Syllabus for: Mechanical Design Drafting	
Semester & Year:	Spring 2017
Course ID and Section Number:	DT60 (E0806)
Number of Credits/Units:	4 (3 hours lecture, 3 hours lab per week)
Prerequisite	DT23 or ENGR23 or equivalent
Day/Time:	TTH 6:05-9:00
Location:	AT107
Instructor's Name:	Steve Brown
Contact Information:	Office location and hours: AT100 MW 12-1, TTH 1-2
	Phone: 707-476-4347
	Email: steve-brown@redwoods.edu
Required Text	Autodesk Inventor Professional 2017 – Tickoo
Required Materials	1) Notebook & plastic sleeves to organize portfolio
	2) USB or cloud file storage

# **Course Description** (as described in course outline):

A study of mechanical drafting with a focus on the development of 3D feature-based parametric part and assembly models. Students will develop proficiency in the application of mechanical CAD software to draft designs per industry standards. Additional topics include threads and fasteners, weldments, sheet metal, and tolerancing.

# **Student Learning Outcomes** (as described in course outline):

- 1. Apply mechanical CAD software to develop 3D parametric solid models and assemblies.
- 2. Apply mechanical CAD software to create industry standard orthographic, section, auxiliary, and assembly model documentation per industry standards.
- 3. Develop concept model output using 3D printers.
- 4. Analyze a mechanical design in terms of tolerances, form, function, and mass properties.

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

55% Projects & Quizzes	Grade Scale:100% - 90%	Α
5% Participation	89% - 80%	В
10% Portfolio	79% - 70%	С
10% Midterm	69% - 60%	D

10% Final

10% Technical Report

### Other Information:

• The information in this document is subject to change, with notice, in the event of extenuating circumstances.

<sup>\*</sup>Late work, for any reason, is penalized 20% and will not be accepted more than 4 class meetings from when it was originally assigned.

<sup>\*</sup>Students with 4 absences prior to the end of the 10<sup>th</sup> week will be dropped from the course.

<sup>\*</sup>Late arrivals and early leaving will result in lost participation points.

- The following items may be found on the Canvas site for this class:
  - ✓ Calendar
  - ✓ Assignments
  - ✓ Announcements
  - ✓ Grade book
  - ✓ Resources such as reading assignments, handouts, and PowerPoints
- It is your responsibility to check Canvas frequently.
- It is expected that students attend every class, on time, and stay for the duration of the class. If you need to leave early, check in with the instructor. If you are absent it is your responsibility to get the missed information before the next class. Make use of the instructor's office hours to get missed information; there will not likely be time during class for the instructor to go over the missed instruction or assignment.
- The software used in this class (Inventor 2017) is available for free download. It is NOT required or expected that you have the software available outside of the CR lab. College staff does not provide technical support your personal software or computers.
- Some weekend lab hours will be available. Times are posted on the white board in the lab.
- SPILLPROOF WATER BOTTLES ARE ALLOWED IN THE LAB. NO OTHER FOOD OR DRINK IS PERMITTED AT THE COMPUTER WORKSTATIONS.

## **Special Accommodations**

College of the Redwoods complies with the Americans with Disabilities Act in making reasonable accommodations for qualified students with disabilities. Please present your written accommodation request at least one week before the first test so that necessary arrangements can be made. No last-minute arrangements or post-test adjustments will be made. If you have a disability or believe you might benefit from disability related services and may need accommodations, please see me or contact <u>Disabled Students</u> <u>Programs and Services</u>. Students may make requests for alternative media by contacting DSPS at 707-476-4280.

### **Academic Support**

Academic support is available at <u>Counseling and Advising</u> and includes academic advising and educational planning, <u>Academic Support Center</u> for tutoring and proctored tests, and <u>Extended Opportunity Programs & Services</u>, for eligible students, with advising, assistance, tutoring, and more.

# **Academic Honesty**

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 at: <a href="http://www.redwoods.edu/board/Board-Policies/Chapter-5-Student-Services">http://www.redwoods.edu/board/Board-Policies/Chapter-5-Student-Services</a>. 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 Classroom 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, he or she 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 at: <a href="http://www.redwoods.edu/board/Board-Policies/Chapter-5-Student-Services">http://www.redwoods.edu/board/Board-Policies/Chapter-5-Student-Services</a>
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.

# **Emergency Procedures for the Eureka campus:**

Please review the campus evacuation sites, including the closest site to this classroom (posted by the exit of each room). The Eureka **campus emergency map** is available at: <a href="http://www.redwoods.edu/aboutcr/Eureka-Map">http://www.redwoods.edu/aboutcr/Eureka-Map</a>. For more information on Public Safety, go to <a href="http://www.redwoods.edu/publicsafety">http://www.redwoods.edu/publicsafety</a>. In an emergency that requires an evacuation of the building:

- 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 Incident Commander or campus authorities. (CR's lower parking lot and Tompkins Hill Rd are within the Tsunami Zone.)

RAVE – College of the Redwoods has implemented an emergency alert system. In the event of an emergency on campus you can receive an alert through your personal email and/or phones at your home, office, and cell. Registration is necessary in order to receive emergency alerts. Please go to <a href="https://www.GetRave.com/login/Redwoods">https://www.GetRave.com/login/Redwoods</a> and use the "Register" button on the top right portion of the registration page to create an account. During the registration process you can elect to add additional information, such as office phone, home phone, cell phone, and personal email. Please use your CR email address as your primary Registration Email. Your CR email address ends with "redwoods.edu." Please contact Public Safety at 707-476-4112 or <a href="mailto:security@redwoods.edu">security@redwoods.edu</a> if you have any questions.

College of the Redwoods is committed to equal opportunity in employment, admission to the college, and in the conduct of all of its programs and activities.