CALIFORNIA STATE UNIVERSITY, CHICO

Department of Mechanical and Mechatronic Engineering and Sustainable Manufacturing

Mechanical Engineering 200 - Graphics II
Course Syllabus – Fall 2019

Instructor:	Mr. Charlie Pooler
Office location:	O'Connell 426
Telephone:	530-898-6488
E-mail:	cjpooler@csuchico.edu
Office hours:	Mon. 12-1, Tues. 1-2, Wed. 1-2, and Thurs. 11-12 And by Appointment (Please email to schedule)
Class days and times:	M 1:00PM – 1:50PM
Classroom:	LANG 300
Prerequisites:	MECH 100 and MECH 100L
Class Meetings:	Section 01 – Lecture – Monday – 1:00 – 1:50 - Langdon 300 Section 02 – Lab - Tuesday – 2:00 – 5:00 - O'Connell 438 Section 03 – Lab - Wednesday – 2:00 – 5:00 - O'Connell 438 Section 04 – Lab - Thursday – 8:00 – 11:00 - O'Connell 438
Lecture:	50 minute Powerpoint presentation: Notes, key points, weekly assignments
Lab:	2 hour 50 minute lab period: Separate in-class lab assignment • Time to work on weekly assignments • Opportunity for general questions and one-on-one help
Course Materials:	Required course materials include textbook, sketch pad (engineer's pad works well for this), and storage media such as a flash drive. Also recommend a cloud based storage service such as Dropbox, Google Drive, etc. Note: A lost, stolen, or corrupted flash drive is not an accepted excuse for missed work.

Course Usage of Blackboard Learn

Copies of the course syllabus and major assignments may be found on Blackboard Learn. You are responsible for regularly checking the online resources, which is accessed through the Chico State Portal at http://portal.csuchico.edu. Support materials for the course will be provided via the portal and it is expected that you will either have hardcopies or electronic access to the materials during in-class activities.

Required Texts/Readings

Lecture: **Recommended**	Interpretation of Geometric Dimensioning and Tolerancing 3rd Edition, Daniel E. Puncochar & Ken Evans, 2011, ISBN: 978-0831134211
Lab: **Recommended**	Shop Reference for Students & Apprentices, 2nd Edition, Christopher McCauley, 2000, Industrial Press Inc. ISBN: 978-0831130794

Classroom Protocol

It is expected that students are in-class, prior to each class, as the class will start promptly at the scheduled time. Any homework class assignments are due at the start of the class and must be submitted in person at the turn in file that will be located at the front of the classroom.

Weekly Assignments

Assignments made during each week's lecture. Due at beginning of following week's lecture. Some work time is available during lab meetings.

In-Class Lab Assignments

Brief assignments made at beginning of lab period. Due before end of lab period. Graded pass/fail. No show is no grade; no exceptions.

Project Work

Two major projects are required in the course. The midterm project is a reverse engineering assignment resulting in a complete set of Working Drawings. The end-of semester project requires modeling, rendering, animation, and presentation of a complex moving assembly

Hardcopy Assignment Submission

For hardcopy submission, your name and lab section number (03, 04, or 05) must be indicated on at least the first page. Multiple pages should always be stapled together. Assignments cannot be submitted in stages. Failure to follow these simple instructions will result in a grade reduction on the assignment.

Electronic Assignment Submission

Electronic submission will be handled via Blackboard Learn. Students are strongly encouraged to verify submissions made through Blackboard Learn. It is the student's responsibility to ensure the correct file has been submitted for the assignment. **No accommodations are made for incorrect submissions**. I do not accept assignments via email.

Late Work

Weekly assignments are due at the beginning of the next lecture period. If you are late to class, your work is late. Assignments will be accepted late the same day with a one letter grade deduction. Assignments will not be accepted after their due date. In-class lab assignments will not be accepted from students that are more than a few minutes late for their scheduled lab meeting, even if the assignment is completed. In class assignments must be submitted in person. There is no late work policy for the midterm project. No project at the deadline = zero grade.

Email

In the event I need to contact members of the class or make urgent announcements regarding tests, class cancellations, etc., it will be done via your WildcatMail email account. I do not plan to use this method of communication frequently, but I do expect that information sent this way will be received. University policy requires students to monitor their WildcatMail accounts. If you have another preferred email provider, you may set up automatic forwarding of your WildcatMail to that address. Details are available at www.csuchico.edu/itss/.

Dropping and Adding

You are responsible for understanding the policies and procedures about add/drops, academic renewal, etc. found http://www.csuchico.edu/catalog/. You should be aware of the new deadlines and penalties for adding and dropping classes.

Academic Integrity

By their nature, computer based assignments lend themselves to easy copying and sharing. Any sharing of electronic data constitutes a violation of the university's academic integrity policy and will not be tolerated. Violations will be referred to student judicial affairs and can result in penalties ranging from failure of the course to long term suspension from the university. See the Academic Integrity document for additional information.

Grading:

Weekly assignments	30%
In-class lab assignments	20%
Midterm project	20%
Final project	30%

University Policies and Campus Resources

Academic integrity

Students are expected to be familiar with the University's Academic Integrity Policy. Your own commitment to learning, as evidenced by your enrollment at California State University, Chico, and the University's Academic Integrity Policy requires you to be honest in all your academic course work. Faculty members are required to report all infractions to the Office of Student Judicial Affairs. The policy on academic integrity and other resources related to student conduct can be found at: http://www.csuchico.edu/sjd/integrity.shtml.

Campus Policy in Compliance with the American Disabilities Act

If you need course adaptations or accommodations because of a disability, or if you need to make special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible, or see me during office hours. Students with disabilities requesting accommodations must register with the DSS Office (Disability Support Services) to establish a record of their disability.

Special accommodations for exams require ample notice to the testing office and must be submitted to the instructor well in advance of the exam date.

IT Support Services

Computer labs for student use are located on the first and fourth floor of the Meriam Library, Room 116 and 450, Tehama Hall Room 131, and the Bell Memorial Union (BMU) basement. You can get help using your

computer from IT Support Services; contact them through their website, http://www.csuchico.edu/itss. Additional labs may be available to students in your department or college.

Student Services
Student services are designed to assist students in the development of their full academic potential and to motivate them to become self-directed learners. Students can find support for services such as skills assessment, individual or group tutorials, subject advising, learning assistance, summer academic preparation and basic skills development. Student services information can be found at: http://www.csuchico.edu/current-students.

Americans with Disabilities Act
If you need course adaptations or accommodations because of a disability or chronic illness, or if you need to make special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible, or see me during office hours. Please also contact Accessibility Resource Center (ARC) as they are the designated department responsible for approving and coordinating reasonable accommodations and services for students with disabilities. ARC will help you understand your rights and responsibilities under the Americans with Disabilities Act and provide you further assistance with requesting and arranging accommodations.

Accessibility Resource Center
http://www.csuchico.edu/arc
530-898-5959
Student Services Center 170
arcdept@csuchico.edu

Student Learning Center

The mission of the Student Learning Center (SLC) is to provide services that will assist CSU, Chico students to become independent learners. The SLC prepares and supports students in their college course work by offering a variety of programs and resources to meet student needs. The SLC facilitates the academic transition and retention of students from high schools and community colleges by providing study strategy information, content subject tutoring, and supplemental instruction. The SLC is online at http://www.csuchico.edu/slc. The University Writing Center has been combined with the Student Learning Center.

MECH 200, Graphics II, Fall 2019

(Note: subject to change with fair notice.)

Week: Topic:

1 Introduction, Parametric Modeling Overview, Review of MECH 100

2 Dimensions in Parametric Modeling, Fully Defined Geometry, Tolerancing, Fits

3 GD&T Basics, Summary, Symbols, Inspection Tools, Datums

4 GD&T Inspection Processes, Form & Orientation Controls Bonus Tolerances, Basic Dimensions

5 Fasteners, Thread Terminology, Threads in Drawings, Threads in SolidWorks

6 Assemblies, Assembly Features, Top Down, Smart Fasteners

7 Working Drawings, Assembly Drawings, eDrawings, Composer, References

8 DimXpert, Model Based Definition, 3D PDFs, Midterm Project

9 Mechanism Assemblies, Flexible Assemblies, Replace Components, Physical Simulation, Animations

10 Results Plots, Key Frames, Animation Wizard, Viewpoints, Cameras

11 Gears, Belts, Chains, SolidWorks Power Transmission Tools

12 Introduction to Rendering, Appearances, PhotoView 360, Visualize, Final Project

13 Surfaces, Spline Tool, 3D Sketches, Split Lines, 3D Content Central

14 Configurations, Design Tables, Equations, Rendering Animations

15 Final Project and CSWP Offering