Course Information

Semester & Year: Spring 2023
Course ID & Section #: MT-59B-E4820
Instructor's name: Mike Peterson
Day/Time of required meetings: Lecture, Mondays and Wednesdays / 4:30 to 5:55 PM
                                                    Laboratory, Mondays / 6:30 to 9:40 PM

Location: AT133
Course units: 4.0

Instructor Contact Information

Office location: AT122
Office hours: 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 advanced course in computer-aided manufacturing (CAM) using Mastercam software. Students will create complex three-dimensional virtual surfaces and solids as virtual models that will be used to develop advanced tool path programming for computerized machine tools. This course covers innovative applications of CAM systems in the manufacturing industry.

Course Student Learning Outcomes

1. Create Mastercam programs, incorporating wireframe, surface, and solid models for multi-axis machining.
2. Plan machining operations, select tooling, set parameters, and produce machine parts, utilizing computers and CNC machine tools.

Prerequisites / Co-Requisites / Recommended Preparation

This course requires prior successful completion of MT-59A, Mastercam 2D Programming.

Required Materials

Textbook title: Mastercam 2022 Mill Advanced Training Tutorial
Author: In-House Solutions
ISBN: 9781771469449

Textbook title: Mastercam 2022 Solids Training Tutorial
Author: In-House Solutions
ISBN: 9781771469500

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 and Grading Policy

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

1. Laboratory Assignments   35%
2. Textbook Tutorials   10%
3. Course Project   5%
4. Quizzes and Written Assignments   10%
5. Midterm Examination   20%
6. Final Examination   20%

Details for each of these criteria will be provided on 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%

Classroom and Laboratory Policies

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 machine laboratory is 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. All personal injuries in the classroom or laboratory must be reported to the instructor immediately.

5. Report any unsafe conditions immediately to the instructor.

7. Do not eat any food including candy, chips, snacks, etc. in the classroom. You may consume beverages from spill-resistant containers.

8. Parking in the fenced yard behind the laboratory is for short-term loading and unloading, and staff vehicles only.

Final Examination
The final examination for this class is Wednesday, May 10, 2023, from 3:15 to 5:15 PM.

Admissions Deadlines and Enrollment Policies
Spring 2023 Dates
- *Classes begin: January 14, 2023*
- *Martin Luther King's Birthday (all campuses closed): January 16, 2023*
- *Last day to drop without a W and receive a refund: January 27, 2023*
- *Census date: January 30, 2023, or 20% into class duration*
- *Last day to petition to file P/NP option: February 10, 2023*
- *Lincoln's Birthday (all campuses closed): February 17, 2023*
- *President's Day (all campuses closed): February 20, 2023*
- *Last day to petition to graduate or apply for certificate: March 2, 2023*
- *Spring Break (no classes): March 13 through 18, 2023*
- *Last day for student-initiated W (no refund): March 31, 2023*
- *Last day for faculty-initiated W (no refund): March 31, 2023*
- *Final examinations: May 6 through 12, 2023*
- *Semester ends: May 12, 2023*

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 can 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 [My CR Portal](#)
For help logging in to Canvas, visit [My CR Portal](#).
For help with Canvas once you're logged in, click on the Help icon on the left menu.
For tech help, email [its@redwoods.edu](#) or call 707-476-4160
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 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 CR Police Department-Public Safety 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
- Online Tutoring Resources

Counseling offers assistance to students in need of professional counseling services such as crisis counseling.

Learning Resource Center includes the following resources for students

- Library Services to promote information literacy and provide organized information resources.
- Multicultural & Diversity Center
- Academic Support Center – offers tutoring and test proctoring for CR students.
- Student Tech Help – provides students with assistance around a variety of tech problems.

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.

- [CalWORKS](#) – assists student parents with children under the age of 18, who are receiving cash assistance (TANF), to become self-sufficient.
- Klamath-Trinity students can contact the CR KT Office for specific information about student support services at 530-625-4821

Thank You

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 all questions or concerns. My classrooms and laboratories are safe environments for every student.