

JAMESTOWN COMMUNITY COLLEGE
State University of New York

INSTITUTIONAL COURSE SYLLABUS

Course Title: Calculus/BUS/Social Science I

Course Abbreviation and Number: MAT 1630

Credit Hours: 3

Course Type: Lecture

Course Description: Students will study an introduction to differential calculus of functions of a single variable with applications to the behavioral, management, and social sciences. Topics include limits, continuity, derivatives, and applications of derivatives for algebraic, exponential, and natural logarithm functions.

Prerequisite: MAT 1530 or MAT 1600 or high school Precalculus or equivalent. A student cannot receive graduation credit for both MAT 1630 and MAT 1710.

Student Learning Outcomes:

Students who demonstrate understanding can:

1. Interpret and draw inferences from mathematical models such as formulas, graphs, tables, and schematics.
2. Represent mathematical information symbolically, visually, numerically and verbally.
3. Employ quantitative methods such as, arithmetic, algebra, geometry, or statistics to solve problems
4. Estimate and check mathematical results for reasonableness.
5. Recognize the limits of mathematical and statistical methods.

Topics Covered:

- Functions
- The Derivative
- Applications of the Derivative
- Techniques of Differentiation
- Logarithmic Functions

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.

Effective Date: Fall 2023