

NORTHWESTERN CONNECTICUT COMMUNITY COLLEGE

COURSE SYLLABUS

Course Title: Manufacturing Machinery – CNC 1

Course #: MFG 156

Course Description:

This course explains methods for operating and set-up of CNC Milling and Turning machines. Related topics also include shop safety, print reading, hand tools, measurement, layout work and cutting fluids. Students will apply classroom lessons to the fabrication of parts on CNC equipment.

Pre-requisite/Co-requisite: Reading exempt or permission of the instructor.

Goals: To develop the skills necessary for operating and set-up of typical CNC milling / turning machines.

Outcomes: Upon successful completion of this course each student must have demonstrated understanding and competency in each of the following topics and techniques (thru in-class testing of each individual student independently):

- Demonstrate ability to interpret basic OSHA requirements, MSDS information, and general shop safety.
- Identify a router / job sheet and interpret information as needed to operate a CNC machine.
- Demonstrate the ability to read basic part prints as it relates to gauging, dimensioning, and tolerancing.
- Recognize, name, and describe the function of the primary components of a CNC mill / turning machine.
- Correctly perform preventative maintenance.
- Determine when a malfunction has occurred and respond appropriately.
- Safely power up, locating program, and loading a program, and Homing the CNC machine
- Demonstrate JOG functions.
- Measure tooling, inserting tooling into tool holder, and loading tools into CNC machine.
- Set-up work piece in to holding fixture.
- Locate work piece zero.
- Interpret CNC program.
- Demonstrate the ability to use tool WEAR offsets.
- Safely power down the CNC machine and return tooling to appropriate location.
- Perform general housekeeping.

College Policies

Plagiarism: Plagiarism and Academic Dishonesty are not tolerated at Northwestern Connecticut Community College. Violators of this policy will be subject to sanctions ranging from failure of the assignment (receiving a zero), failing the course, being removed/expelled from the program and/or the College. Please refer to your “Student Handbook” under “Policy on Student Rights,” the Section entitled “Student Discipline,” or the College catalog for additional information.

Americans with Disabilities Act (ADA): The College will make reasonable accommodations for persons with documented learning, physical, or psychiatric disabilities. Students should notify Dr. Christine Woodcock, the Counselor for Students with Disabilities. She is located at Green Woods Hall, in the Center for Student Development. Her phone number is 860-738-6318 and her email is cwoodcock@nwcc.edu.

School Cancellations: If snowy or icy driving conditions cause the postponement or cancellation of classes, announcements will be made on local radio and television stations and posted on the College’s website at www.nwcc.edu. Students may also call the College directly at **(860) 738-6464** to hear a recorded message concerning any inclement weather closings. Students are urged to exercise their own judgment if road conditions in their localities are hazardous.

"Some course content as presented in Blackboard Learn is not fully supported on mobile devices at this time. While mobile devices provide convenient access to check in and read information about your courses, they should not be used to perform work such as taking tests, quizzes, completing assignments, or submitting substantive discussion posts."

Sexual Assault and Intimate Partner Violence Resource Team: NCCC is committed to creating a community that is safe and supportive of people of all gender and sexual identities. This pertains to the entire campus community, whether on ground or virtual, students, faculty, or staff.

Sexual assault and intimate partner violence is an affront to our national conscience, and one we cannot ignore. It is our hope that no one within our campus community will become a victim of these crimes. However, if it occurs, NCCC has created the SART Team - Sexual Assault and Intimate Partner Violence Resource Team - to meet the victim’s needs.

SART is a campus and community based team that is fully trained to provide trauma-informed compassionate service and referrals for comprehensive care. The team works in partnership with The Susan B. Anthony Project to extend services 24 hours a day, 7 days a week throughout the year.

The NCCC team members are:

Ruth Gonzalez, PHD	860-738-6315	Greenwoods Hall Room 220
Susan Berg	860-738-6342	Greenwoods Hall Room 223
Kathleen Chapman	860-738-6344	Greenwoods Hall Room 110
Michael Emanuel	860-738-6389	Founders Annex Room 308
Gary Greco	860-738-6397 (V) 860-469-3138 (VP)	Founders Hall Room 101
Robin Orlomoski	860-738-6416	Business Office Room 201
Patricia Bouffard, Ex-Officio	860-738-6319	Founders Hall Room 103

At NCCC we care about our students, staff and faculty and their well-being. It is our intention to facilitate the resources needed to help achieve both physical and emotional health.