

**Precalculus**  
(MATH 1045)  
Fall 2006

**Professor:** Paul Bailey

**Office:** WIL 228

**Office Hours:** MTWRF 11 am to 12 noon; TR 1 pm to 2 pm

**Web Site:** <http://www.saumag.edu/pbailey>

**Email:** plbailey@saumag.edu

**Books:** *Precalculus*, 3<sup>rd</sup> edition, by Faires and DeFranza

**Grade Components**

**Problems:** 25%

**Quizzes:** 25%

**Midterms:** 25%

**Final:** 25%

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.

Problem sets will be assigned periodically, to be due in one week. The write up of each problem should state both the problem and then the solution. It should be neat and legible, using words in complete sentences, where appropriate.

You may discuss the problems from the problem sets with other members of the class and other interested students or faculty, under these conditions:

(a) any help from others must be noted in the solutions, and the originator of any idea must be so credited;  
(b) your solutions must be completely understood by you and written *in your own words*.

Any violation of rules (a) or (b) is academic dishonesty.

Quizzes will be given weekly, on Friday. 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 11, 2006, 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.

**Approximate Syllabus**

Week	Beginning	Topic	Sections	Supplemental Notes
Week 1	Aug 28	Sets, Relations, Functions		Basic Set Theory
Week 2	Sep 4	Real Variables and Equations	1.1-1.4	Shifting, Stretching, Reflecting
Week 3	Sep 11	Linear and Quadratic Functions	1.6-1.8	Complex Numbers
Week 4	Sep 18	Combining Functions	2.1-2.5	
Week 5	Sep 25	Polynomial Functions	3.1-3.3,3.6	
Week 6	Oct 2	Rational Functions	3.4-3.5	Polynomial Asymptotes
Week 7	Oct 9	Exponential Functions	5.1-5.2	
Week 8	Oct 16	Logarithmic Functions	5.3-5.4	
Week 9	Oct 23	Trigonometric Functions	4.1-4.5	Standard Angles
Week 10	Oct 30	Trigonometric Identities	4.6-4.7	Derived Angles
Week 11	Nov 6	Inverse Trigonometric Functions	4.8-4.9	
Week 12	Nov 13	Vectors in $\mathbb{R}^2$		Vectors
Week 13	Nov 20	Conic Sections	6.1-6.4	
Week 14	Nov 27	Parametric Equations	6.5-6.7	Parametric Equations
Week 15	Dec 4	Vectors in $\mathbb{R}^3$		