# CALCULUS II (MATH 10B) FALL 2010 MWF 4:00 - 4:50 CENTER 115

1. Important Information

Instructor: Stephen J. Young Office: AP&M5210 Office Hours: W 2:30 pm – 3:30 pm, F 1:30 pm – 3:30 pm, or by appointment. E-mail: s7young@math.ucsd.edu (Please include "Math10B" in the subject) Office Phone: (858)-534-3983 Course Webpage www.math.ucsd.edu/~s7young/teaching/math10B/fall10/

**Textbook** Calculus, 5<sup>th</sup> edition

## 2. Grading System

All exam and homework problems will be graded on the following holistic five-point scale:

- 5 Well written and complete work. ( $\sim A+$ )
- 4 Good work with minor errors or small gaps in explanation. ( $\sim A$ )
- **3** Good work with more serious errors or insufficiently clear explanation  $(\sim B)$
- 2 Significant, but incomplete, explanation that will clearly lead to the correct answer. ( $\sim$  C)
- 1 Some ideas that might lead to the correct answer are presented..  $(\sim D)$
- 0 No work, work that will not lead to a correct result, or illegible.  $(\sim F)$

### 3. Grading Breakdown

Final grades in this course will be determined according to most beneficial of the four following rubrics, with the proviso that in order to pass the class you must pass the final exam. At the judgement of the instructor and on an individual basis, course grades may be higher than the numerical calculation would yield.

Homework	Exam 1	Exam 2	Exam 3	Final Exam
	Oct. 11	Nov. 1	Nov. 24	Dec. 7, 3:00 - 5:59 pm
10	20	20	15	35
10	25	25	0	40
10	25	0	20	45
10	0	25	20	45

A+										
95	85	80	75	65	60	55	45	40	30	0

## 4. Course Policies

- Unless otherwise specified in writing, all tests are closed book and closed notes. However a graphing calculator is recommended and may be used on the exams. In order to receive credit all work must be shown, copying the answer from the calculator is *not* acceptable.
- ◆ Please silence all cell phones and noise making devices during class. Note that some models of cell phone when put on vibrate make a significant amount of noise.
- ◆ All homework assignments are to be turned in to the appropriate drop box by 2:30 pm on the day it is due. Late work *will not* be accepted. You may work together on your homework assignments, but each person must turn in their own work. In order to ensure that your homework is graded, please use clean paper not torn from a spiral notebook, with your name, section, and ID number on the front page. Write your solutions neatly, legibly, and labelled in numerical order. If multiple pages are necessary be sure to staple the pages together. At the sole discretion of the grader, homework not following these guidelines may not be graded and will receive a 0.

- ◆ If you believe an exam has been graded incorrectly do not mark the exam in any way. Submit in writing to the TA, along with exam, a short statement of why your think a *particular* problem, or set of problems was graded incorrectly. Regrade requests will not be accepted later than the end of the class period after they are returned. I reserve the right to photocopy any or all of your exams in order to prevent regrade abuse.
- ◆ In order to receive full credit on exams and homework you must show all work in a clear and coherent manner. In particular, correct answers not fully supported by explanations using complete sentences, where appropriate, will not receive full credit. It is your responsibility to present your solutions in an easily understood manner.
- ◆ If you need help outside of normal office hours, please feel free to stop by my office. I may not be able to help at that moment, but we will at least be able to arrange another time to meet.
- ◆ Please keep all your exams and homeworks; if you believe there has been an error in the recording of your grades they are the only way to validate your claim. Also, grades will be placed on WebCT, so please periodically check the grades posted there so we can resolve any issues quickly.

Date	Sections Covered	Notes
Sept. 24	5.1: How do we measure distance traveled?	
Sept. 27	5.2: The Definite Integral	
Sept. 29	5.3: Interpretations of the Definite Integral	
Oct. 1	5.4: Theorems about Definite Integrals	
Oct. 4	5.4(cont.), 6.1: Antiderivatives Graphically/Numerically	
Oct. 6	6.2: Constructing Antiderivatives Analytically	
Oct. 8	6.3, 6.5: Differential Equations and the Equations of Motion	
Oct. 11	Exam 1	
Oct. 13	6.4: The Second Fundamental Theorem of Calculus	
Oct. 15	7.1: Integration by Substitution	
Oct. 18	7.2: Integration by Parts	
Oct. 20	7.3, 7.4: Tables of Integrals and Algebraic Identities	
Oct. 22	7.4: Trigonometric Substitution	Drop Day
Oct. 25	7.5: Approximating Definite Integrals	
Oct. 27	7.7: Improper Integrals	
Oct. 29	7.8: Comparison of Definite Integrals	
Nov. 1	Exam 2	
Nov. 3	8.1: Areas and Volumes	
Nov. 5	8.2: Applications in Geometry	
Nov. 8	8.6: Applications in Economics	
Nov. 10	11.1: What is a Differential Equation?	
Nov. 12	11.2: Slope Fields	
Nov. 15	11.4: Separation of Variables	
Nov. 17	11.5: Growth and Decay	
Nov. 19	11.6: Applications to Modelling	
Nov. 22	11.7: Models of Population Growth	
Nov. 24	Exam 3	
Nov. 26	No Class – Thanksgiving Holiday	
Nov. 29		Drop Day without "F"
Dec. 1		
Dec. 3		
Dec. 7	Final Exam – 3:00pm - 5:59 pm	

### 5. Class Schedule