MATH 160 – SPRING 2008
PRECALCULUS

Instructor:	Alina Birca
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Office:	Building 40 – Room 145
Office hours: MW:	**11:25 AM – 12:00 pm & 1:35 – 2:15 pm**
	F: 11:25 am – 12:00 pm & 1:35 – 2:30 pm
Text:	*Precalculus Functions and Graphs* (11th Edition) by Swokowski and Cole
Section #091024	MW 7:15 – 9:20 pm 40 - 109

Course Objectives

This course studies the basic functions used in Calculus: the polynomial, rational, exponential, logarithmic, trigonometric, and inverse trigonometric function. Topics include recognizing, graphing and solving equations involving these functions, working with function notation, transformations of functions and applications. Other topics include the binomial theorem, conic sections, vectors, and the dot product.

Upon completion of this course, the student will be able to:

- represent a function graphically, numerically, and analytically;
- demonstrate an in depth understanding of function notation and operations including inverses and composition of functions;
- demonstrate an understanding of and graph transformations of functions;
- recognize, graph, and solve equations involving polynomial, rational, exponential, logarithmic, trigonometric inverse trigonometric, and root functions;
- recognize and apply the appropriate function to solve problems involving tables, graphs, equations or words;
- solve the applications of system of equations;
- recognize the behavior and characteristic properties and graph parabolas, circles, ellipses, and hyperbolas;
- apply studied principles and skills to new situations in addition to situations that mirror those on the homework and those shown in class.

Methods of Instruction

This course will combine lecture, teamwork, and class discussion. Students will be required to do homework, group problems, quizzes and examinations.

Attendance and Participation

Understanding math requires more than just reading a textbook. Listening and participating in the class activities are as important as solving problems. College policy requires that you attend every class meeting. Moreover, I do notice when you do not show up. If your grade is on a borderline, those with regular attendance are more likely to be on the higher side of the line. In addition, you miss the material from that day and that day's quiz. Do not be late to class. The homework is due at the beginning of the class. You may also miss the quiz if you are late. NOTE: You the student are responsible for dropping the course should you decide not to continue in it. If you stop attending and doing the work and you fail to drop, you will receive a failing grade in this course. **You may be dropped from this class if you miss class during the first 2 weeks of instruction**. Your seat will be given to a student who has been attending each day.

Prerequisites

There is an official prerequisite for this course (Math 150 – Trigonometry), and I expect that you demonstrate college algebra and trigonometry skills (linear, quadratic, polynomial, rational, trigonometric functions).

Study time & Extra help

You are expected to study two hours outside class for every hour in class. If you have trouble completing assignments or understanding the mathematics, get help as soon as you need it. My office hours and email are listed above.

Free tutorial services are available in the Learning Assistance Center, Building 6, room 101. Tel: 909-594-5611 x 4300 and in building 40 (math).

Late Work

Be prepared with all assignments on the day they are due. As a rule, I do not accept late written work nor are there any make up tests or quizzes.

Academic Honesty
Plagiarism or cheating will not be tolerated. There will be a zero on the assignment and risk failing the course.

Calculators
Most of the homework problems I will assign this semester will be done using paper, pencil, ruler and a scientific calculator. However, a graphing calculator will be necessary for some of the homework problems. You could rent a graphing calculators from MARC. No graphing calculator will be allowed during the tests.

If you have a phone or pager, please turn it to vibrate and sit close to the door in case you need to use it in an emergency. Thank you.

Organization, Grading and Requirements

You will need a 3-hole binder with 3 separators, labeled as follows:
LECTURES **HOMEWORK** **TESTS & QUIZZES**

- **LECTURES** – Pay attention in class to what I say and do, and make careful notes. In particular, note the problems I work on the board, and copy the complete solutions as well as the theory presented in each section. Work as neatly as you can. Write your symbols clearly, and make sure the exercises are clearly separated from each other. Do not hesitate to ask questions in class. It is not a sign of weakness, but of strength. There are always other students with the same question who are too shy to ask.
- **HOMEWORK** – Before you start on homework assignments, rework the problems I worked in class as well as all examples from the textbook. This will reinforce what you have learned. Make sure you check your previous work against the solution sections posted on my website. Print out the solutions from my website for your reference.
- Keep all quizzes and tests that are returned to you in your binder. Use them when you study for future tests and for the final exam.

Assignments in the course are divided into four areas and are worth a total of 1000 points. Those earning 900 points or more will be awarded an A, 800 to 899 points a B, 700 to 799 points a C, 600 to 699 points a D and less than 599 points an F.

Homework 175 points

Homework and reading will be assigned each day. Homework will be collected eight times (see due dates on the Tentative Class Schedule). Homework is due at the beginning of the class. Each homework is worth 25 points. The lowest score will be dropped. Read carefully all the directions from the homework handout. Late homework will not be accepted for any reason with the following exception: you are allowed ONE grace period until the next class period for ONE assignment. You get only one grace period – use it wisely! You are encouraged to discuss assignments with your classmates; however, you are required to write up your work independently. Copied homework will not be tolerated and identical, or nearly identical, assignments will *share* a single homework score.
I will make every effort to address homework questions in class as time permits. Please feel free to visit me during office hours, make an appointment with me, or contact me by email if you need additional help.

Quizzes 200 points*

Two quizzes will be given (see Tentative Class Schedule). They may be given at the beginning or at the end of the class. These quizzes will be given from exercises and examples done in class as well as homework problems assigned from the topics covered up to that point. For an exercise to be complete there needs to be a detailed solution to the problem. Do not just write down an answer. **No proof, no credit given!** Each quiz is worth 100 points.

Tests 350 points*

Two tests will be given over the major areas addressed in the course. Each test is worth 175 points. For an exercise to be complete there needs to be a detailed solution to the problem. Do not just write down an answer. **No proof, no credit given!**

Comprehensive final 275 points*

The final is a 2 ½ hour exam and it is held on Monday, June 9th from 10:30 – 1:00 pm .The final is a cumulative exam. You may use the final exam percent score to replace your lowest test score. You must take the final to pass this class.

Grade Sheet

Homework 1		/25
Homework 2	+	/25
Homework 3	+	/25
Homework 4	+	/25
Homework 5	+	/25
Homework 6	+	/25
Homework 7	+	/25
Homework 8	+	/25
HOMEWORK (best 7)	=	**/ 175**
Quiz 1		/100
Quiz 2	+	/100
QUIZZES*	=	**/200**
Test 1		/175
Test 2	+	/175
TESTS*	=	**/350**
FINAL EXAM*	=	**/275**
TOTAL	=	**/1000**