

 Edit

Summer 2026

College of the Redwoods



Course Information

Semester & Year: Summer 2026

Course ID & Section #number: DT-23-V2942-2026X Engineering Design Graphics

Instructor's name: Douglas Hartling

Day/Time of required meetings: Asynchronous

Location: Online

Number of proctored exams: 0

Course units: 3.0 Units / LEC-LAB



Instructor Contact Information

Course location or Online: <https://redwoods.instructure.com/courses/22436/assignments/syllabus>

Office hours: By appointment



Phone number: (707) 499-8313


Email address: douglas-hartling@redwoods.edu

Canvas In-box is the quickest way to get a message to me.

I check email daily, though sometimes not until late in the evening.



Required Material

A workstation (computer) with internet access and capable of running the latest version of AutoCAD. See system requirements [HERE](#) 

<https://www.autodesk.com/support/technical/article/caas/sfdcarticles/sfdcarticles/System-requirements-for-AutoCAD-2027-including-Specialized-Toolsets.html>. Widescreen or multiple monitors are highly recommended.

Other Materials: Mechanical Drafting Pencils in 0.5mm and 0.9mm sizes. HB drafting lead for mechanical pencils. Clear plastic scale or triangle straight edge, vinyl eraser, and (optional) thin metal erasing shield. [See supplies.](#)

<https://redwoods.instructure.com/courses/22436/pages/drafting-supplies-for-dt-23>



Catalog Description

A study of engineering design graphics for engineers and drafters with an emphasis on technical drawings and an introduction to computer-aided design (CAD). Topics include the development of visualization skills; orthographic projections; dimensioning and tolerancing practices; and the engineering design process. Assignments develop sketching and 2-D and 3-D CAD skills. The use of CAD software is an integral part of the course



Course Student Learning Outcomes



1. Develop orthographic projections, isometrics, obliques, and perspective pictorial representations of designs using CAD and sketching.
2. Present engineering drawings using current industry standard documentation and annotation techniques.
3. Define terminology related to engineering graphics.
4. Prepare a professional portfolio.



Course Calendar



Evaluation & Grading Policy

Methods of Evaluation: The final grade you receive will be based on the following criteria:

50% Drawings	Grade Scale: 100% - 90%	A
10% Discussions	89% - 80%	B
10% Participation	79% - 70%	C
10% Portfolio	69% - 60%	D
10% Midterm	59% - 50%	F
10% Final		

*Late work, for any reason, is penalized 20% and will not be accepted for credit more than 2 weeks after it is due.

*Per CR policy, students with 4 absences prior to the end of the 10th week will be dropped from the course.

Grading Methods:

Each assignment is graded separately for each student, meaning there is no curve. For each incorrect portion of the drawing, $\frac{1}{2}$ a point will be deducted from the drawing's grade. This can be changed depending on the severity of the mistake by the instructor.

Participation is based on taking a quiz on Canvas at the beginning of each class. Students will have 10 minutes total for the quiz; 5 minutes prior to the start of class and 5 minutes after the beginning of class. Students will get 2 points on each quiz regardless of answering questions correctly or not. If a student leaves early, they will lose 1 point. At the end of the semester, the instructor may add or subtract points depending on class participation and attitude.

Assignments are weighted by group:

Group	Weight
Drawings	50%
Discussions	10%
Participation	10%
Portfolio	10%
Midterm Exam	10%
Final Exam	10%
Total	100%

**Prerequisites / Co-requisites / Recommended Preparation**

Recommended Preparation: **CISI00 STRONGLY RECOMMENDED**

Prerequisite: None







Educational Accessibility & Support

College of the Redwoods is committed to providing reasonable accommodations for qualified students who could benefit from additional educational support and services. You may qualify if you have a physical, mental, sensory, or intellectual condition which causes you to struggle academically, including but not limited to:

- Mental health conditions such as depression, anxiety, PTSD, or bipolar disorder
- Common ailments such as arthritis, asthma, diabetes, autoimmune disorders and diseases
- Temporary impairments such as a broken bone, recovery from significant surgery, or a pregnancy-related disability
- Neurodevelopmental disorders such as a learning disability, intellectual disability, autism, acquired brain injury, or ADHD
- Vision, hearing, or mobility conditions

Available services include extended test time, quiet testing environments, academic assistance and tutoring through the [LIGHT Center](https://www.redwoods.edu/services/sass/light.php) , counseling and advising, alternate formats of course materials (e.g. audio books or E-texts), assistive technology, learning disability assessments, approval for personal attendants, interpreters, priority registration, on-campus transportation, adaptive physical education and living skills courses, and more. If you believe you might benefit from disability- or health-related services and accommodations, please contact [Student Accessibility Support Services \(SASS\)](https://www.redwoods.edu/services/sass/index.php)  [. \(https://www.redwoods.edu/services/sass/index.php\)](https://www.redwoods.edu/services/sass/index.php).

If you are unsure whether you qualify, please contact SASS for a consultation:

SASS@redwoods.edu (<mailto:SASS@redwoods.edu>).

SASS office locations and phone numbers

Eureka campus

- Phone: 707-476-4280,
- Locations: Student Services building, first floor SS113

Dr. Norte campus

- Phone: 707-465-2353
- Location: Main building, near the Library



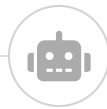
Klamath-Trinity campus

- 707-476-4280



Academic Integrity

In the academic community, the high value placed on truth implies a corresponding intolerance of scholastic dishonesty. In cases involving academic integrity, 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 a lack of academic integrity, 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 2024-2025 College Catalog and CR Board and Administrative Policies.





AI Use Class Policy

Generative AI tools, such as ChatGPT and Google's Bard, are likely to be widely used in the workplace moving forward. It's important for you to understand how to use them ethically and effectively. For that reason, in this class, you will sometimes be invited to use such a tool in the completion of an assignment. In this class, using generative AI tools is not cheating if the outputs are screened by you for accuracy, bias, appropriateness, and fidelity to your perspective.



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. Additional information about the rights and responsibilities of students, Board policies,

and administrative procedures is located in the [2024-2025 College Catalog](https://redwoods.elumenapp.com/catalog/2024-2025/home)  (<https://redwoods.elumenapp.com/catalog/2024-2025/home>) and [CR Board and Administrative Policies](https://go.boarddocs.com/ca/redwoods/Board.nsf/Public?open&id=policies)  (<https://go.boarddocs.com/ca/redwoods/Board.nsf/Public?open&id=policies>).

Course Summary:

Date	Details	Due
