JAMESTOWN COMMUNITY COLLEGE
State University of New York

INSTITUTIONAL COURSE SYLLABUS

Course Title: Problem Solving w/Mathematics

Course Abbreviation and Number: MAT 1500   **Credit Hours:** 3   **Course Type:** Lecture

Course Description: Students will develop problem solving skills through a detailed study of topics such as financial mathematics, linear and exponential modeling, and geometry, in concert with specific problem solving strategies such as drawing diagrams, making systematic lists, looking for patterns, identifying sub-problems, and working backwards. Solution presentations and communication are emphasized. Prerequisite: any developmental MAT course or eligibility for any college-level MAT course. Prerequisite/Corequisite: ENG 1510. J fall, spring; C fall, spring; Online fall, spring.

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:
- Unit analysis and scientific notation
- Percentages
- Financial mathematics
  - Personal finance
  - Simple & compound interest
  - Investments
  - Credit cards
  - Loans & mortgages
- Exponential and linear modeling
- Geometry
- Introduction to Statistics

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=0

- 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 2023