CADD 7 Syllabus

WELCOME TO CADD 7 ONLINE!

STUDENT LEARNING OUTCOME:

Given sufficient product definition information of a simple machined part, the student will be able to utilize Inventor Pro software to produce a 3D solid model of the item.

GETTING STARTED

If you are reading this, you are currently enrolled in CADD 7, section 4790, the Distance Education class for "Intro to 3D CADD using Autodesk Inventor". Before you go any further in this class, you must read and understand the syllabus below and the "get started" information, by going in the "Modules" menu (on the left) and clicking on Week 1 - Getting Started and following along.

PREREQUISITES

If you are taking this class as a means to satisfy requirements for a major or a certificate, please contact the division office or an appropriate school advisor to learn if this is the right class for you. The phone number for the Industry & Technology office is (310) 660-3600. Besides students with requirements that need to be met, this class is primarily for students with *some* previous CADD or drafting experience. Generally, CADD 5 is a great class to take first but I don't require it in many cases if your focus is on 3D modeling. If you have any questions, please don't hesitate to send me a Private Message using the "Discussion and Private Messages" tool on the left.

COURSE OBJECTIVES

Learning 3D Computer Modeling and Drafting takes time and practice. Be prepared to put in at least **four to six solid hours a week** to do the assignments and learn the software.

From your efforts, you will learn the basics of creating 3D mechanical models with sketches, parts, and assemblies, and creating simple drawings and renderings from those models.

TEXTBOOK

<u>Autodesk Inventor 2014: A Tutorial Introduction</u>, by L. Scott Hansen, PhD. (SDC Publications), available at the ECC bookstore as well as other sources.

MANDATORY CLASS MATERIALS

- USB flash drive or external hard drive for backing up class files (any reasonable size, 1 GB min. recommended)
- Class textbook (see above)
- A means of organizing handouts and notes -- a three-ring binder or spiral notebook with pockets recommended
- Pencil or pen for taking notes

• Class Assignments List-download from the link below or from "Resources."

OFFICE HOURS

I am an adjunct instructor and do not maintain regular office hours. However, the online class format allows you to post questions on the "boards" any time of day or night and generally get answered by me or another student within 48 hours. If a problem *absolutely* requires a verbal dialog, you may contact me by phone at 310-844-6690. If I do not pick up, leave a message briefly explaining your issue and let me know a good time to reach you when you are at your computer. However, just be aware that I may take up to 24 hours to get back to you.

I am here to assist as much as possible! Just keep in mind that the beauty of an online class is that we don't have to be in a particular place at a particular time. (This applies to both students and instructors.)

ADD / DROP REMINDER

- Last day to add is Friday, September 5, 2014.
- Last day to *drop* for an enrollment fee refund is **Friday**, **September 5**, **2014**.
- Last day to drop without notation on record is Friday, September 5, 2014.
- Last day to drop with a 'W' notation on record is Friday, November 14, 2014.
- Visit http://www.elcamino.edu for a full calendar.

RULES

- Students are responsible for dropping the class. The Instructor is not responsible for dropping students. If you stop turning in work and participating, you may receive an 'F' for the class.
- Assignments will be turned in by uploading files to Etudes ATS only.
- Assignments are generally due **one week** following the last day of the lesson week. Due dates are posted on the Assignments List and in ATS. Assignments will be accepted until the end of the semester but students are encouraged to turn them in on time in order to stay on track.
- If a student has personal issues that prevent him/her from turning in an assignment on time, the instructor should be contacted by Private Message so other arrangements can be made.
- Files that do not follow specified naming conventions **will not be accepted**. See the Assignments List in Resources.
- In addition to completed assignments, grading is based on participation, effort, following handout instructions, and being generally organized with work.
- Getting help with assignments from other students (past or present) is acceptable and encouraged, however, turning in other people's work is **cheating** and is subject to a zero grade on the assignment and possible disciplinary action.

GRADING

Students are graded based on assignment points, participation, effort, and organization. Cumulative assignment and quiz points generally correspond to the following semester grades:

- A 550+
- B 450 549
- C 350 449
- D 250 349
- F below 250

Students can keep tabs on their progress by periodically visiting the "Gradebook" and evaluating their

assignment points against their class goals. Any questions about progress grades should be directed to the instructor via Etudes Private Messaging.

IT IS ESSENTIAL THAT STUDENTS KEEP RELIABLE BACK-UP COPIES OF THEIR WORK.

HARD DRIVES CAN FAIL AND FLASH DRIVES ARE EASILY LOST OR MISPLACED SO DO NOT

DEPEND ON THEM FOR KEEPING SOLE COPIES OF YOUR CLASS FILES.

EXCUSES FOR LOST WORK WILL NOT BE ACCEPTED!!!

WORKING WITH INVENTOR PRO

- Enrolled students may use the CADD lab at any time when the room is open and there is an El Camino instructor present.
- Students may also choose to do work at home or at their place of employment. Free educational versions of Autodesk software are available from http://students.autodesk.com. The facilitator will point you toward web resources to help with installation but can not provide one-on-one installation support.

USING AUTOCAD IN THE ECC CADD LAB (Rooms 251, 204, and 204B)

Check with the Division office to see when the rooms are open and there is an instructor present. Generally this is during class times. You may be in the room when classes are in progress but please be respectful of the teacher and the students with regard to noise, etc.

Log in to the workstations using your **ECC login and password**. This is the same that you use to access *myecc* and elcamino.edu email.

On Windows PCs you may start AutoCAD by double-clicking the Inventor Pro desktop icon.

COURSE SCHEDULE:

Week 1 -

- Ground Rules
- Acquiring Book and Software

Weeks 2 & 3 - Chapter 1

Getting Started

Week 4 - Chapter 2

Learning More Basics

Week 5 - Chapter 3

Learning to Create a Detail Drawing

Weeks 6 & 7 - Chapter 4

Advanced Detail Drawing Procedures

Week 8 - Chapter 5

Learning to Edit Existing Solid Models

Week 9 - Chapter 6

Designing Part Models for Assembly

Week 10 - Chapter 7

Introduction to Assembly View Procedures

Week 11 - Chapter 8

Introduction to the Presentation Panel

Week 12 - Chapter 9

Introduction to Advanced Commands

Week 13 - Chapters 10 & 11

- Introduction to Creating Threads
- Advanced Work Plane Procedures

Week 14 - Chapters 12 & 13

- Introduction to Stress Analysis
- Introduction to the Design Accelerator

Weeks 15 & 16 - Final Independent Project

• Independent Modeling Project of your choosing

STUDENT CONDUCT STATEMENT:

By clicking on "Yes" below, you accept the terms of the following:

"Through the entry of my username and password I affirm that I am the student who enrolled in this course. Furthermore, I affirm that I understand and agree to follow the regulations regarding academic integrity and the use of student data as described in the ECC Board Policy 5500 Academic Honesty and Standards of Conduct that governs student rights and responsibilities. Failure to abide by the regulations may result in disciplinary action up to expulsion from the college."

NOW, DOWNLOAD AND PRINT THE "CADD 7 Assignments List". KEEP IT IN A SAFE PLACE FOR YOUR REFERENCE.