrals, area between curves</td>
<td>5.3, 5.4, 5.5, 6.1</td>
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<tr>
<td>3</td>
<td>General volumes, washers, shells, beginning work</td>
<td>6.2, 6.3, 6.4</td>
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<tr>
<td>8/23</td>
<td>Midterm 1</td>
<td>Covers first three weeks</td>
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<tr>
<td>4</td>
<td>More work, average value, integration by parts</td>
<td>6.4, 6.5, 7.1</td>
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<tr>
<td>5</td>
<td>Trig integrals, trig sub, partial fractions</td>
<td>7.1, 7.2, 7.3</td>
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<tr>
<td>6</td>
<td>Arclength, improper integrals, numerical integration</td>
<td>8.1, 7.7, 7.8</td>
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<tr>
<td>9/9 and last discussion</td>
<td>Final Exam</td>
<td>Covers everything</td>
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