Math 3B Syllabus
Fall, 2013

Instructor: Zetian Yan
Office: South Hall 6702
Lecture: LSB 1001 TR 2:00-3:15 pm
Office Hours: Monday 2:00-5:00 pm
Text: James Stewart, ÒSingle Variable Calculus - Early TranscendentalsÓ, 7th edition.
Prerequisites: A grade of C- or better in Math 3A, or AP calculus credit for Math 3A.

About the Course
This course is a continuation of Math 3A. We will mainly discuss integral calculus and its applications (Chapters 5-8 in the textbook). After taking this course, you should be able to:

- Communicate integral calculus through writing and talking
- Evaluate definite and indefinite integrals, using a variety of integration techniques
- Describe area or volume using integrals; and understand this area as a limit of a Reimann sums
- Understand and apply the Fundamental Theorem of Calculus
- Apply techniques of integration to problems from other sciences.

Evaluation Your grade in the course will be determined by the break-down below.

- Individual Quizzes (Qz) 20 %
- Homework (Hw) 20 %
- Participation and Attendance (P) 10 %
- Midterm 20%
- Final 30%

The **individual quizzes** are weekly and will be posted on Canvas after Thursday's class. It will contain 2 multiple choices and 2 filling in the blanks. The content is **not** cumulative.
The **assignments** will be posted on **Webwork**.
The **final** has two components. The final part A is like a second midterm. It is required for all students. The final part B is optional- it may be used to replace your midterm grade, or to make up a midterm. The final part B is cumulative. **Calculators** will not be allowed on exams. When I return an exam to you, you must tell me before leaving the room if you think the grade needs to be changed. Once you leave the room with your exam, that grade is finalized.
Homework Help:
You may come to my office, and ask questions before and after class. I recommend that you **exchange contact information** with your peers and get together to study outside of class. The **math lab** is open every day from 11-4 in **South Hall 1607** math.ucsb.edu/ugrad/mathlab.php . There is also an online version of the math lab, with many helpful videos: www.math.ucsb.edu/oml/3B.html. You may also get help at CLAS

if you choose.

ADA: Students with disabilities can get assistance from the Disabled Students Program (805-893-8897) or (dsp.sa.ucsb.edu). I will make every reasonable accommodation for any students in the Disabled Students Program. Please come see me in office hours to discuss any special needs you may have.

A course schedule is on the last page. You are responsible for keeping up with the homework to do well on quizzes and exams. You may also enter your scores to keep track of your grade. I will not post scores on Gaucho space, so this is how you will keep track of your progress. You may compute your grade using

$$\text{My Grade} = .2(\text{Qz avg}) + .2(\text{Hw avg}) + .1(\text{P}) + .2(\text{MT}) + .3(\text{final}).$$

Grades will be determined by the usual breakdown:
100- 93 % A, 92-90% A-, 89-87% B+, 86-83% B, 82-80% B-, 79-77% C+, 76-73% C, 72-70 % C-, 69-67% D+, 66-63% D, 62-60% D-, 59% - F.

How to do well in this course:
Do all of the homework, and understand it! Exams and quizzes will look suspiciously like your homework problems. Come to office hours, and work with other students. Study every day. If you don't understand a concept, come to see me immediately.

Topic	Homework	Qz/GQ/NC	Score
Review	Ch 1-4 finish worksheet		
Area and Dist & Definite Int	5.1 # 1-4,14,15,18		
Definite Int	5.2 # 1-11 odd, 17,18,21,22,24		
Continued	33-36, 39, 42,43,48,59		
Fund Thm of Calc	5.3 # 1,2,4-8, 10-12		
Continued	# 14-18, 19-41 odd, 56,57,61		
Indef $\int$ and Net Change	5.4 # 1-17 odd 27,37,51,53,54,56		
Substitution	5.5 # 1-33 odd, 54,57,59,85,86		
Area btw curves	6.1 # 1,3,5,6,10,12,16,17,19,44,46,53		
Volume	6.2 # 1-17 odd, 39-42		
Shells	6.2 # 47-49,61, 67 and 6.3 # 1-7		
continued	6.3 # 9-19 odd, 29-32,37-43 odd,48		
Work	6.4 # 1-12		
Continued	6.4 # 14-23		
Avg Value of Func	6.5 # 1-9 odd, 16,19		
Midterm			
$\int$ by parts	7.1 # 1-29 odd		
Trig $\int$	7.1# 31-41 odd, 57,63 & 7.2# 1-13 odd		
Midterm 2			
Continued	7.2 # 15-49 odd, 62-64		
Trig Sub	7.3 # 1-29 odd, 34,37		
Rat'l Func by Partial Frac	7.4 # 1-21 odd, 39-47 odd, 60-63		
Strategy for $\int$	7.5 # 1-51 odd, 55,65,66,75,79		
Approximate $\int$	7.5 cont & 7.7 # 1,2, 7-21 odd, 29		
Improper $\int$	7.8 # 1,2,5-21 odd		
Continued	7.8 # 23-39 odd, 50-54, 57-59, 63,67		
Arc Length & Surf of Rev	8.1 # 1-17 odd 37 & 8.2 # 1-13 odd, 29, 30		
Review	finish worksheet		
Final			