

SUFFOLK COMMUNITY COLLEGE
MATHEMATICS DEPARTMENT
STUDENT COURSE OUTLINE/SYLLABUS
MAT 124– Fall 2009

INSTRUCTOR:	Dr. James Fulton	OFFICE:	R345
COURSE:	MAT 124-Fundamentals of Precalculus I	OFFICE HOURS:	
CRN #:	94345		M 2:00-3:30 PM
	M/W 8:00-9:15 AM		Tu 8:00-9:00 AM
	Th 8:00-8:50 AM		W 2:00-3:45 PM
CLASSROOM:	T111		Th 7:30-8:00 AM
PREREQUISITE:	C or better in MAT111 or Sequential II		
TELEPHONE:	451-4784 (Prof. Fulton)		
	451-4270 (Secretary)		
E-MAIL:	fultonj@sunysuffolk.edu		

Copies of the detailed departmental syllabus for this course are available in the Math Office (R352).

COURSE PHILOSOPHY:

A presentation of advanced algebraic concepts and right triangle trigonometry for the student with MAT 111 (Algebra II) or three years of college preparatory mathematics competency, who plans on taking subsequent required courses in the Business, Health Careers, Science or Mathematics curricula. Topics will include techniques for solving algebraic equations; graphs and application of rational, exponential and logarithmic functions, and polynomials with rational zeros, right triangle trigonometry and applications using Pythagorean's Theorem and standard reference angles. The use of the TI 83 or 84 graphing calculator is required.

OBJECTIVES:

Upon successful completion of this course, students should be able to

1. demonstrate an understanding of a mathematical function including such ideas as the range and domain of functions, symmetric functions, composite functions, and inverses of functions;
2. sketch graphs of quadratic functions and understand the zeros of such functions;
3. comprehend the significance of the fundamental theorem of algebra and be able to solve polynomial equations completely by finding the roots;
4. sketch the graph of polynomial functions;
5. sketch the graph of rational functions;
6. sketch the graph of exponential and logarithmic functions;
7. solve exponential and logarithmic equations, including compound interest;
8. understand and graph the trigonometric functions and solve applications using right triangle relationships;
9. use a graphing calculator to perform computations and to graph a variety of functions.

STUDENT REQUIREMENTS:

The student is required to:

1. Attend class.
2. Read assigned chapters in the textbook.
3. Complete homework assignments before the next scheduled class.
4. Take all the examinations at scheduled times.
5. Have a calculator at each class meeting. We will use a TI83 or TI84 graphing calculator in class. See Instructor.

COLLEGE-WIDE ATTENDANCE POLICY:

All students are expected to attend every session of each course for which they are registered. Students are responsible for all that transpires in class whether or not they are in attendance. The College defines excessive absence or lateness as more than the equivalent of one week of class meetings during the semester. Excessive absence or lateness may lead to failure in a course or removal from the class roster.

GRADING POLICY:

1. There will be four (4) exams. The lowest exam grade will be dropped.
2. There are no make-up exams.
3. There will be a comprehensive final examination. The final exam grade may not be dropped.
4. Your course average will be determined as follows:
Exams.....75%
Final Exam.....25%

TEXTBOOK:

PRECALCULUS
Enhanced with Graphing Utilities, 5th Ed.
Sullivan & Sullivan
Prentice Hall Publishing

OUTLINE OF TOPICS:

- Polynomial Functions
- Rational Functions
- Exponential Functions
- Logarithmic Functions
- Trigonometric Functions

MATHEMATICS LEARNING CENTER:

Free tutoring and use of computer software is available in the Math Learning Center (R235). Hours are posted on the door. You must sign in each time you use the MLC. The College and the Mathematics Department support the MLC.