## JAMESTOWN COMMUNITY COLLEGE

# **State University of New York**

# INSTITUTIONAL COURSE SYLLABUS

Course Title: Calculus/Analytic Geometry I

Course Abbreviation and Number: MAT 1710 Credit Hours: 4 Course Type: Lecture

**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 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:**

- 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	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