SOUTHEAST COMMUNITY COLLEGE
DIVISION OF ARTS AND SCIENCES
Mathematics
Revision Date: 01-01-25

I. CATALOG DESCRIPTION

Course Number:	MATH0950
Course Title:	Beginning Algebra
Prerequisites:	Grade of "C" or higher in MATH0900 or grade of "B" or higher in MATH0903 or appropriate score on the math placement test.
Catalog Description:	Study of operations with integers, solving linear equations and inequalities, writing linear equations, graphing lines and linear inequalities, working with Laws of Exponents and performing operations on polynomials, factoring polynomials, and performing operations on rational expressions.
Credit Hours:	3.0
Class Hours:	45
Lab Hours:	0
Total Contact Hours:	45

II. COURSE OBJECTIVES: *Course will*:

A. Develop a familiarity with the properties of the real number system.
B. Develop techniques to solve linear equations and inequalities.
C. Develop the use of the rectangular coordinate system.
D. Develop techniques for graphing linear equations and inequalities in two variables.
E. Teach students to solve linear systems of equations in two and three variables.
F. Teach students to solve linear systems of inequalities in two variables..**G**.Develop techniques of working with exponents and operations on polynomials.
H. Develop techniques for factoring polynomial expressions.

III. STUDENT LEARNING OUTCOMES AND GENERAL EDUCATION LEARNING OUTCOMES

A. Student Learning Outcomes**:** *Student will be able to:*
1. Simplify expressions using operations on the real number system.
2. Solve linear equations in one variable.
3. Solve linear inequalities in one variable.
4. Solve linear systems of equations in two and three variables.
5. Solve linear systems of inequalities in two variables.
6. Graph linear equations and inequalities in two variables.
7. Simplify expressions involving exponents.
8. Simplify polynomial expressions.
9. Solve applied problems.
10. Factor polynomials.

B. General Education Learning Outcomes
1. GELO #5: Analytical, Quantitative, and Scientific Reasoning
Outcome: Apply mathematical and scientific methods to solve problems from an array of contexts and everyday situations.

IV. CONTENT/TOPICAL OUTLINE (*course outline may provide more detailed information*)

A. Basic algebra skills are extended in this course to provide the background for further mathematics courses. Main units of this course are as follows:
1. Operations on Real Numbers and Algebraic Expressions
2. Equations and Inequalities in One Variable
3. Introduction to Graphing and Equations of Lines
4. Solving Systems of Linear Equations in Two and Three Variables.

5. Solving Systems of Linear Inequalities in Two Variables.
6. Exponents and Polynomials
7. Factor Polynomial

V. INSTRUCTIONAL MATERIALS

A. Required Text(s):

1. Sullivan, *Elementary & Intermediate Algebra*, 4th Edition, Pearson (Prentice Hall), 2018. (Note that your book will be available to you through MyMathLab Inclusive Access. Your instructor will provide you with the instructions on how this will work.)

B. Other resources: Scientific calculator recommended

VI. METHODS OF PRESENTATION/INSTRUCTION

A. Methods of presentation typically include a combination of the following:

1. Lecture
2. Small group discussion
3. Presentations and Guided Practice

VII. METHODS OF EVALUATION

A. Methods of evaluation typically include a combination of the following:

1. Attendance/Participation
2. Quizzes and/or Homework
3. Exams
4. Comprehensive Final Exam

B. SCC GRADING SCALE:

A+	95-100	C+	75-79	F	59 or less
A	90-94	C	70-74		
B+	85-89	D+	65-69		
B	80-84	D	60-64		

VIII. SPECIFIC COURSE REQUIREMENTS

A. None