UCSB Math 4B Summer 2014 Session A

INSTRUCTOR INFO

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TA INFO

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COURSE INFO

Class time and location: MTWR 2:00-3:05 TD-W 1701
Course website: gauchospace.ucsb.edu
Course textbook: Wiliam E. Boyce and Richard C. DiPrima, *Differential Equations and Boundary Value Problems*, 10th Edition

COURSE OVERVIEW

The purpose of this course is to familiarize you with solving (when possible) and analyzing differential equations. A differential equation describes the rate of change of some unknown quantity. Our hope is to use this information to find a solution function describing this unknown quanitity. The course will cover various methods of finding solutions to certain types of differential equations, as well as develop tools to analyze differential equations in order to obtain qualitative information about solutions.

COURSE GOALS

This course will enable you to:

- Solve certain types of first and second order differential equations, as well as systems of differential equations, as well as understand and apply uniqueness and existence theorems of solutions
- Understand solution spaces of homogeneous differential equations and particular solutions to non-homogeneous differential equations
- Analyze the qualitative behavior of solutions to differential equations
- Interpret solutions and analysis of differential equations to gain insight into real world solutions
- Effectively communicate mathematics both written and orally

SUMMER COURSE INFO

Please be aware that we will be covering the same amount of material during this 6 week course as in the 10 week course. We will go through material very quickly and the homework assignments may be longer than you are used to. It is important to attend all the lectures and work on the homework assignments throughout the week.

GRADE BREAKDOWN

Class Participation	5
Discussion Section	5
Web Homework	15
Quizzes	15
Exam 1	20
Exam 2	20
Exam 3	20

HOMEWORK Webwork will be through WileyPlus. There will be a link to the website from GauchoSpace along with instructions on how to sign up. There will be two homework assignments each week, for a total of 12 assignments. See the GauchoSpace page for due dates.

CLASS PARTICIPATION We will be using iclickers in this course. You must purchase an iclicker from the UCSB bookstore and follow the instructions to register your device. The iclicker will be used to record your class participation each meeting. Your 5 lowest participation scores will be dropped.

DISCUSSION SECTIONS You are required to attend two discussion sections each week. The location and time of your discussion section can be found on GOLD. The purpose of these discussion sections is to work on problems that will further develop your understanding of the course material as opposed to a time for homework help.Your TA will provide problems to work on in groups, followed by student presentations of solutions. You are required to present two solutions in section by the end of the course in order to receive full credit for your discussion section grade.

GAUCHOSPACE All of the assignments, news and important information will be on the GauchoSpace. I will also post the lecture slides to the GauchoSpace.

QUIZZES There will be three quizzes given on the dates below:

Quiz 1	6/26
Quiz 2	7/10
Quiz 3	7/24

EXAMS There will be 3 exams given on the dates below:

Exam 1	7/3
Exam 2	7/17
Exam 3	7/31

GRADE SCHEME

A+: 97-100	A: 93-96	A-: 90 - 92
B+: 87-89	B: 83-86	B-: 80 - 82
C+: 77-79	C: 73-76	C-: 70 - 72
D+: 67-69	D: 63-66	D-: 60 - 62
	F: ≤ 60	

EXAM POLICIES You are allowed one 3x5 notecard during exams. There are no calculators allowed for exams. There will be NO MAKE UP EXAMS OR QUIZZES.

EXTRA HELP If you need extra help outside of class time or my office hours, you can visit the math lab in South Hall 1607 Monday through Friday 12-5. You could also go to CLAS which has free tutoring during the summer. You can visit their website for more information at http://clas.sa.ucsb.edu.

CRASHERS You must be on the math department waiting list if you are trying to get in to the course. Go to math.ucsb.edu, click undergraduate information, then click waiting lists. If you are crashing, the online homework system has a 14 day grace period where you don't have to pay, but you can access the homework. Please do not miss assignments if you are crashing the course just in case you get in. Late homework will not be accepted.