

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 about functions and their properties, limits, derivatives, and integrals from appropriate mathematical models such as graphs, function notation, coordinate tables, and sign tables. [SUNY Gen Ed – Mathematics]
 2. Represent mathematical information such as limits, discontinuities, derivatives, extrema, inflection points, and integrals symbolically, graphically, and numerically, as appropriate. [SUNY Gen Ed – Mathematics]
 3. Employ quantitative methods such as limit evaluation, differentiation, and integration to solve problems. [SUNY Gen Ed – Mathematics]
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Topics Covered:

- Functions and Graphs
 - Limits and Continuity
 - Differentiation
 - Additional Applications of the Derivative
 - Integration
 - Additional Applications of the Integral
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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: Spring 2026