Precalculus
(MATH 1045)
Fall 2008

Professor: Dr. Paul L. Bailey

Office: WIL 228

Office Hours: MWF 1:00 PM to 2:00 PM; TTh 12 noon; by appointment

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Books: *Precalculus*, 4th edition, by Faires and DeFranza

Grade Components

Quizzes: 40%
Midterms: 30%
Final: 30%

Reading and homework exercises will be assigned daily, to be accomplished before the next class. The purpose of these exercises is practice; they will not be collected or graded.

There will be a quiz almost every Friday. No makeup quizzes will be given *unless arrangements are made before the day of the quiz.*

There will be two midterm examinations, one the first week of October and the other the second week of November. The final examination is scheduled for Monday, December 15, 2008, at 10:00 AM.

Calculators can be detrimental to the study of mathematics. The use of calculators, cell phones, laptop computers, and all electronic devices is strictly prohibited during quizzes and examinations.

Course Outline

Week	Beginning	Topic	Sections	Supplemental Notes
Week 1	Sep 1	Sets and Functions		Basic Set Theory
Week 2	Sep 8	Real Variables and Equations	1.1-1.4	Shifting, Stretching, Reflecting
Week 3	Sep 15	Linear and Quadratic Functions	1.6-1.8,3.6	Complex Numbers
Week 4	Sep 22	Combining Functions	2.1-2.5	
Week 5	Sep 29	Polynomial Functions	3.1-3.3,3.6	
Week 6	Oct 6	Rational Functions	3.4-3.5	Polynomial Asymptotes
Week 7	Oct 13	Exponential Functions	5.1-5.2	
Week 8	Oct 20	Logarithmic Functions	5.3-5.4	
Week 9	Oct 27	Trigonometric Functions	4.1-4.5	Standard Angles
Week 10	Nov 3	Trigonometric Identities	4.6-4.7	Derived Angles
Week 11	Nov 10	Inverse Trigonometric Functions	4.8-4.9	
Week 12	Nov 17	Vectors in $\mathbb{R}^2$		Vectors in $\mathbb{R}^2$
Week 13	Nov 24	Complex Geometry		Complex Geometry
Week 14	Dec 1	Conic Sections	6.1-6.4	
Week 15	Dec 8	Parametric Equations	6.5-6.7	

Grade Interpretation

A: Indicates nearly complete mastery of the conceptual and computational aspects of the course.

1. know all definitions;
2. understand all major theorems;
3. perform all related calculations with only minor and infrequent errors;
4. combine ideas from differing sections in new ways to solve problems.

B: Indicates good understanding of conceptual material and excellence at computation.

1. know most definitions;
2. know most major theorems;
3. perform all related calculations without signficant errors;
4. combine ideas within sections in new ways to solve problems.

C: Indicates adequate knowledge of conceptual material and adequate computational skills.

1. know most of definitions;
2. know some major theorems;
3. perform a majority of the computational techniques correctly.

D: Indicates some knowledge of the theory and techniques resulting from adequate effort to learn.

1. complete a majority of assignments;
2. perform some computational techniques correctly.

F: Indicates inability to demonstrate knowledge of course material, and/or inadequate effort.

Assignment Assessment

Each quiz will be graded on a scale of 0 to 10. Quizzes normally contain two problems.
Each exam will be graded on a scale of 0 to 100.

Academic Integrity

The University's policy on academic integrity, as stated in the Course Catalog (pages 34 and 35) will be strictly enforced in this course. Any evidence of academic dishonesty will not be tolerated.

You are welcome to work with each other on homework assignments if you follow these rules: 1) anyone you discuss a problem with should be mentioned in your solution, and the originator of any idea should be so credited; 2) you must understand your solution, and write it in your *own words* (NO COPYING). Any violation of rules 1) and 2) is plagiarism, a form of academic dishonesty.

Observing and/or copying from another student's paper during quizzes and examinations is cheating, a form of academic dishonesty.

All answers on quizzes, worksheets, examinations, et cetera, must be justified in words and/or computations. Answers with insufficient or incorrect justification may result in zero credit, or in question marks surrounding the assignment's grade. Assignments with question marks receive zero credit until the student visits the professor to demonstrate the ability to reproduce the result in question.