

INTRODUCTION TO TECHNICAL DRAFTING - CAD 195T

Instructor: Alex Sanchez (ph 925-8716)

Office Hours:
Mon/Wed 3:15-4:00
Tues/Thur 1:00-3:30

DESCRIPTION: CAD 195T is a lecture/lab course in mechanical drafting. The course covers basic drafting skills, geometric construction, multi-view projection, and dimensioning. The drawing assignments include engineering sketches and Fusion 360/AutoCAD working drawings.

TEXT: *Technical Drawing and Engineering Communication*, 6th Edition by David L. Goetsch/Nelson ISBN-10 1-4283-3583-8

ATTENDANCE:

Attendance is necessary for you to fully understand the material presented. You are responsible for “signing-in” to document your attendance.

“Students are required to attend all meetings of their classes unless excused by the instructor. A student with excessive absences may be dropped from a course with a grade of W by an instructor. Absences due to illness, field trips, athletic trips, and so forth do not relieve the student of the responsibility for missing assignments. It is the obligation of the student to take the initiative in arranging with the instructor to make up missed work.” (from the UNM Valencia Catalog)

GRADING POLICY: Grades will be based on class assignments, quizzes, and tests.

Class assignments 60%

Four Quizzes 40%

Letter grades	100% or higher	= A+
	91%-99%	= A
	81%-90%	= B
	71%-80%	= C
	61%-70%	= D
	Below 60%	= F

LIBRARY USE: A list of reference books and periodicals will be provided during the first week of class.

MAIN OBJECTIVES:

1. Learn basic technical drafting conventions, procedures, and terminology.
2. Learn about CAD (using AutoCAD) production drafting techniques.
3. Learn about tolerance dimensioning.
4. Learn how to use Sketchup for design visualization

Required Materials: Each student will be required to purchase storage media (1 GB flash drive) and a 1 ½” binder.

SPECIAL NEEDS:

If you are a qualified person with disabilities, who might need reasonable accommodations in academic settings, please communicate with me as soon as possible so that we may make appropriate arrangements to meet your needs. If you have a documented disability, please provide me with a copy of your letter from Equal Access Services as soon as possible to ensure that accommodations are provided.

Alex Sanchez (alexs@unm.edu)

Course schedule

Week 1 (Chapter 1) CAD and the Internet, AutoCAD basics

Week 2 (Chapter 2) Drafting with Instruments

Week 3 (Chapter 3) Sketching

Week 4 (Chapter 3) Lettering and line techniques, Quiz Review, Quiz #1

Week 5 (Chapter 4) Geometric construction and AutoCAD 3D basics

Week 6 (Chapter 5) Multiview drawings, Projection types

Week 7 (Chapter 6 cont.) Sectional Views

Week 8 Quiz, Review, Quiz #2

Week 9 (Chapter 7) Auxiliary Views

Week 10 (Chapter 10) Dimensioning and notation

Week 11 (Chapter 10 cont.) Dimensioning and notation

Week 12 Quiz Review, Quiz #3

Week 13 (Chapter 14) Springs

Week 14 (Chapter 16) Gears

Week 15 (Chapter 18) Pictorial Drawing

Week 16 (Chapter 18 cont.) Quiz Review, Quiz #4