

Math 222

Precalculus (AA)

Fall 2006

Daily 8:10 – 9:00

Instructor:

Jon Freedman

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Office hours: M 1:30 – 2:30, Tu – F 9:30 – 10, WTh 1:30 – 2:30 and *by appointment*



Prerequisite:

Math 130 or equivalent with C or better, or appropriate score on placement test.

Important Details:

1) Math 222 is a prerequisite for majors in Engineering, Mathematics, and Physics. Check yours.
2) Transfer: CSU (B4); UC .

Text:

Connally, Hughes-Hallett, Gleason, et al. *Functions Modeling Change*. 2nd ed. New York: John Wiley & Sons Inc. 2002. ISBN 0-471-45653-5

Materials:

A TI-83+ (or TI-84) graphing calculator is required for this course. Other graphing calculators may perform the same functions and may be acceptable but see me about this. There will be quizzes and tests or portions of each where you may not be allowed to use technology.

Important Dates:

Last day to Add this course:	Tuesday, August 29
Last day to Drop this course without a W:	Friday, September 8
Last day to Withdraw from class:	Tuesday, November 14
Holidays:	9/4; 11/10; 11/23 - 11/26
Last regular class	Friday, December 8
Final Exam (comprehensive):	Wednesday, December 13 8:10 – 10:40am

Assignments:

Homework is due the last day of class every week (usually Friday) unless otherwise stated. Full credit will be assigned if the assignment is (1) complete, (2) on time, and (3) boxed problems have been checked and initialed by a TLC/MESA tutor or by me. Most test and quiz problems will be taken directly from homework assignments or from other problems in the text.

Grading:

Homework and other assignments (25%)

Quizzes (15%)

3 – 5 Tests (40%)

Final (20%)

I will drop your worst test score (*Not* the final). There will be no makeup tests. If you are late for a test you will have only the remaining time to complete the test (so don't be late). If you know you are going to miss a test date, contact me at least three days in advance and we can arrange an alternate test.

I will give quizzes often. I will drop your worst quiz. There will be no makeup quizzes.

Grading Scale:

A \geq 90%

80% \leq B < 90%

70% \leq C < 80%

60% \leq D < 70%

F < 60%

Attendance Policy:

You will not be graded directly on your attendance. However, your involvement in class and your participation in the process of discovering concepts will be fundamental in your understanding of calculus.

Withdrawal Policy: If you decide to drop this class you must do so formally either by using WebSMART or by filing the correct form with the registrar's office. If you miss more than ten hours of class and still desire to remain in the class you must meet with me and convince me that you can learn the material necessary to pass the class.

Course Contents: We will cover the majority of Chapters 1 through 6, 8 and 9, as well as some supplemental materials. We will focus on developing a library of functions and the attitude necessary to throw down with them.

- For each of the functions:

- Linear
- Quadratic (and some general polynomials)
- Exponential
- Logarithmic
- Trigonometric

we will be able to take any one of the representations: Data Table, Graph, Formula, and use technology or algebraic manipulation to generate the other two. We will also be able to manipulate the general form of each equation to shift and distort the function's graph.

- Additionally, we will recognize and derive the relationship between each function and Contextual Applications relevant to that function.
- We will be able to use the graphing calculator to help you analyze complex functions, derive formulas from data, and perform various calculus-related analyses on a function.
- We will compose functions and invert them and develop your intuition for the results of such manipulations.

Tutoring: The Learning Center (TLC) (in building 5) and MESA (in 7207) are outstanding resources for free tutoring in calculus. You should visit TLC or MESA at the slightest sign of confusion or just as a place to sit and work in a supportive environment. The Learning Center staff and MESA tutors are well trained and dedicated solely to your success, so don't waste these resources!

Internet: There are hundreds of internet sites with precalculus assistance offered - though many will ask you for money first. I will be happy to forward a list to you upon request or go to my website under HELP.

Assistance: If you need any assistance please let me know what I can do to accommodate you. A wide range of services is available through the Disabled Students Program and Services (DSPS) at 738-4280 in Building 2.

Plagiarism etc.: I strongly encourage you to form study groups and to work together to understand the material covered in this class. Explaining a concept is a valuable way for you and the listener to develop insight and skill. Simply copying work, whether it is from an assignment or a test, is of no value to you academically. Consequently, if I find that you are submitting any part of another's work as your own, you will not receive credit for this course. The same holds true for any other kind of academic dishonesty. There is no situation that could arise in this class that would justify risking expulsion. If you are having any difficulty, PLEASE see me about it so that we can work together in resolving the issue.