JAMESTOWN COMMUNITY COLLEGE

State University of New York

INSTITUTIONAL COURSE SYLLABUS

Course Title: Machine Theory and Operations

Course Abbreviation and Number: MCT 1270 Credit Hours: 3 Course Type: Lecture/Lab

Course Description: Students will learn the function and operation of basic chip producing machine tools such as lathes,

drill, milling machines, saws, and grinders.

Eligibility: MAT 1590 or Corequisite: MAT 0550.

Student Learning Outcomes:

After successful completion of this course, students will be able to:

- 1. Describe the basic operation of chip-producing machine tools.
- 2. Identify procedures relating to inspection and measurement of work pieces.
- 3. Explain machine operation safety procedures.

Topics Covered:

- Safety
- An Introduction to the Development of Machine Tools
- Shop Math
- Linear Measurement and Tolerance
- Angular Measurement
- Metal Cutting Saws

- Drill Presses
- Screw Threads
- Engine Lathes
- Milling Machines
- Grinding Machines

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