

JAMESTOWN COMMUNITY COLLEGE
State University of New York

INSTITUTIONAL COURSE SYLLABUS

Course Title: Manufacturing Drawings & GD&T

Course Abbreviation and Number: MCT 1340

Credit Hours: 4

Course Type: Lecture

Course Description: Students will gain further exposure to actual manufacturing drawings and other information provided. The first part of the course will cover the ability to read, interpret, and construct manufacturing drawings. The second part will introduce the students to geometric tolerance and dimensioning.

Prerequisite: MCT 1240; **Prerequisite / Corequisite:** MCT1380; **Eligibility:** MAT1590.

Student Learning Outcomes:

Students who demonstrate understanding can:

1. Explain drawing views and line types including what they represent.
 2. Apply dimensions and tolerances in accordance with the most recent ASME Y14.5 standard.
 3. Interpret and explain the meaning of drawing symbols and geometric dimensions and tolerances.
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Topics Covered:

- Review of Drawings & Blueprints
 - Lines
 - Orthographic projection
 - Assembly drawings
 - Dimensions and tolerances
 - Manufacturing Drawing Topics
 - Print reading (including prints from a variety of manufacturing processes)
 - Thread Representation and Specification
 - Specifications and symbols for machining and fabrication processes.
 - Geometric Dimensioning and Tolerancing
 - History of GD&T
 - Advantages/Disadvantages
 - Datum Reference Frames
 - Read, Interpret, and Apply GD&T Tolerance Specifications
 - Demonstrate methods for inspecting parts with GD&T specifications (manually and with a coordinate measurement machine [CMM])
 - Introduction to 3D scanning
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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 2025