JAMESTOWN COMMUNITY COLLEGE

State University of New York

INSTITUTIONAL COURSE SYLLABUS

Course Title: Math for Elementary Teachers II

Course Abbreviation and Number: MAE 2520 Credit Hours: 3 Course Type: Lecture

Course Description: This is the second course in the Math for Elementary Teachers sequence. Students will develop the skills necessary to effectively teach mathematics at the elementary school level. Topics of study will include problem solving, operations within a variety of number systems (integers, rationals, reals), statistical problem solving and data analysis, principles of probability, and various topics in geometry. While there will be review of the basic mathematics used at the elementary school level, the emphasis of this course will be for students to understand why those mathematical procedures work and how to construct appropriate lessons and activities to illustrate the ideas to elementary students using a variety of concrete methods.

Prerequisites: Fulfillment of the math requirement in the student's degree program.

General Education Requirements Met

SUNY

Math

Student Learning Outcomes:

Students who demonstrate understanding can:

- 1. Interpret and draw inferences from appropriate mathematical models such as formulas, graphs, tables, or schematics. [SUNY Gen Ed Mathematics]
- 2. Represent mathematical information symbolically, visually, numerically, or verbally as appropriate. [SUNY Gen Ed Mathematics]
- 3. Employ quantitative methods such as arithmetic, algebra, geometry, or statistics to solve problems. [SUNY Gen Ed Mathematics]

Topics Covered:

- Properties and operations: integers, rational numbers, real numbers
- Solving equations and inequalities
- Identifying functions and their graphs
- Basic principles of statistics & data analysis
- Fundamental concepts in probability
- Properties of two and three-dimensional shapes
- Measurement
- Triangle congruence & similarity
- Concepts & applications of coordinate geometry
- Geometric transformations

Information for Students

- Expectations of Students
 - Civility Statement
 - Student Responsibility Statement
 - Academic Integrity Statement
- Accessibility Services

Students who require accommodations to complete the requirements and expectations of this course because of a disability must make their accommodation requests to the Accessibility Services Coordinator.

- Get Help: JCC & Community Resources
- Emergency Closing Procedures
- 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:

A=4.0 B+=3.5 B=3 C+=2.5 C=2 D+=1.5 D=1 F=

• 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: Spring 2023