

SYLLABUS

DATE OF LAST REVIEW: 12/2019

CIP CODE: 24.0101

SEMESTER: Departmental Syllabus

COURSE TITLE: Elementary Algebra

COURSE NUMBER: MATH0099

CREDIT HOURS: 3

INSTRUCTOR: Departmental Syllabus

OFFICE LOCATION: Departmental Syllabus

OFFICE HOURS: Departmental Syllabus

TELEPHONE: Departmental Syllabus

EMAIL: Departmental Syllabus
KCKCC-issued email accounts are the official means for electronically communicating with our students.

PREREQUISITES: Students need to meet the correct placement measure for this course or have completed MATH0097 Math Essentials with a grade of “C” or better.

REQUIRED TEXT AND MATERIALS: Please check with the KCKCC bookstore <http://www.kckccbookstore.com> for the required text for your particular class.

COURSE DESCRIPTION: Elementary Algebra is an introductory course for students who have a solid foundation in arithmetic. Topics studied will include operations with signed numbers, linear equations and inequalities, problem solving, graphs of linear equations, operations with polynomials, factoring, quadratic equations, rational expressions, and radical expressions. Students will be expected to use appropriate technology as one tool to achieve competency in Elementary Algebra.

METHOD OF INSTRUCTION: A variety of instructional methods may be used depending on content area. These include but are not limited to: lecture, multimedia, cooperative/collaborative learning, labs and demonstrations, projects and presentations, speeches, debates, and panels, conferencing, performances, and learning experiences outside the classroom. Methodology will be selected to best meet student needs.

EXPECTED LEARNER OUTCOMES:

- A. The student will be able to perform arithmetic and algebraic manipulations.
- B. The student will be able to solve equations and inequalities.
- C. The student will be able to graph linear equations on a coordinate plane.
- D. The student will be able to analyze equations and graphs.

COURSE COMPETENCIES:

Upon successful completion of this course:

The student will be able to perform arithmetic and algebraic manipulations.

1. The student will be able to evaluate arithmetic expressions (including absolute values) using the order of operations and properties of real numbers.
2. The student will be able to evaluate and simplify algebraic expressions.
3. The student will be able to apply the laws of exponents to simplify expressions containing integer exponents.
4. The student will be able to express numbers in scientific notation.
5. The student will be able to perform addition, subtraction, multiplication, and division on polynomial expressions.
6. The student will be able to factor expressions with common factors, expressions that require grouping, trinomial expressions, and differences of squares.
7. The student will be able to perform addition, subtraction, multiplication, and division on rational expressions.
8. The student will be able to evaluate radicals, approximating those that are irrational.
9. The student will be able to simplify numeric radicals using the product and quotient rules.

The student will be able to solve equations and inequalities.

10. The student will be able to solve linear equations in one variable.
11. The student will be able to solve proportional equations.
12. The student will be able to solve linear inequalities in one variable showing solutions on the real number line.
13. The student will be able to solve literal equations that do not require factoring.
14. The student will be able to solve quadratic equations by factoring.
15. The student will be able to develop and solve mathematical models including number, geometry and percent applications.

The student will be able to graph linear equations on a coordinate plane.

16. The student will be able to plot points on a coordinate plane.
17. The student will be able to graph linear equations by plotting points (table of values).
18. The student will be able to graph linear equations using intercepts.
19. The student will be able to graph linear equations using the y-intercept and slope.

The student will be able to analyze equations and graphs.

20. The student will be able to identify the x-intercept, y-intercept, and slope of the line given its graph.
21. The student will be able to identify the x-intercept, y-intercept, and slope of the

- line given its equation.
22. The student will be able to determine the equation of a line given its graph, given its slope and y-intercept, and given its slope and a point on the line.
 23. The student will be able to determine equations of both horizontal and vertical lines.
 24. The student will be able to determine whether or not an equation is linear.
 25. The student will be able to calculate the slope of a line passing through two given points.

ASSESSMENT OF LEARNER OUTCOMES:

Student progress is evaluated by means that include, but are not limited to, exams, written assignments, and class participation.

The course grade is determined by this grading scale:

A = 90% and above

B = 80 - 89%

C = 70 - 79%

F = 69% and below

There is no grade of D in Elementary Algebra.

A comprehensive, proctored, departmental final exam will be given in all sections of Elementary Algebra. This final exam will count a minimum of 25% of each student's course grade.

SPECIAL NOTES:

Material included is intended to provide an outline of the course and rules that the instructor will adhere to in evaluating the student's progress. However, this syllabus is not intended to be a legal contract. Questions regarding the syllabus are welcome any time.

All enrolled students at Kansas City Kansas Community College are subject to follow all rules, conditions, policies and procedures as described in both the Student Code of Conduct as well as the Student Handbook. All Students are expected to review both of these documents and to understand their responsibilities with regard to academic conduct and policies. The Student Code of Conduct and the Student Handbook can be found on the KCKCC website.

STATEMENTS ON NON-DISCRIMINATION, HARASSMENT AND VIOLENCE, AND EDUCATIONAL EQUALITY

Non-Discrimination Policy Statement

Kansas City Kansas Community College is committed to promoting and sustaining a campus community which identifies and values the individuality of every community member and is dedicated to maintaining a positive environment where diversity is encouraged and fostered throughout the college. KCKCC strongly believes that diversity generates a positive image and awareness and community strength that encourages active involvement and helps enhance organizational effectiveness and culture. KCKCC

prohibits discrimination on the basis of race, religion, color, sex (including pregnancy, gender identity, and sexual orientation), parental status, national origin, age, disability, family medical history or genetic information, political affiliation, military service, or other non-merit based factors. All college actions and policies comply with all state, federal and local laws and regulations.

Harassment and Violence Statement

Kansas City Kansas Community College is committed to providing a non-discriminatory and harassment-free educational, living and working environment for all members of the campus community, including students, faculty, administrators, staff, trustees or visitors. This policy prohibits all forms of sexual or gender-based harassment and sexual assault.

Title IX, regulated by the Office of Civil Rights, prohibits discrimination on the basis of sex in federally funded education programs and activities. All schools who receive any federal financial assistance must comply with Title IX.

Deputy Title IX Coordinator: Sean Burkett, Employee Relations Manager,
sburkett@kckcc.edu or 913-288-7269, 7250 State Avenue, Kansas City, Kansas 66112.

Educational Equality Statement

Kansas City Kansas Community College is committed to a policy of educational equity. Accordingly, the College admits students, grants financial aid and scholarships, and conducts all educational programs, activities, and employment without regard to race, color, creed, religion, sex, national origin, age, sexual orientation, marital status, ancestry, veteran status, or disabilities.

Any person having inquiries concerning College compliance with regulations implementing Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, or the American with Disabilities Act of 1990, is directed to contact Human Resources, Kansas City Kansas Community College, 7250 State Avenue, Kansas City, Kansas 66112, Telephone (913) 288-7646.

Any person needing access to academic programs or college activities due to a documented disability is directed to contact the Student Accessibility and Support Services, 913-288-7664 for accommodations.

More information on these statements and additional resources are available through the links below.

<http://www.kckcc.edu/footer/statements>

<http://www.kckcc.edu/services/reporting/titleix>

<http://www.hhs.gov/ocr/office/file>

