

**Course Syllabus**  
**Salt Lake Community College**  
**EDDT2540**  
**Geometric Dimensioning and Tolerancing**

Instructor:

Office: 

Phone:

Consultation Hours: TBD

E-Mail: Please use canvas

**COURSE DESCRIPTION:** The use of CAD to create industrial level production working drawings. Includes the latest ASME Y14.5 standards for Geometric Dimensioning & Tolerancing. Topics of discussion will include: general tolerancing, symbols and terms, datums, material conditions and boundaries, geometric characteristics, and positional tolerancing.

**COURSE LEARNING OUTCOMES:** In order to full-fill the goals of the College-wide Learning Outcomes, the following course learning outcomes have been established for this course. Upon completion of this course a student should be able to demonstrate a general understanding of the following essential learning outcomes:

- The student will demonstrate knowledge of general tolerancing including: limits, specified dimension, maximum material condition, least material condition, extreme form variation, clearance fit, allowance, interference fit.
- The student will demonstrate knowledge of symbols and terms including: geometric characteristic symbols, material condition symbols, datum feature symbol, feature control frame, basic dimension symbol, dimensioning symbols.
- The student will demonstrate knowledge of datums including: datum feature symbol presentation, datum features, high point contact, datum reference frame, datum axis, partial datums, and datum center plane.
- The student will demonstrate knowledge of Material condition and material boundary symbols including: maximum material condition and maximum material boundary, regardless of feature size and regardless of material boundary, least material condition and least material boundary, applications.
- The student will demonstrate ability to use CAD to create professional level engineering drawings. Combination geometric characteristics.

- The student will demonstrate knowledge of Positional tolerancing including: conventional tolerancing vs. positional tolerancing, floating fasteners, fixed fasteners, location of multiple features, positional tolerance at MMC, zero positional tolerance, virtual condition, projected tolerance zone, composite positional tolerance, two single-segment feature control frame, concentricity, symmetry.
- The student will gain knowledge & understanding of the ASME GD & T industry specification and how the different year standards have changed throughout the years.
- The student will demonstrate ability to use CAD to create professional level engineering drawings.

**REQUIRED COURSE MATERIALS:** Geometric Dimensioning and Tolerancing by David A. Madsen, 10<sup>th</sup> Edition

**Grading:** All grades will be given based on the following distribution:

A	100% -94%
A-	<94% – 90%
B+	<90% - 87%
B	<87% - 84%
B-	<84% - 80%
C+	<80% - 77%
C	<77% - 74%
C-	<74% - 70%
D+	<70% - 67%
D	<67% - 64%
D-	<64% - 61%
F	<61% - 0%

**Grades distribution:**

Ten Homework Assignments	25%
Fifteen CAD Assignments	25%
Attendance	10%
Final Comprehensive Test	40%

**Homework:** Homework consist of the print reading exercise found at the end of each chapter. These assignments are due the following week after the chapter has been covered in class. Late homework will be accepted up to one week late but will be penalized 50%. Homework later than one week will not be accepted.

**CAD Assignments:** CAD assignments consist of the first 15 drafting problems found at end of the textbook. These assignments are due each week. Late CAD assignments will be accepted up to one week late but will be penalized 50%. CAD assignments later than one week will not be accepted.

**Final Exam:** A comprehensive final exam will be given on the scheduled day during final week. This exam constitutes 40% of your final grade. More information about this exam will be given during the semester.

**Schedule:** All 10 chapter in the textbook will be covered at a rate of approximately 1 ½ weeks per chapter. Your attendance is important as it constitutes 10% of your grade and is a major factor in understanding the course material. Please make arrangements with me if you are unable attend any scheduled class period.