Math 20b Fall 2007 Syllabus

MWF 12-12:50pm, Ledden Auditorium
Professor D. Rogalski

1. Contact Information

Prof. Rogalski’s Office: 5131 AP&M
E-mail: drogalsk@math.ucsd.edu
Class website: www.math.ucsd.edu/~drogalsk/20b.html.
Office hours: M 11am-12pm, W 4pm-5pm
TA’s: Please see the course website for complete information about the TA’s for each section and their office hours.

2. Basic class description

This course is the second of the three-quarter sequence Math 20abc, which covers the basics of single and multivariable calculus at a level suitable for those intending to major in science, engineering, or mathematics. Math 20b will cover the theory of integration, complex numbers, polar coordinates, infinite sequences and infinite series.

- Prerequisite: Math 20A at UCSD, or a score of 4 or better on the AB Calculus AP test. If you have questions about whether you are in the right course, please ask me or the mathematics undergraduate office on the seventh floor of AP&M. Note that all add/drops/wait lists are processed online. If you are not yet officially registered for this course, it is currently full, and it is unlikely that a spot will open up for you.

- Schedule of Lectures: Please see the course calendar on the course website for the planned schedule of lectures including what sections of the text will be covered when, and when you should do the homework problems. The schedule is open to change and the calendar will be updated accordingly.

- Textbook: Calculus: Early Transcendentals Single Variable, Edition 5e, by James Stewart. In addition, there is a required course supplement prepared by the UCSD math department, available at
  
  http://www.math.ucsd.edu/resources/instructor

1Version of 9/28/07
• **Reading**: You should read the sections of the book (and the material in the course supplement) as indicated in the course schedule. Many students find it especially useful to read the material before the topics are covered in class.

• **Lecture**: The lecture is a very important part of the course, and attendance is strongly encouraged. Seeing the material several times, and with different viewpoints (the lectures, the book, and discussion section) will help cement your understanding.

• **Discussion Section**: Again, attendance is strongly encouraged. In section, you have the opportunity to see more worked problems and examples and ask questions. It is important to get to know your TAs. They are there to help you!

• **Calculus Tutoring Lab**: This is open daily from M-F in AP&M 2402. Undergrad tutors and/or TA’s will be available to help you with questions about homework or the course material. See http://www.math.ucsd.edu/resources/tutoring for the current schedule. Also at the same link, you can find information about OASIS, a university-wide tutoring program you might take advantage of.

• **Calculators**: *No calculators of any kind will be allowed during quizzes and exams*. If you find calculators useful in doing certain homework problems, that is OK, but remember that you need to be able to do exam/quiz problems without the calculator.

• **Quizzes**: Short in-class quizzes, containing problems direct from the assigned homework, will be used to make sure you have been keeping up with the homework problems. Quizzes will be held roughly every other Friday, as indicated in the course calendar. The quiz grade will be based on the best 3 out of 4 quiz scores. Makeup quizzes will not be given.

• **Homework**: Doing the homework is the single most important part of your work for the course. Please see the course calendar on the website for the dates that homework is due and for the lists of assigned problems. It is your responsibility to keep up with the homework and do it thoroughly and on time. While homework is not scored, the quizzes are designed to encourage you to keep on schedule. Discussion section is a good time to ask about homework problems which may be giving you trouble. *In my experience, students who do few or no homework problems almost always fail the course*.

• **Exams**: There will be two in-class midterm exams (Friday 10/19 and Friday 11/16) and a final exam (Thursday 12/13 11:30am-2:30pm). No calculators or books are allowed, though you can bring one normal sized (8 and a half by 11) page of notes. *Student IDs will be collected on exam days*. No makeup midterms will be given.
The final exam will be cumulative and roughly the length of two midterms; the same rules above apply. It is your responsibility to make sure that you will be able to take the final exam at the regularly scheduled time.

- **Regrades**: Very occasionally there might be a mistake in the grading of a midterm. You must bring this to the attention of your TA when the exam is handed back. Your TA will decide if there was a grading mistake and will award extra points if deserved. No regrades will be considered once the exam is taken home.

- **Grading**: Your final average will be calculated using whichever of the following two schemes gives you the better score:

  — 20% quizzes, 20% midterm 1, 20% midterm 2, 40% final exam.
  — 20% quizzes, 20% best midterm, 60% final exam.

Note that if one of the midterms is missed for whatever reason, the second grading scheme automatically applies. Also, your final exam must receive a passing grade in order for you to pass the course.

Final grades will be assigned based on the final averages, with your final grade at least as good as the grade given by the following standard scale:

<table>
<thead>
<tr>
<th>97</th>
<th>93</th>
<th>90</th>
<th>87</th>
<th>83</th>
<th>80</th>
<th>77</th>
<th>73</th>
<th>70</th>
<th>60</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>A-</td>
<td>B+</td>
<td>B</td>
<td>B-</td>
<td>C+</td>
<td>C</td>
<td>C-</td>
<td>D</td>
<td></td>
</tr>
</tbody>
</table>

Note that the final grading scale might be more lenient ("curved") depending on the class average.

### 3. Academic Honesty

The university takes academic honesty very seriously, as do I. Students caught cheating on an exam will receive a zero for that exam, and will be reported to the University. Cheating on an exam includes (but is not limited to) using a calculator, books or notes other than the allowed one page of notes, or consulting such materials when using a restroom, copying off of or talking to nearby students, or having someone else take the exam for you. The administration has recently gotten even stricter in its penalties for cheating and may choose to expel or suspend you. Trust me, it is not worth it.