

# Pre-Calculus for Science and Engineering Math 4C – Winter 2005 – Professor Erickson

## Course Information

Professor: Stefan Erickson  
Lecture: MWF 10:00-10:50am in WLH 2111  
Email: erickson@math.ucsd.edu  
Website: <http://math.ucsd.edu/~erickson/math4c/>  
Office: AP&M 5801  
Office Hours: MWF 8:45-9:45am or by appointment

Teaching Assistant: Will Garner  
Sections: A01 Thursday 6:00-6:50pm WLH 2112  
A02 Thursday 7:00-7:50pm WLH 2112  
Email: wgarner@ucsd.edu  
Website: <http://sdcc21.ucsd.edu/~wgarner/math/math4c/>  
Office: AP&M 2402 (Calculus Lab)  
Office Hours: Monday 3:00-4:00pm and Tuesday 2:00-3:00pm

Textbook: Cohen, Precalculus, 5<sup>th</sup> ed., Brooks/Cole, 1997.

## Course Description (From UCSD Catalog)

Review of polynomials. Graphing functions and relations: graphing rational functions, effects of linear changes of coordinates. Circular functions and right triangle trigonometry. Reinforcement of function concept: exponential, logarithmic, and trigonometric functions. Vectors. Conic sections. Polar coordinates. Three lectures, one recitation. (No credit given if taken after Math 10A or 20A. Two units of credit given if taken after Math 3C.) Prerequisite: Math Placement Exam qualifying score, or Math 3C with a grade of C or better.

## Course Expectations

Math 4C prepares you for the Math 20 series. The major topics of this course are functions, trigonometry, and analytic geometry. A basic level of proficiency is required in these areas. This course covers a lot of material in a short time. We typically cover two sections from the book in every lecture. As a result, you may fall behind from missing only one or two lectures. Attendance is highly recommended. You will also be expected to read the book, paying special attention to the examples. They will often give you insight into homework problems.

## Homework

Homework will be assigned on a weekly basis. The assignments will be posted on the course website. Homework is due at the end of Thursday section. No late homework will be accepted. Although I encourage you to work in groups on the assignments, the problems should be written up on your own. The grader will have discretion to give zeroes to identical homework. Homework is worth 25% of your grade in the class, so you must turn in assignments to receive a good grade in the class. The assignments just cover the bare minimum of material we cover in class. I encourage you to work out as many problems from the book as you can.

## Midterms and Final

There will be two midterm exams in class on Friday of the fourth and eighth weeks (January 28 and February 25). Each exam is worth 20% of your grade in the class. The final exam is Tuesday, March 15 8:00-11:00am in WLH 2111. The final exam is worth 35% of your grade in the class. Scientific calculators are required; graphing calculators are highly recommended. No personal notes will be allowed. A formula sheet with all relevant formulas will be provided. Blue books are also unnecessary. You will write your answers on the exam. Be sure to include all your scratch work on the exam since partial credit will be awarded.

## Academic Dishonesty

Cheating of any form will not be tolerated. Violations of the rules will result in academic discipline in compliance with university regulations. The professor and TA have the right to reassign seating during the exams at any time.

## Help Available

There are several options available to you:

Office Hours: The best chance to ask individual questions is during office hours.

Discussion Sections: These are focused on presenting solutions to homework problems.

Calculus Lab: AP&M 2402 has tutors/TAs available M-F 8:00 am-7:00 pm. Will Garner, the TA for this class, will be in the Calculus Lab on Mondays 3:00-4:00pm and Tuesdays 2:00-3:00pm.

OASIS: An OASIS workshop is available for this course. The workshop meets Tuesdays and Thursdays 10:00-11:50am. It's free, but you must enroll by the second week of classes. Attendance is mandatory. This is an excellent option if you foresee having difficulty with the material. See the OASIS website for more details: <http://oasis.ucsd.edu/>

Study Groups: Form a study group — they can be a great help.

E-mail: If you encounter difficulty during a lecture or in the homework, you may e-mail your question. I will either try to answer your e-mail or address your question in lecture.

## Tentative Schedule

Week	Monday	Wednesday	Friday
1/3 - 1/7	3.1	3.2-3.3	4.1-4.2
1/10 - 1/14	3.4-3.5	4.3	4.4-4.5
1/17 - 1/21	Holiday	4.6-4.7	5.1-5.2
1/24 - 1/28	5.3-5.4	5.5-5.7	Midterm 1
1/31 - 2/4	6.1, 6.3	6.2	6.4-6.5
2/7 - 2/11	8.1-8.2	8.4, 9.1	7.1-7.2
2/14 - 2/18	7.3-7.4	7.5-7.6	7.7, 8.5
2/21 - 2/25	Holiday	9.5-9.6	Midterm 2
2/28 - 3/4	10.1-10.2	12.1, 13.6	11.1-11.2
3/7 - 3/11	11.4-11.5	13.2-13.3	13.4-13.5