

**Central Washington University / Department of Industrial and Engineering Technology
IET 265, Three-Dimensional Modeling / Spring Quarter 2011**

Catalog Description: IET 265. Three-Dimensional Modeling (4) Prerequisites, IET 160 and IET 165 or by permission of instructor. Design of parts, assemblies and working drawings using 3-D solid modeling software, basic theory of threaded fasteners and gears, welding representation and geometric dimensioning and tolerancing. Two hours lecture and four hours laboratory per week.

Textbooks: Engineering Design with SolidWorks 2010, David C. & Marie P. Planchard, SDC Publications. Students Guide to Learning SolidWorks Software, SolidWorks Corp. (as a pdf file via class website)

Supplies: 4GB or more flash or thumb drive

Instructor: Chris Scarlett, Electrical Design Engineer, Adjunct Professor, freelance modeler, draftsman and small business owner.

Email: cscarlett@fairpoint.net , chris@e-d-and-i.com , (scarlech@cwu.edu infrequently used)

Course Schedule and Grade Sheet are available online and updated frequently at:

<http://e-d-and-i.com/Classes/IET-265-S2011>

Office hours: Weekdays after class, by appointment or by phone.

Phone: 509-899-2732

Learner Outcomes: (Course Objectives)

| Outcome | Assessment Strategy |
|--|---|
| 1. Demonstrate the ability to produce solid models using SolidWorks software | Design assignments due and graded weekly. |
| 2. Demonstrate the ability to understand basic concepts and terminology as explained in the textbook and in lecture. | Periodic assessments involving short answer examinations. |
| 3. Demonstrate the ability to produce basic design documents under a time constraint. | Periodic assessments involving the creation and modification of design documents during examinations. |

Assessments:

| Item | Percentage |
|---|------------|
| 2 exams and final project (three items total) | 50% |
| Weekly design assignments | 50% |

You will receive a letter grade as a final assessment in this class based on the following scale:

A = 92 or higher, A- = 89 – 91, B+ = 86 – 88, B = 83 – 85, B- = 80 – 82, C+ = 77 – 79, etc...

Design assignments: Student progress is evaluated weekly by the handing in of printed drawings or by in class evaluations usually on Tuesdays with a time constraint then sent via email. Assignments will be evaluated for completeness and timeliness and awarded a maximum point value of 10 points. Design assignments will be returned for corrections the next class meeting and can be re-submitted for re-grading by the upcoming Friday. Re-graded design assignments can only achieve a maximum of 8 points. Missed drawings may be submitted by the upcoming Friday for a maximum of only 7 points. Missed drawings more than a week late will not be graded. Missed in class evaluations will receive a 0.

Examinations: there will be 2 exams per quarter consisting of multiple-choice, true false and short answer questions plus a design assignment. Both elements of the exam are to be done in class under a time constraint usually within two hours. Points will be split evenly between both portions of the exam.

General statement about missed class: In all fairness to the class as a whole; if you miss class for what ever reason it is your responsibility to make up the work according to the schedule. If you miss assignment or test deadlines without prior arrangements you will get the appropriate grade! Exceptions will only be made to this under extraordinary circumstances (medical or family emergencies etc...) and only with proper documentation.

Cheating: Your work has to be unique and original to this class. If caught cheating you will fail the class!

ADA Statement: Students who have special needs or disabilities that may affect their ability to access information and or material presented in this course are encouraged to contact the ADA Compliance Officer, Director, ADA Affairs and Students Assistance on campus at 963-2171 for additional disability related educational accommodations.