

# SYLLABUS - CADD 43

**COURSE:** CADD 43 --- "Design Process and Concepts"  
**UNITS:** 4.5  
**HOURS:** 8 PER WEEK --- 3 LECTURE, 5 LAB  
**TEXT:** "Engineering Design Methods: Strategies for Product Design, 4th Edition"  
by Nigel Cross.

**DESCRIPTION:** CADD 43 is a lecture and lab course which covers creation and manipulation of two-dimensional drawings of physical objects and focuses on the team aspects of the design process from concept through final product drawings. The lab portion of the course utilizes various CADD softwares.

The course consists of lecture, demonstration, an individual design project, team participation, and lab exercises.

Students will complete a series of lab projects including a complete design package for a simple product and a team design project.

Students will utilize the CADD terminals to complete these projects.

**GRADING:** Exercises from text

- Three View Drawing = 50
- Auxiliary Views = 50

Concept drawing:

- Individual = 100
- Team = 100

Design Layout:

- Individual = 100
- Team = 100

Detail drawings:

- Individual = 100
- Team = 100

Assembly drawing(s):

- Individual = 50
- Team = 50

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Tests:

- Midterm Examination = 100
- Final Examination = 100

Total Points = 1000

**EXTRA CREDIT:** Donate Blood (1 pint) = 25

Vote in Public Election = 25

**BONUS POINTS:** If you score higher on the Final Exam than you scored on the Midterm Exam, you will receive bonus points equal to the difference in scores. This could equal as much as 100 points.

**SEMESTER GRADE:** To earn an "A", you must have at least 900 points.

To earn a "B", you must have at least 800 points.

To earn a "C", you must have at least 700 points.

To earn a "D", you must have at least 600 points.

You will receive an "F" if you earn less than 600 points.

**Make-up exams must be arranged immediately upon your return to class.**

## STUDENT LEARNING OUTCOMES:

### Design Process:

Given a problem statement and set of design constraints, the student will be able to describe and implement the steps of the design process from conceptual design to final production drawings.

### Product Definition Packages:

Given sufficient design requirement definition, the student will be able to plan, sketch and create complete two dimensional engineering drawing packages of sample products.

### Design Team:

Given sufficient task definition, the student will be able to function as a member of a design team charged with planning and creating a complete two dimensional engineering drawing package of a simple product.

## **SYLLABUS - CADD 43**

### **DISABILITY STATEMENT:**

Students with disabilities who believe they may need accommodations in this class are encouraged to contact the Special Resources Center on campus as soon as possible to ensure such accommodations are implemented in a timely fashion. Please contact me privately to discuss your specific needs.

### **POLICIES:**

For campus policies regarding attendance, student conduct, plagiarism, etc. see the college catalog available at: <http://www.elcamino.edu/admissions/catalog.asp>