COURSE SYLLABUS

Course Title:	Elementary Algebra Foundations
Department:	Mathematics & Science
Curriculum:	Mathematics

Date submitted:	Spring 2014 (AAC: 14-92)

Course Descriptors:
Make certain that the course descriptors are consistent with college and Board of Trustees policies, and the current course numbering system.

Course Code: (eg. ACC 101) — MAT*095

Course Type: — L

A: Clinical   B: Lab   D: Distance Learning
I: Individual/Independent   L: Lecture   N: Internship
M: Seminar P: Practicum   U: Studio
X: Combined Lecture/Lab   Y: Combined Lecture/Clinical/Lab   Z: Combined Lecture/Studio

Elective Type: — N/A

AH: Art History E: English   FA: Fine Arts   FL: Foreign Language
G: General   HI: History   HU: Humanities   LAS: Liberal Arts & Sciences M: Math S: Science   SS: Social Science

Credit Hours:	3
Developmental: (yes/no)	yes
Contact Hours: Lecture:	3
Clinical:	0
Lab:	0
Studio:	0
Other:	0
TOTAL:	3
Class Maximum:	27
Semesters Offered:	F/Sp/Su

Prerequisites:

C or better in PreAlgebra-Number Sense/Geometry (MAT*075) or appropriate placement test score

Corequisites:

None

Other Requirements:

None

Catalog Course Description:

A non-credit course for students who have never had algebra or who need to review algebraic concepts. The following topics of algebra are covered: signed numbers, solving linear equations and inequalities in one variable, solving formulas and word problems involving linear equations, graphing linear equations and inequalities in 2 variables, formulating equations of lines in two variables, rules of integral exponents and the 4 operations (addition, subtraction, multiplication, division) on polynomials, factoring, and solving systems of two equations in two variables. This course does not satisfy a mathematics elective in any program.

Topical Outline:
List course content in outline format.

1. Solving Linear Equations and Inequalities in one variable, solving related Formulas and Word Problems
2. Graphing Linear Equations and Inequalities in two variables; formulating Equations of Lines in two variables; related Word Problems
3. Rules of Integral Exponents; four Operations on Polynomials
4. Factoring of Polynomials
5. Solving Systems of two Linear Equations in two unknowns and related Word Problems

Outcomes:
Describe measurable skills or knowledge that

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

COURSE:

students should be able to demonstrate as evidence that they have mastered the course content.	1. solve linear equations, formulas and inequalities in 1 variable and related word problems 2. graph and formulate equations of lines in two variables; solve related word problems 3. graph inequalities in two variables; solve related word problems 4. apply the rules of integral exponents and the 4 operations on polynomials 5. apply factoring to polynomials 6. solve systems of two linear equations in two unknowns and related word problems
	PROGRAM: does not apply

	GENERAL EDUCATION: *(Numbering reflects General Education Outcomes as they appear in the college catalog)*
	
	7. Quantitative Reasoning -Students will learn to recognize, understand, and use the quantitative elements they encounter in various aspects of their lives. Students will develop a habit of mind that uses quantitative skills to solve problems and make informed decisions.
	
	    Demonstrates: Interprets numerical information and applies sufficient laws of logic and mathematics to solve problems using numbers, symbols, graphs and/or descriptions.
	
	    Does Not Demonstrate: Misinterprets numerical information or insufficiently applies laws of logic and mathematics to solve problems using numbers, symbols, graphs and/or descriptions.

Evaluation: List how the above outcomes will be assessed.	Assessment will be based on the following criteria: Quizzes Tests Classroom assessments Departmental midterm exam (optional depending on instructor) Final exam (required for all sections)
Instructional Resources: List library (e.g. books, journals, on-line resources), technological (e.g. Smartboard, software), and other resources (e.g. equipment, supplies, facilities) required and desired to teach this course.	Required: large amounts of board space and individual desks; access to MyMathLab Desired: None
Textbook(s)	<u>Introductory and Intermediate Algebra,</u> 3rd edition by Bittinger/Beecher