## 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 |

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

Title 5 Category: AA Degree Applicable
Grading: Grade Only
Repeatability: $\quad 00$ - 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
CSU GE:
IGETC: Transfer Area
CSU Transfer:

UC Transfer:

## 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, includ ing 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.

Effective: Inactive:
Effective: Inactive:
Effective: Inactive:
Inactive:

Inactive:

## 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.


Problem Solving: Assessment tools, other than exams, that demonstrate competence in computational or noncomputational 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
Exams: All forms of formal testing, other than skill performance exams.

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

## WRITING ASSIGNMENTS

## Representative Textbooks and Materials:

$\operatorname{Text}(\mathrm{s})$ 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.

