Central Washington University / ETSC 265, Three-Dimensional Modeling / 4 Credits
6 hours of lecture and lab per week / MET Core Program Requirement
Prerequisites: IET 160 or IET 161 or by permission of instructor
This is a Technical content course under ABET Criterion 5

Course Description: Using relationship based parametric 3D solid modeling software, a student will learn to design virtual parts and assemblies and to create drawings of those parts and assemblies including welding representation and geometric dimensioning and tolerancing symbols as well as basic theory of gear design.

Textbooks: The Ultimate GD&T Pocket Guide, 2nd Edition, Alex Krulikowski – and instructional video content
Supplies: 4GB or more flash drive or similar backup medium, have a backup copy of your work at all times!
Instructor: Chris Scarlett, Design Engineer, Adjunct Professor and small business owner.
        Email: chris@e-d-and-i.com, design@edi3di.com, (scarlech@cwu.edu less frequently used)
Office: Mondays through Fridays after class, by appointment, by email or by phone: 509-899-2732
Class Website: http://edi3di.com/Instruction/2017-4-ETSC-265/

Specific Learner and Expressive Outcomes and Assessment Strategies: (Course Objectives)

ABET Outcome Criteria #	Learner Outcomes, the student will:	Assessment
	1. Demonstrate the ability to produce solid models using SolidWorks software	Class Design Projects evaluated and graded weekly as part of the Weekly Design Evaluation.
	2. Demonstrate the ability to understand basic concepts and terminology as explained in lecture Instructional Videos and textbook,	Evaluations involving short answers, multiple choice, matching and true/false questions as part of the Weekly Design Evaluation.
	3. Demonstrate the ability to produce design documents under a time constraint.	Weekly Design Evaluations involving the creation and modification of design documents and a Final Design Project evaluated at the end of the quarter.

Assessments: Grading is split evenly between Weekly Design Evaluation (WDE) and a Final Design Project (FDP).

Item	Percentage of total grade
Weekly Design Evaluations (WDE)	50%
Final Design Project (FDP)	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…

WDE: WDE are CAD files that are created during or prior to the evaluation are graded based on completeness and timeliness and awarded a maximum point value in multiples of 10 points. More information can be found on the student grade sheet available on the class website.

Final Design Project: FDP will be of the students' choosing and will be worked on throughout the quarter. It will be evaluated at the end of the quarter based on: model details (in sketches, features and assemblies), model drawings, and a student presentation of the model and an applied SolidWorks tool. Presentations will be evaluated by your class peers. More information can be found on the class website.

General statement about missed class: In all fairness to the class as a whole; if you miss class for whatever reason it is your responsibility to make up the work. Class material covered once will not be repeated. If you miss a WDE without prior arrangements you will not get credit for the missed work. Exceptions will only be made 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 not receive a grade.

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.