

Salt Lake Community College
EDMT Department
EDDT 2710: 3D Modeling

Instructor:

Office: [REDACTED]

Phone:

Consultation Hours: TBD

E-Mail: Please use canvas

COURSE DESCRIPTION: Solid modeling with Auto Desk Inventor will be taught. Topics include sketch planes, part construction, extraction of engineering data, assemblies and mating parts, parametric design and related drawings. The Design Center will also be used.

COURSE LEARNING OUTCOMES:

- Develop geometry for solid parts using sketch tools including: Referencing and projecting geometry, Creating lines, splines, rectangles, polygons, circles, arcs and ellipses, Placing sketch points and hole centers, Modification and duplication commands, fillets, chamfers, mirror, patterning, and offset, Geometric constraints and dimensions, precision input.
- Basic 3D modeling commands: extrude, revolve, shell, sketching on a base feature, edge referencing, holes, ribs and webs.
- Understand and utilize parametric modeling functions, including: Design element tools, Viewing, inserting, creating, and managing catalog features, Developing derived parts, features, components, and assemblies, Adaptive work environment.
- Utilize advanced modeling tools: loft, sweep, split, 3D sketches and lines, work feature tools, planes, axes, and work points.
- Create assembly drawings from detail parts using assembly constraints, insertion tools, links, shared content, and create-in-place components.
- Produce 2D orthographic detail and assembly drawings from solid models applying ANSI standards for views (section, detail, auxiliary, isometric) and dimensioning.

Required Supplies: Computer Storage device.

Course Evaluation:

Grading of the course will be based on mastery of the performance objectives and determined according to accuracy, appearance, adherence to drafting standards, and

completion of both the assignments and the final exam. The final grade will be based on the following percentages:

100% - 95% A	82% - 79% B-	65% - 62% D+
94% - 90% A-	78% - 75% C+	61% - 58% D
89% - 87% B+	74% - 70% C	57% - 54% D-
86% - 83% B	69% - 66% C-	53% - E

Homework: Most of the work can be completed in class. There are 4 CAD labs at the college which students can use to complete their work. Students can also download the software on their personal computer to do work at home.

CAD Assignments: CAD assignments will be graded and recorded in canvas. Assignments will be graded with the instructor to fully understand corrections that need to be made.

TENATIVEVE SCHEDULE: Will be posted on Canvas.