

JAMESTOWN COMMUNITY COLLEGE
State University of New York

INSTITUTIONAL COURSE SYLLABUS

Course Title: Applied Technical Calculus

Course Abbreviation and Number: MAT 1250

Credit Hours: 4

Course Type: Lecture

Course Description: Students will learn applications of derivatives and integrals. Illustrative examples are provided for the electrical, mechanical, computer technology and physics disciplines. A computer algebra system such as Derive is incorporated into the course. The course is designed to meet the specialized needs of technology students and is not intended for engineering or mathematics majors.

Prerequisite; MAT 1590 or higher, or MAT 1220, or placement.

Student Learning Outcomes:

Students who demonstrate understanding can:

1. Use exponential functions to solve problems typically seen in technology-related disciplines
 2. Use logarithmic functions to solve problems typically seen in technology-related disciplines
 3. Apply derivatives to solve problems typically seen in technology-related disciplines
 4. Apply integrations to solve problems typically seen in technology-related disciplines
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Topics Covered:

- Exponential and Radicals
 - Exponential and Logarithmic Functions
 - The Derivative
 - Applications of the Derivative
 - Integration
 - Applications of Integration
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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