



Syllabus for Introduction to Computer Numerical Control

Course Information

Semester & Year: Fall 2021

Course ID & Section #: MT-54A-E2271

Instructor's name: Mike Peterson

Day/Time of required meetings: Mondays and Wednesdays / 2:50 to 5:50 PM

Locations: Lecture AT106 at 2:50 PM / Laboratory AT133 at 4:25 PM

Course units: 4.0

Instructor Contact Information

Office location: AT122

Office hours: Mondays and Wednesdays 1:30 to 2:00 PM, and by appointment.

Phone number: (707) 476-4350

Email address: mike-peterson@redwoods.edu

This class has a Canvas Inbox Messaging system, please contact me there as our primary method of remote communication.

Catalog Description

An introductory course in Computer Numerical Control (CNC) machining. Students will learn to program, set up, and operate CNC machine tools including vertical machining centers. This course will introduce industry standard programming protocols, machine specific parameters, and applications for CNC systems in the manufacturing industry.

Course Student Learning Outcomes From Course outline of Record

1. Program, set up, and operate CNC machine tools to perform basic machining operations.
2. Research and report on current topics in the manufacturing industry.

Prerequisites/Co-Requisites/Recommended Preparation

This course has no prerequisite.

Required Materials

Textbook Title: *CNC Programming Principles and Applications*

Edition: 2

Author: Michael Mattson

ISBN: 1418060992

Other requirements: Safety glasses and sturdy shoes

Accessibility

College of the Redwoods is committed to making reasonable accommodations for qualified students with disabilities. If you have a disability or believe you might benefit from disability-related services and accommodations, please contact your instructor or [Disability Services and Programs for Students \(DSPS\)](#). Students may make requests for alternative media by contacting DSPS based on their campus location:

- Eureka: 707-476-4280, student services building, 1st floor
- Del Norte: 707-465-2324, main building near library
- Klamath-Trinity: 530-625-4821 Ext 103

If you are taking online classes DSPS will email approved accommodations for distance education classes to your instructor. In the case of face-to-face instruction, please present your written accommodation request to your instructor at least one week before the needed accommodation so that necessary arrangements can be made. Last minute arrangements or post-test adjustments usually cannot be accommodated.

Student Support

Good information and clear communication about your needs will help you be successful. Please let your instructor know about any specific challenges or technology limitations that might affect your participation in class. College of the Redwoods wants every student to be successful.

Evaluation & Grading Policy

Your final grade for the course will be based on the following criteria:

1. Laboratory Assignments	35%
2. Laboratory Activities	5%
3. Research Project	5%
4. Quizzes and Written Assignments	15 %
5. Midterm Examination	20 %
6. Final Examination	20 %

Details for each of these criteria will be provided by additional course documents.

Grades will be assigned according to these percentages:

A = 90 – 100%
B = 80 – 89%
C = 70 – 79%
D = 60 – 69%
F = 0 – 59%

Class Schedule

All course meeting dates are detailed in a separate document titled *Schedule Document for MT-54A Fall 2021.pdf*.

Classroom and Laboratory Policies

All COVID-19 related protocols and policies will be enforced in this class. We can expect these protocols to change throughout the semester. In addition, the following policies will be in effect for this class.

1. Students are expected to follow the College of the Redwoods Student Code of Conduct Standards. Please review the Student Code of Conduct in the CR catalog or on the CR website.
2. When the CNC machines are operating, safety glasses are required in the machine room and must be worn by everyone at all times, regardless of their proximity to running machines.
3. Sturdy shoes are required and must be worn in the machine laboratory at all times. No open-toe shoes will be allowed.

4. Any and all personal injuries in the classroom or laboratory must be reported to the instructor immediately.
5. Report any unsafe conditions immediately to the instructor.
6. The classroom and laboratory will only be available to registered MT-54A students during our class time. The manual machine shop will not be available for any students.
7. Food and beverages will not be consumed in the classroom or laboratory; college policy prevents you from removing your face covering indoors. We will take frequent breaks, feel free to take a moment outside as needed.
8. Parking in the fenced yard behind the laboratory is for short-term loading and unloading, and staff vehicles only.
9. Security of your assignment files is important. Do not leave your assignment files on any laboratory computers or machine controllers/simulators. Do not leave paper copies and printouts of your assignments in the laboratory. When you are finished using a computer or machine controller/simulator, delete your assignment files.

Final Examination

The final examination for this class is Monday, December 13, 2021 from 3:15 to 5:15 PM.

Admissions deadlines & enrollment policies

Fall 2021 Dates

- *Classes begin: August 21, 2021*
- *Last day to add a class: August 27, 2021*
- *Last day to drop without a W and receive a refund: September 3, 2021*
- *Labor Day Holiday (all campuses closed): September 6, 2021*
- *Census date: September 7, 2021 or 20% into class duration*
- *Last day to petition to graduate or apply for certificate: October 28, 2021*
- *Last day for student-initiated W (no refund): October 29, 2021*
- *Last day for faculty-initiated W (no refund): October 29, 2021*
- *Veteran's Day (all campuses closed): November 11, 2021*
- *Fall Break (no classes): November 22, 2021 through November 26, 2021*
- *Thanksgiving Holiday (all campuses closed): November 24, 2021 through November 26, 2021*
- *Final examinations: December 11, 2021 through December 17, 2021*
- *Last day to petition to file P/NP option: December 17, 2021*
- *Semester ends: December 17, 2021*
- *Grades available for transcript release: approximately January 7, 2022*

Academic dishonesty

In the academic community, the high value placed on truth implies a corresponding intolerance of scholastic dishonesty. In cases involving academic dishonesty, determination of the grade and of the student's status in the course is left primarily to the discretion of the faculty member. In such cases, where the instructor determines that a student has demonstrated academic dishonesty, the student may receive a failing grade for the assignment and/or exam and may be reported to the Chief Student

Services Officer or designee. The Student Code of Conduct ([AP 5500](#)) is available on the College of the Redwoods website. Additional information about the rights and responsibilities of students, Board policies, and administrative procedures is located in the [College Catalog](#) and on the [College of the Redwoods website](#).

Disruptive behavior

Student behavior or speech that disrupts the instructional setting will not be tolerated. Disruptive conduct may include, but is not limited to: unwarranted interruptions; failure to adhere to instructor's directions; vulgar or obscene language; slurs or other forms of intimidation; and physically or verbally abusive behavior. In such cases where the instructor determines that a student has disrupted the educational process, a disruptive student may be temporarily removed from class. In addition, the student may be reported to the Chief Student Services Officer or designee. The Student Code of Conduct ([AP 5500](#)) is available on the College of the Redwoods website. Additional information about the rights and responsibilities of students, Board policies, and administrative procedures is located in the [College Catalog](#) and on the [College of the Redwoods website](#).

Inclusive Language in the Classroom

College of the Redwoods aspires to create a learning environment in which all people feel comfortable in contributing their perspectives to classroom discussions. It therefore encourages instructors and students to use language that is inclusive and respectful.

Setting Your Preferred Name in Canvas

Students have the ability to have an alternate first name and pronouns to appear in Canvas. Contact [Admissions & Records](#) to request a change to your preferred first name and pronoun. Your Preferred Name will only be listed in Canvas. This does not change your legal name in our records. See the [Student Information Update form](#).

Canvas Information

If using Canvas, include navigation instructions, tech support information, what Canvas is used for, and your expectation for how regularly students should check Canvas for your class.

Log into Canvas at <https://redwoods.instructure.com>

Password is your 8 digit birth date

For tech help, email its@redwoods.edu or call 707-476-4160

Canvas Help for students: <https://webapps.redwoods.edu/tutorial/>

Canvas online orientation workshop: [Canvas Student Orientation Course \(instructure.com\)](#)

Community College Student Health and Wellness

Resources, tools, and trainings regarding health, mental health, wellness, basic needs and more designed for California community college students, faculty and staff are available on the California Community Colleges [Health & Wellness website](#).

[Wellness Central](#) is a free online health and wellness resource that is available 24/7 in your space at your pace.

Students seeking to request a counseling appointment for academic advising or general counseling can email counseling@redwoods.edu.

Emergency procedures / Everbridge

College of the Redwoods has implemented an emergency alert system called Everbridge. In the event of an emergency on campus you will receive an alert through your personal email and/or phones.

Registration is not necessary in order to receive emergency alerts. Check to make sure your contact information is up-to-date by logging into WebAdvisor <https://webadvisor.redwoods.edu> and selecting 'Students' then 'Academic Profile' then 'Current Information Update.'

Please contact Public Safety at 707-476-4112 or security@redwoods.edu if you have any questions. For more information see the [Redwoods Public Safety Page](#).

In an emergency that requires an evacuation of the building anywhere in the District:

- Be aware of all marked exits from your area and building
- Once outside, move to the nearest evacuation point outside your building
- Keep streets and walkways clear for emergency vehicles and personnel

Do not leave campus, unless it has been deemed safe by the campus authorities.

Eureka Campus Emergency Procedures

Please review the [campus emergency map](#) for evacuation sites, including the closest site to this classroom (posted by the exit of each room). For more information on Public Safety go to the [Redwoods Public Safety Page](#). It is the responsibility of College of the Redwoods to protect life and property from the effects of emergencies within its own jurisdiction.

In the event of an emergency:

1. Evaluate the impact the emergency has on your activity/operation and take appropriate action.
2. Dial 911, to notify local agency support such as law enforcement or fire services.
3. Notify Public Safety 707-476-4111 and inform them of the situation, with as much relevant information as possible.
4. Public Safety shall relay threat information, warnings, and alerts through the Everbridge emergency alert system, Public address system, and when possible, updates on the college website, to ensure the school community is notified.
5. Follow established procedures for the specific emergency as outlined in the College of the Redwoods Emergency Procedure Booklet, (evacuation to a safe zone, shelter in place, lockdown, assist others if possible, cooperate with First Responders, etc.).
6. If safe to do so, notify key administrators, departments, and personnel.
7. Do not leave campus, unless it is necessary to preserve life and/or has been deemed safe by the person in command.

Student Support Services

The following online resources are available to support your success as a student:

- [CR-Online](#) (Comprehensive information for online students)
- [Library Articles & Databases](#)
- [Canvas help and tutorials](#)
- [Online Student Handbook](#)

[Counseling](#) offers assistance to students in need of professional counseling services such as crisis counseling.

The Learning Resource Center includes the following resources for students:

- [Academic Support Center](#) for instructional support, tutoring, learning resources, and proctored exams. Includes the Math Lab & Drop-in Writing Center
- [Library Services](#) to promote information literacy and provide organized information resources.
- [Multicultural & Diversity Center](#)

Special programs are also available for eligible students include

- [Extended Opportunity Programs & Services \(EOPS\)](#) provides services to eligible income disadvantaged students including: textbook award, career academic and personal counseling, school supplies, transportation assistance, tutoring, laptop, calculator and textbook loans, priority registration, graduation cap and gown, workshops, and more!
- The TRiO Student Success Program provides eligible students with a variety of services including trips to 4-year universities, career assessments, and peer mentoring. Students can apply for the program in [Eureka](#) or in [Del Norte](#)
- The [Veteran's Resource Center](#) supports and facilitates academic success for Active Duty Military, Veterans and Dependents attending CR through relational advising, mentorship, transitional assistance, and coordination of military and Veteran-specific resources.
- Klamath-Trinity students can contact the CR KT Office for specific information about student support services at 530-625-4821

Additional Information

Thank you for enrolling in this course at College of the Redwoods. The most important people on the campus are the students. If there is anything that I can do to help make your experience at the college better, please feel free to contact me with any and all questions or concerns. My classrooms and laboratories are safe environments for every student. This syllabus is subject to change.