MATH 150A Course Outline as of Fall 2006

CATALOG INFORMATION

Dept and Nbr: MATH 150A Title: ELEMENTARY ALGEBRA 1
Full Title: Elementary Algebra 1
Last Reviewed: 4/8/2013

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	3.00	Lecture Scheduled	3.00	17.5	Lecture Scheduled	52.50
Minimum	3.00	Lab Scheduled	0	6	Lab Scheduled	0
		Contact DHR	0		Contact DHR	0
		Contact Total	3.00		Contact Total	52.50
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 105.00 Total Student Learning Hours: 157.50

Title 5 Category:	AA Degree Applicable
Grading:	Grade Only
Repeatability:	00 - Two Repeats if Grade was D, F, NC, or NP
Also Listed As:	
Formerly:	

Catalog Description:
This course is the first half of a standard beginning algebra course, including equations and inequalities in one variable, integer exponents, polynomials, and equations and inequalities in two variables. The sequence MATH 150A/MATH 150B constitutes a complete course in beginning elementary algebra equivalent to a standard first year high school algebra course. Not open to those who have taken MATH 151 with a grade of "C" or better.

Prerequisites/Corequisites:
Course Completion of CSKLS 372 (or CSKL 372) OR Course Completion of CSKL 382 OR Completion of CSKLS 372 or higher (VE) OR Course Completion of DRD 382 (or LMATH 381)

Recommended Preparation:

Limits on Enrollment:

Schedule of Classes Information:
Description: This course is the first half of a standard beginning algebra course. The sequence MATH 150A/150B constitutes a complete course in beginning elementary algebra equivalent to

a standard first year high school algebra course. Not open to students who have taken MATH 151 with a grade of "C" or better. (Grade Only)
Prerequisites/Corequisites: Course Completion of CSKLS 372 (or CSKL 372) OR Course Completion of CSKL 382 OR Completion of CSKLS 372 or higher (VE) OR Course Completion of DRD 382 (or LMATH 381)
Recommended:
Limits on Enrollment:
Transfer Credit:
Repeatability: Two Repeats if Grade was D, F, NC, or NP

ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:

AS Degree:	**Area**	Effective:	Inactive:
CSU GE:	**Transfer Area**	Effective:	Inactive:
IGETC:	**Transfer Area**	Effective:	Inactive:

CSU Transfer:	Effective:	Inactive:
UC Transfer:	Effective:	Inactive:

CID:

Certificate/Major Applicable:
Both Certificate and Major Applicable

COURSE CONTENT

Outcomes and Objectives:
Upon successful completion of the course, students will be able to:
1. Solve advanced linear equations and inequalities in one variable and their applications.
2. Evaluate and solve formulas.
3. Graph linear equations and inequalities in two variables, including the slope-intercept method and finding the equation of a line.
4. Define a polynomial and perform the operations of addition, subtraction, multiplication, division, and factoring of polynomials.
5. Apply the laws of exponents to algebraic expressions.

Topics and Scope:

Instructional methodology may include, but is not limited to: lecture, demonstrations, oral recitation, discussion, supervised practice, independent study, outside project or other assignments.
I. Linear Equations and Inequalities in One Variable
   A. Linear equations
   B. Applications of linear equations
   C. Linear inequalities
II. Linear Equations and Inequalities in Two Variables
   A. Cartesian coordinate system
   B. Graphing linear equations

1. Slope-intercept method
2. Finding the equation of a line

C. Graphing linear inequalities
D. Introduction to function notation

III. Polynomials
A. Definition
B. Operations
C. Factoring
1. Common factors
2. Trinomials
3. Difference of squares
4. Sum and difference of cubes
5. Grouping

IV. Exponents
A. Natural number exponents
B. Laws of exponents
C. Integer exponents

V. Quadratic Equations
A. Solution by factoring
B. Applications

Assignment:

1. Daily reading outside of class (approximately 0-50 pages per week).
2. Problem set assignments from required text(s) or supplementary materials chosen by the instructor.
3. Exams and quizzes.
4. Projects (for example, calculator explorations and activities).

Methods of Evaluation/Basis of Grade:

Writing: Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

None, This is a degree applicable course but assessment tools based on writing are not included because problem solving assessments are more appropriate for this course.	Writing 0 - 0%

Problem Solving: Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Homework problems	Problem solving 5 - 20%

Skill Demonstrations: All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

None	Skill Demonstrations 0 - 0%

Exams: All forms of formal testing, other than skill performance exams.

Multiple choice, Free response exams, quizzes	Exams 70 - 95%

Other: Includes any assessment tools that do not logically fit into the above categories.

Projects	Other Category 0 - 10%

Representative Textbooks and Materials:
Text(s) required of each student will be selected by the department, a committee of the department, or the responsible instructor from the books currently available. Choices in the past have included:
Beginning Algebra (4th ed.). Martin-Gay, Elayn. Prentice-Hall: 2005.