

**JAMESTOWN COMMUNITY COLLEGE**  
**State University of New York**

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**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.

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**General Education Requirements Met**

SUNY

Math

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**Student Learning Outcomes:**

Students who demonstrate understanding can:

1. Interpret and draw inferences from mathematical models such as formulas, graphs, tables, and schematics. [SUNY Gen Ed – Mathematics]
  2. Represent mathematical information symbolically, visually, numerically and verbally. [SUNY Gen Ed – Mathematics]
  3. Employ quantitative methods such as, arithmetic, algebra, geometry, or statistics to solve problems. [SUNY Gen Ed – Mathematics]
  4. Estimate and check mathematical and statistical methods. [SUNY Gen Ed – Mathematics]
  5. Recognize the limits of mathematical and statistical methods. [SUNY Gen Ed – Mathematics]
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**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
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**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
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- 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.
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**Effective Date:** Fall 2021