## Central Washington University / Department of Industrial and Engineering Technology IET 265, Three-Dimensional Modeling / Spring Quarter 2010

**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 2009, David C. & Marie P. Planchard, SDC Publications. Students Guide to Learning SolidWorks Software, SolidWorks Corp. (as a pdf file via class website)

Supplies: 1GB 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://www.fetchboy.com/SolidWorks2010

**Office hours:** Tuesdays and Thursdays after class, by appointment or by phone.

**Phone:** 509-899-2732

**Learner Outcomes: (Course Objectives)** 

Outcome	Assessment Strategy
Demonstrate the ability to produce solid 3D models using SolidWorks software	Design assignments due and graded weekly.
Demonstrate the ability to understand basic concepts and terminology as explained in the textbook and in lecture.	Periodic assessments involving short answer examinations.
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:** Weekly design assignments are evaluated on Tuesdays either in class, by printed drawings or sent via email. Models presented for evaluation will be complete and without errors, printed drawings will be properly labeled, dimensioned and with a title block. Maximum points will be 10 points per assignment (unless extra credit work is demonstrated).

Design assignments will be returned for corrections, if needed, and can be submitted for re-grading on the following Tuesday. If re-graded, an assignment can only achieve a maximum of 8 points. Assignments missed the first week may be graded the following week for a maximum of only 7 points. Design assignments more than a week late will not be graded and will receive a 0.

**Exams**: (2) are approximately every 3 to 4 weeks and will consist of multiple-choice, true false and short answer questions plus a design assignment, both 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 <u>prior arrangements</u> 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.

**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.