JAMESTOWN COMMUNITY COLLEGE State University of New York

MASTER COURSE SYLLABUS

Course Title: Elementary Algebra

Course Abbreviation and Number: MAT 0500 Credit Hours: 3 imputed

Course Type: Lecture

Course Description: Students will learn basic algebraic skills necessary for further study in mathematics and many other disciplines which involve quantitative problems. Topics include a review of arithmetic and signed numbers, linear equations and inequalities, graphing and Cartesian coordinates, basic rules of exponents, polynomial arithmetic, and unit analysis. Problem-solving and applications are emphasized.

Prerequisite: MAT 0300, MAT 0400, or placement.

Student Learning Outcomes:

Students who demonstrate understanding can:

- 1. Solve algebraic equations by implementing various algebraic techniques and properties.
- 2. Apply algebraic and problem solving techniques to solve real world applications.
- 3. Synthesize, compare, and integrate the numerical, algebraic, graphical, and verbal representations of linear functions.
- 4. Use properties of exponents to simplify exponential expressions and perform arithmetic operations (addition, subtraction, and multiplication) on polynomials.

Topics Covered:

- Variables, Real Numbers, and Mathematical Models
- Linear Equations and Inequalities in One Variable
- Linear Equations in Two Variables
- Systems of Linear Equations
- Exponents and Polynomials

Information for Students

- Expectations of Students
 - Civility Statement (<u>http://www.sunyjcc.edu/current-students/classroom-civility</u>)
 - Student Responsibility Statement (<u>http://www.sunyjcc.edu/academics/student-responsibility</u>)
 - Academic Integrity (<u>http://www.sunyjcc.edu/faculty-staff/academic-integrity</u>)
- Disability/Special Services
 - Any student who requires accommodations to complete the requirements and expectations of this course because of a disability should make their needs known to the Coordinator of Accessibility Services, 716.338.1251.
- Emergency Closing Procedures (<u>http://www.sunyjcc.edu/student-life/campus-safety/jcc-alert</u>)
- Course grade is determined by the instructor based on a combination of factors, including but not limited to, homework, quizzes, exams, projects, and participation. Final course grade can be translated into a grade point value according to the following:

• Veterans and active duty military personnel with special circumstances (e.g., upcoming deployments, drill requirements, VA appointments) are welcome and encouraged to communicate these to the instructor.

Effective Date: Fall 2019