COURSE LEARNING OUTCOMES

DEPARTMENT: Mathematics

COURSE #: 19000 COURSE TITLE: College Algebra and Trigonometry	CATALOG DESCRIPTION Introduction to functions, rational expressions and their applications, rational exponents.
TERM OFFERED: Spring 2007 PRE-REQUISITES: Placement at college entry or by subsequent examination. PRE/CO-REQUISITES: HOURS/CREDITS: 4 hrs./ week; 2 credits. DATE EFFECTIVE: 1/25/07 COURSE COORDINATOR: Stanley Ocken	conic sections, Gaussian elimination and determinants, nonlinear systems of equations, introduction to trigonometric functions. Required Text: Algebra with Trigonometry for College Students 5 th edition, by Charles Mc- Keague, Brooks-Cole, ISBN 0-03-034446-8

COURSE LEARNING OUTCOMES

Please describe below all learning outcomes of the course, and indicate the letter(s) of the corresponding Departmental Learning Outcome(s) (see list at bottom) in the column at right.

After taking this course, the student should be able to:	Contributes to Departmental Learning Outcome(s):
1. demonstrate knowledge of prerequisite concepts and skills including real numbers, algebraic expressions,	а
factoring polynomials, and removing parentheses 2. solve linear systems in two or three variables, find determinants of 3 x 3 matrices, and apply these techniques	a, c
 to solving real-world problems. 3. simplify sums, products, and quotients of rational expressions 4. simplify expressions involving rational exponents and radicals 5. translate between simple equations and graphs in the x,y-plane 6. solve simple systems of equations in two real variables and use the results to find intersection points of 	a a a, b a, b, c
graphs; 7. construct and evaluate functions of one variable, including those that model real life problems	a, b,c
 solve problems involving right triangle trigonometry, including the Laws of Sines and Cosines solve other problems appropriate for a course in college algebra and trigonometry. 	a, b, c, d, e1,e2 a, b, c, d, e1,e2

COURSE ASSESSMENT TOOLS

Please describe below all assessment tools that are used in the course. You may also indicate the percentage that each assessment contributes to the final grade.

- 1. Final exam: 40%
- 2. In-class exams, quizzes, homework, attendance: 60%

3.

DEPARTMENTAL LEARNING OUTCOMES (to be filled out by departmental mentor)

The mathematics department, in its varied courses, aims to teach students to

a. perform numeric and symbolic computations

- b. construct and apply symbolic and graphical representations of functions
- c. model real-life problems mathematically

 $d\$ use technology appropriately to analyze mathematical problems

e. state (e1) and apply (e2) mathematical definitions and theorems

f. prove fundamental theorems

g. construct and present (generally in writing, but, occasionally, orally) a rigorous mathematical argument.