

**SOUTHEAST COMMUNITY COLLEGE
DIVISION OF ARTS AND SCIENCES**

Mathematics

Revision Date: 2014-03-31

Term: 2014 Spring
Course: MATH-0950-ES31 (Beginning Algebra)
Class Time: MWF 9:30–10:50
Class Room: ESQ 111

Instructor: Toby Bartels, PhD
Email: TBartels@Southeast.edu
Voice mail: 402-323-3452
Text: 402-805-3021
Office Hour: MWF 13:00–15:00 CT (advising TT 10:00–12:00 CT)
Office: ESQ 112

Course policies are available at <http://TobyBartels.name/MATH-0950/2014s/>.

I. CATALOG DESCRIPTION

Course Number: MATH-0950
Course Title: Beginning Algebra
Prerequisites: A grade of C or higher in MATH-0900 or a grade of B or higher in MATH-0903 or an appropriate score on a math placement test.
Catalog Description: Study of operations with integers, solve linear equations and inequalities, solve linear absolute value equations and inequalities, write equations and graphing lines and linear inequalities, solve systems of equations, the Laws of Exponents, and operations with polynomials.
Credit Hours: 4.5
Class Hours: 40
Lab Hours: 0
Total Contact Hours: 40

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. Develop techniques for solving linear systems of equations in two variables.
- F. Develop techniques of working with exponents and operations on polynomials.

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 equations and inequalities involving absolute value.
 5. Graph linear equations and inequalities in two variables.
 6. Solve a system of linear equations in two variables.
 7. Simplify expressions involving exponents.
 8. Simplify polynomial expressions.
 9. Solve applied problems.

- B. General Education Learning Outcomes
 - 1. Thinking Critically: The ability to examine data, ideas, issues and arguments; understand and evaluate assumptions and evidence; and reach logically valid conclusions. *(GELO 2)*
 - 2. Problem Solving: The ability to define a problem, propose hypotheses and strategies for testing solutions, implement outcomes that address all factors of the problem, evaluate results, and define any need for further work. *(GELO 3)*
 - 3. Quantitative Reasoning – The ability to reason and solve quantitative problems in a variety of contexts utilizing mathematical manipulations such as words, data sets, graphs, tables, etc. *(GELO 6)*

IV. COURSE CONTENT

- A. Basic algebra skills are extended in this course to provide the background for further mathematics courses. The 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. Systems of Linear Equations
 - 5. Exponents and Polynomials

V. INSTRUCTIONAL MATERIALS

- A. Required Textbook: Sullivan, *Elementary & Intermediate Algebra*, 3rd Edition, Pearson (Prentice Hall), 2013, ISBN 321880116.
- B. Other resources: A scientific calculator is recommended.

VI. METHODS OF PRESENTATION/INSTRUCTION

- A. Lecture
- B. Small group discussion

VII. METHODS OF EVALUATION

- A. Homework
- B. Comprehensive Final Exam
- C. 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

None

SYLLABUS STATEMENTS

Statement of Equal Opportunity and Nondiscrimination

It is the policy of Southeast Community College to provide equal opportunity and non-discrimination in admission, attendance and employment matters for all qualified persons, attending or seeking admission to the College, without regard to race, color, ethnicity, religion, sex, age, marital status, national origin, veteran status, sexual orientation, disability, or other factors prohibited by law. Inquiries concerning the application of Southeast Community College's policies on equal opportunity and nondiscrimination should be directed to the Vice President for Access, Equity and Diversity, SCC Area Office, 301 S 68th Street Pl, Lincoln NE 68510-2449; Phone 402-323-3412; Fax 402-323-3420; Internet e-mail jsoto@southeast.edu.

Americans with Disabilities Act – Reasonable Accommodations

If you have a disabling condition that may substantially limit your ability to participate in this class, it is your responsibility to contact the Disability Services provider on campus. For additional information and assistance contact:

Lincoln	Room J2	402-437-2620
Milford	Assessment Office	402-761-8202
Beatrice	Jackson Hall – Room J406	402-228-8242

Academic Integrity

Academic Integrity is one of the basic principles of a college community. SCC encourages and expects the highest standards of academic honesty from all students. Please note that cheating, plagiarism, or other forms of academic dishonesty are monitored and subject to disciplinary action.

Electronic Devices

Personal use of any electronic device not authorized by the instructor is **prohibited**. **Violations may lead to formal disciplinary action.** Instructors, for instructional purposes, may allow in the classroom the **use of cell phones and personal electronic devices.**

Firearms/Weapons Strictly Prohibited

SCC policy prohibits the possession of firearms, weapons, or fireworks on College property or at any College-sponsored event. Effective January 1, 2007, Nebraska State Statute 69-2441 makes it unlawful to carry a concealed handgun into a meeting of the governing body of a political subdivision, collegiate athletic event, school, school grounds, school-owned vehicle, or school-sponsored activity or athletic event. These prohibitions apply to EVERYONE (employees, students, invitees, and visitors) and are enforceable EVERYWHERE (all college property and all college-related events.) Violations of these prohibitions will result in disciplinary and/or law enforcement action.