

CATALOG INFORMATION

Dept and Nbr: MATH 150A Title: ELEM ALGEBRA 1
Full Title: First Half of Elementary Algebra
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 within the past 3 years with a grade of "C" or better.

Prerequisites/Corequisites:
CSKL 372.

Recommended Preparation:

Limits on Enrollment:

Schedule of Classes Information:
Description: First half of a standard beginning algebra course. The sequence MATH 150A/150B constitutes a complete course in beginning algebra, equivalent to a standard first year high school course. Not open to students who have taken MATH 151 within the past 3 years with a grade of "C" or better. (Grade Only)

Prerequisites/Corequisites: CSKL 372.

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:

Not Certificate/Major Applicable

COURSE CONTENT

Outcomes and Objectives:

To be successful, students should 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:

LINEAR EQUATIONS AND INEQUALITIES IN ONE VARIABLE

Linear equations and Applications, Inequalities.

LINEAR EQUATIONS AND INEQUALITIES IN TWO VARIABLES.

Cartesian coordinate system, Graphing linear equations and inequalities, Slope-intercept method. Finding the equation of a line. Introduction to function notation.

POLYNOMIALS

Definition and operations, Factoring (common factors, trinomials, difference of squares, sum and difference of cubes, grouping).

EXPONENTS

Natural number exponents, Law of exponents, Integer exponents.

QUADRATIC EQUATIONS

Solution by factoring, Applications.

Assignment:

1. The student will have daily outside reading, problem set assignments from required text(s), or instructor chosen supplementary materials.
2. Instructional methodology may include, but not limited to: lecture, demonstrations, oral recitation, discussion, supervised practice, independent study, outside project or other assignments.

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 and skill demonstrations 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, Exams

Problem solving
15 - 40%

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

Performance exams

Skill Demonstrations
50 - 75%

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

Multiple choice

Exams
5 - 25%

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

WRITING ASSIGNMENTS

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, (8th) by Lial/Miller/Hornsby Harper Collins, 1998
ELEMENTARY ALGEBRA (6th) by McKeague, Saunders, 1998.