JAMESTOWN COMMUNITY COLLEGE State University of New York

INSTITUTIONAL COURSE SYLLABUS

Course Title: Machine Tool Tech. III

Course Abbreviation and Number: MCT 2300 Credit Hours: 3 Course T

Course Type: Lecture/Lab

Course Description: Students will gain additional exposure in setting up and running CNC machine tools such as lathes, mills, and EDM equipment. Students will concentrate on the set-up and machining utilizing CNC programs of more complex parts using the CNC equipment.

Prerequisites: MCT 1300 Eligibility MAT 1590.

Student Learning Outcomes:

Students who demonstrate understanding can:

- 1. Explain and demonstrate proper and safe set-up of work pieces in the CNC equipment (lathes and mills).
- 2. Explain and demonstrate proper CNC machine start-up and shut-down procedures.
- 3. Explain axis orientation and MDI operation.
- 4. Explain and demonstrate programming options and program editing.
- 5. Explain the use of tool holders and tolling options.
- 6. Explain the "first part" procedure.
- 7. Perform independent projects of moderate difficulty on both lathes and mills.

Topics Covered:

- Review Machine Tool Safety
- Determination of Equipment for operations.
- CNC Mill
- CNC Lathes
- Lab Outline and Projects

Information for Students

- Expectations of Students
 - <u>Civility Statement</u>
 - <u>Student Responsibility Statement</u>
 - Academic Integrity Statement
- <u>Accessibility Services</u>

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
- <u>Emergency Closing Procedures</u>
- 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