

**MATH 150A Course Outline as of Spring 2020****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:**

The first half of a beginning algebra course, including equations and inequalities in one variable, integer exponents, polynomials, and equations and inequalities in two variables. The combination of MATH 150A and MATH 150B is equivalent to MATH 151. Not open to those who have taken MATH 151 with a grade of "C" or better.

**Prerequisites/Corequisites:**

Completion of CSKLS 372 or higher (VE) or Course Completion of DRD 382

**Recommended Preparation:****Limits on Enrollment:****Schedule of Classes Information:**

Description: The first half of a beginning algebra course, including equations and inequalities in one variable, integer exponents, polynomials, and equations and inequalities in two variables. The combination of MATH 150A and MATH 150B is equivalent to MATH 151. Not open to those who have taken MATH 151 with a grade of "C" or better. (Grade Only)

Prerequisites/Corequisites: Completion of CSKLS 372 or higher (VE) or Course Completion of

DRD 382

Recommended:

Limits on Enrollment:

Transfer Credit:

Repeatability: Two Repeats if Grade was D, F, NC, or NP

### **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

<b>AS Degree:</b>	<b>Area</b>	Effective:	Inactive:
<b>CSU GE:</b>	<b>Transfer Area</b>	Effective:	Inactive:
<b>IGETC:</b>	<b>Transfer Area</b>	Effective:	Inactive:
<b>CSU Transfer:</b>		Effective:	Inactive:
<b>UC Transfer:</b>		Effective:	Inactive:

**CID:**

**Certificate/Major Applicable:**

Certificate Applicable Course

### **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 related applications.
2. Evaluate and solve formulas.
3. Graph linear equations and inequalities in two variables, including the slope-intercept method, and find 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:**

- I. Linear Equations and Inequalities in One Variable
  - A. Linear equations
  - B. Applications of linear equations
  - C. Linear inequalities
  - D. Formulas
- II. Linear Equations and Inequalities in Two Variables
  - A. Cartesian coordinate system
  - B. Graphing linear equations, including the slope-intercept method
  - C. Finding the equation of a line
  - D. Graphing linear inequalities
- III. Integer Exponents and Laws of Exponents
- IV. Polynomials
  - A. Definition
  - B. Operations
  - C. Factoring

1. Common factors
  2. Trinomials
  3. Difference of squares
  4. Sum and difference of cubes
  5. Grouping
- V. Quadratic Equations
- A. Solution by factoring
  - B. Applications

**Assignment:**

1. Weekly reading outside of class (0-50 pages)
2. Homework problem sets (5-30)
3. Exams (3-6) and quizzes (0-20)
4. Projects (for example, calculator explorations and activities) (0-1)

**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.

Objective examinations (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:**

Beginning Algebra. 7th ed. Martin-Gay, Elayn. Prentice-Hall. 2016

