Syllabus
MAC 1147, Precalculus Algebra and Trigonometry, Fall 2011, 3 credits
Prerequisite: MAC 1105 College Algebra (grade of C or better) or ALEKS placement exam (score of 45 or better)

Instructor:	Office:
Office Hours:	Office Phone:
E-mail Address:	

Description: The goal is to prepare the student (primarily science and engineering majors) for more advanced coursework in mathematics - specifically calculus - by developing an improved knowledge base in the requisite algebra topics and suitable study/work habits. To achieve this, this course will require the student to complete assignments on time, follow instructions precisely, and demonstrate completion of the following objectives:

Objectives:
- A knowledge of basic polynomial, rational, exponential, and logarithmic functions and their graphs
- A knowledge of the analytic and graphical descriptions of composite functions and inverse functions
- The ability to solve applications of the preceding (e.g. max/min problems, exponential growth and decay problems, etc.)
- The ability to solve systems of equations by elimination or by substitution
- The ability to solve systems of linear equations using matrices
- The ability to do a partial fraction decomposition of a rational function
- The ability to determine the properties of simple arithmetic or geometric sequences and series.
- A knowledge of basic trigonometric functions, relations, and their graphs
- The ability to manipulate and simplify trigonometric functions and identities
- A knowledge of analytic and graphical descriptions of trigonometric functions and their inverses
- The ability to use trigonometric functions and identities for the solutions of triangles
- The ability to solve conditional trigonometric equations
- A knowledge of DeMoivre's theorem and its application
- The ability to manipulate two dimensional vectors, their sums, differences, and dot products to solve simple applications

Materials: The text for this course is Precalculus, by Michael Sullivan, 9th edition, published by Pearson/Prentice-Hall. See the next section. Students must bring scantrons and a scientific calculator without graphing or programming capability (with e^x & ln key(s)) to quizzes and exams. The calculator is needed for some homework, quiz, and exam problems, but may NOT be used during any quiz or exam unless specifically authorized by the instructor.

Websites: This course uses Blackboard (http://bb.fau.edu, sign in as to MyFAU) and the web-based course MyLabsPlus for the text Precalculus, by Michael Sullivan, 9th edition, published by Pearson/Prentice-Hall. MyLabsPlus can be accessed directly from the page for this course in Blackboard. Students are expected to check Blackboard several times a week for updates regarding assignments, quizzes, and exams. Once registered in MyLabsPlus, students have access to an electronic version of the text.

Attendance Policy: Regular attendance is expected, including active involvement in all class sessions and professional conduct in class. In particular, a student should avoid leaving during lecture, unless he or she is not feeling well or needs to use the restroom. A student who must leave early for an appointment should notify the instructor at the start of class.

Tutoring: For tutoring resources, visit http://www.math.fau.edu/MLC/index.php

Course Grade: The overall course grade is based on the quiz, midterm exam, final exam, and MyMathLab grades as follows:

Quiz average	20%
Midterm exam average	30%
Final exam grade	40%
MyMathLab grade	10%

Grading Scale:

	A: 90% or above	A-: 87-89%
B+: 84-86%	B: 80-83%	B-: 77-79%
C+: 74-76%	C: 70-73%	C-: 67-69%
D+: 64-66%	D: 60-63%	D-: 57-59%
	F: 56% or below	

Midterm Exams and Quizzes: There will be three midterm exams and a number of quizzes. The policy on missed exams and quizzes is left to the individual instructor.

Comprehensive Final Exam: The midterm exams and the quizzes form the basis for a cumulative final exam. The date, location, and time will be announced in class. The final exam may be made up if a conflict arises; however, the student may be required to demonstrate that an emergency or serious situation has arisen by providing documentation. Having another FAU final exam at the same time, being sick, attending the funeral of a relative, or having a military or civil obligation such as jury duty are examples of situations in which you would be allowed to take a make-up; oversleeping or getting stuck in traffic are not such examples.

Academic Honesty: Florida Atlantic University expects you to be honest in all of your university course work. By registering for this course, you agree to follow the academic guidelines stated in the university catalog. *Instances of academic dishonesty will be prosecuted to the fullest possible extent.*

This syllabus is subject to limited reasonable changes at the discretion of the instructor.

Exam dates:

Date	Exam
	Exam #1
	Exam #2
	Exam #3
Sunday, December 4, 10:30 am – 1:00 pm	Final Exam

The time of the Final Exam is subject to change by the university.

Tentative due dates for MyLabsPlus homework:

Date	Homework due
8/29	Review (parts of Section 2.3)
9/7	Absolute Value (parts of Sections A.6 and A.9) and Section 2.5
9/12	Section 3.3
9/19	Sections 3.4 and 4.1
9/26	Sections 4.2 and 4.3
10/3	Polynomial and Rational Inequalities (Sections 3.5 and 4.4) and Section 4.5
10/10	Sections A.7 and 4.6
10/17	Sections 5.1 and 5.2
10/24	Sections 5.3 and 5.4
10/31	Sections 5.5 and 5.6
11/7	Sections 5.7 and 5.8
11/14	Sections 11.1 and 11.2
11/21	Section 11.3
11/28	Sections 11.5 and 12.1
12/4	Sections 12.2 and 12.3

8/29	Section 6.1
9/7	Section 6.2
9/12	Section 6.3
9/19	Sections 6.4 and 6.6
9/26	Sections 6.5 and 7.1
10/3	Sections 7.2 and 7.3
10/10	Section 7.4
10/17	Section 7.5
10/24	Sections 7.6 and 7.7
10/31	Section 8.1
11/7	Section 8.2
11/14	Sections 8.3 and 8.4
11/21	Sections 9.1 and 9.2
11/28	Section 9.3
12/4	Sections 9.4 and 9.5