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

INSTITUTIONAL COURSE SYLLABUS

Course Title: Calculus/Analytic Geometry I

Course Abbreviation and Number: MAT 1710

Course Description: Students will study the fundamental concepts of calculus. Topics include an introduction to analytic geometry, functions, limits and continuity, and derivatives and integrals and their applications. An approved graphing calculator is required. A computer algebra system such as DERIVE is incorporated into the course.

Prerequisite: MAT 1600 or high school Precalculus or equivalent.

General Education	Requirements Met
SUNY	
Math	

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 results for reasonableness. [SUNY Gen Ed Mathematics]
- 5. Recognize the limits of mathematical and statistical methods. [SUNY Gen Ed Mathematics]

Topics Covered:

- **Functions and Graphs** •
- Limits and Continuity •
- Differentiation
- Additional Applications of the Derivative •
- Integration •
- Additional Applications of the Integral

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 $D+-5.3$ $D-3$ $C+-2.3$ $C-2$ $D+-1.3$ $D-1$ $I-0$
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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.

Effective Date: Fall 2021

Course Type: Lecture

Credit Hours: 4