# JAMESTOWN COMMUNITY COLLEGE

**State University of New York** 

## INSTITUTIONAL COURSE SYLLABUS

Course Title: Precalculus

Course Abbreviation and Number: MAT 1600 Credit Hours: 4 Course Type: Lecture

**Course Description:** Students will learn topics necessary for studying calculus and discrete mathematics. Algebra topics include rational and polynomial functions. Trigonometry topics include graphs, identities, half and double-angle formulas, and inverse trig functions. Other topics include exponential and logarithmic functions, and an introduction to limits. An approved graphing calculator is required.

Prerequisite: MAT1590 (or higher); or as determined by college placement.

## **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:**

- Equations, Inequalities, and Functions
- Quadratic Functions and Models
- Polynomial and Rational Functions
- Limits and derivatives of functions
- Exponential and Logarithmic Functions
- Trigonometric Functions
- Analytic Trigonometry

## **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