

Math 105 – Fall 2007 – PreCalc

Pietro Poggi-Corradini

Instructor: Pietro Poggi-Corradini,

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Class: Precalculus Mathematics – Section 002,

Time: TR 1:30-2:45PM,

Location: B122

Office Hours: By appointment only.

Text: Precalculus, 5th Edition, by Stewart, Redlin, and Watson.

Prerequisites: Must have either passed the Math Placement Exam or successfully completed the self-paced Algebra Tutorial Program.

Course Goals: The primary goal is to prepare each student for the study of Calculus. A secondary goal is to give students the skills and the confidence to solve basic every-day problems.

Course Content: Functions, graphs, exponentials and logarithms, trig functions, and other topics.

Teaching Style: Mix of lecture/exercises/quizzes. Points will be given for in-class participation. On the next page I compiled a tentative schedule of what will be covered on a given day. Ideally you should come to class having read the relevant Section and having attempted the first few odd-numbered exercises.

Calculators Policy: Scientific calculators will not be the focus of this class, so you are discouraged to use them on the exams because they can be an unnecessary distraction.

Class Conduct: We will follow the GMU Honor Code. Personal ID must be brought to class on scheduled exams.

Homework: Not graded. However, it is essential to do as many problems as possible in preparation for the exams. So, I'll try to cover as many even-numbered problems as possible in class.

Grades and Exams:

Midterm 1: Tuesday, October 2nd. (100 pts.)

Midterm 2: Thursday, November 8. (100 pts.)

Final: Thursday, December 13. (200 pts.)

In-Class Participation (100 pts.)

Tentative Schedule

<u>Date</u>	<u>Sect.</u>	<u>Topic</u>
Aug 28	1.1-1.7	Algebra Review
Aug 30	1.8	Coordinate Geometry
Sep 4	1.10	Lines
Sep 6	2.1	What is a Function
Sep 11	2.2	Graphs of Function
Sep 13	2.3	Avg. Rate of Chge: Increasing and Decreasing Fcts.
Sep 18	2.4	Transformation of Functions
Sep 20	2.5	Quadratic Functions: Maxima and Minima
Sep 25	2.7	Combining Functions
Sep 27	2.8	One-to-One Functions and their Inverses
Oct 2	1st Midterm	
Oct 4	3.1	Polynomials and Their Graphs
Oct 9	Holiday	
Oct 11	3.6	Rational Functions
Oct 16	4.1	Exponential Functions
Oct 18	4.2	Logarithmic Functions
Oct 23	4.3	Laws of Logarithms
Oct 25	4.4	Exponential and Logarithmic Functions
Oct 30	6.1	Angle Measure
Nov 1	6.2	Trigonometry and Right Angles
Nov 6	6.3	Trigonometric Functions of Angles
Nov 8	2nd Midterm	
Nov 13	5.2	Trig Functions of Real Numbers
Nov 15	5.3	Trigonometric Graphs
Nov 20	5.4	More Trigonometric Graphs
Nov 22	Thanksgiving	
Nov 27	7.1	Trigonometric Identities
Nov 29	7.2	Addition and Subtraction Formulas
Dec 4	7.3	Double-Angle, Half-Angle, and Sum-Product Formulas
Dec 6	7.4	Inverse Trigonometric Functions
Dec 13	Final Exam	