
COURSE SYLLABUS

Computer Aided Drafting & Design
Industrial Technology Department
Technical Education Division
South Plains College
Levelland Campus

Instructor: Jason R. Bush, AIA
Office: Technical Arts Center, 205A
Phone: (806) 716-2351
Email: jbush@southplainscollege.edu
Office Hours: T/Th: 8:30am-10:30am (by appointment)
F: 8:00am-12:00pm (by appointment)

COURSE INFORMATION

COURSE NUMBER	ENGR-1304-001
COURSE TITLE	Engineering Graphics I
PREREQUISITE(S)	None
LOCATION	TA 209A
MEETING TIME	M/W 8:00am – 10:40am
TEXTBOOK	None
DESCRIPTION	This course is an introduction to computer aided drafting, using AutoCAD software and freehand sketching to generate two- and three-dimensional drawings based on the conventions of engineering graphical communication. Topics include spatial relationships, multi-view projections and sectioning, dimensioning, graphical presentation of data, and fundamentals of computer graphics.
SCOPE	The scope of <u>Engineering Graphics I</u> will be for sixteen weeks, which will include two (2) hours of lecture per week and four (4) hours of laboratory experience per week, for a total of ninety-six (96) contact hours per semester.
COURSE OUTCOMES	This course is an introduction to space relationships, principles of size and shape pertinent to engineering, freehand sketching, orthographic drawings, pictorials, graphical presentation of data, engineering geometry, and experimental presentation of data.
COURSE TOPICS	<ol style="list-style-type: none">1) Discuss the basic steps in the design process2) Establish skills and techniques for freehand sketching3) Introduce AutoCAD and/or other computer aided drafting and design software4) Graphically communicate design solutions5) Discuss engineering and architectural scales6) Graphically represent object views and/or elevations7) Graphically represent object sections8) Annotate, dimension, and/or label drawings9) Introduce the use of title blocks and graphical layouts10) Introduce document plotting, printing and/or publishing

GRADING

WEIGHTS	Attendance	30%	SCALE	A	90 – 100%
	Quizzes	20%		B	80 – 89%
	Assignments	25%		C	70 – 79%
	Final Project	25%		D	60 – 69%
				F	59% or Below

ASSIGNMENTS

Practical drawings and/or research assignments will be periodically assigned to demonstrate proficiency in the various topics covered in class. These assignments are to be completed during laboratory time and will be graded on but not limited to the following items:

1. Neatness
2. Line Criteria
3. Text Criteria
4. Dimensioning Criteria
5. Layer Management Criteria
6. Correctness & Accuracy
7. Nomenclature
8. File Name Management and/or Digital Image File Creation

REVIEW QUESTIONS

Students will be assigned review questions for topics covered in class and/or from other assigned supplemental readings available via Blackboard.

FINAL PROJECT

The Final Project will be assigned near the end of the semester and will be used to demonstrate practical proficiency in the various topics covered in class throughout the semester. The final project is intensive and will require multiple laboratory periods to complete.

CLASSROOM POLICIES

ATTENDANCE

Three (3) absences, for any reason, are allowed per semester. Your overall attendance grade for the semester will be reduced by ten (10) points for each absence over the allowable limit.

Late arrival (Tardiness), defined as not being present in class within 15 minutes of the scheduled start of class, will count as a $\frac{1}{2}$ absence. A maximum of **six (6) late arrivals** are allowed per semester. Your overall attendance grade for the semester will be reduced by ten (10) points for each late arrival over the allowable limit.

If a student has not participated in the course in any form for a minimum of six (6) consecutive classes, without any communication from the student and is earning a solid "F", the student will be contacted and encouraged to initiate a student withdrawal.

WITHDRAWAL

Any student wishing to drop this class should go through the proper procedure of initiating the withdrawal by obtaining a **drop form** from the Registrar's Office.

OTHER POLICIES

Drinks are allowed in the classroom/lab during lecture. Food is not allowed in the classroom/lab during lecture. Food and/or drinks will be allowed in the classroom/lab near a student's workstation if the computers are not affected in a negative way and/or the food/drinks do not distract/disturb the instructor or other students. All drinks must be stored away from the computer so as not to damage any component. All workstations must be thoroughly cleaned, and all trash must be properly disposed of before a student leaves class.

Music is allowed in the classroom during lab time if it is played through headphones.

Cellphones are only permitted during lab time when used directly for research or class initiatives. If your cell phone rings or you need to make a phone call, please promptly excuse yourself from the class to address the call.

At the discretion of the instructor, a failing grade ("F") may be assigned to a student's overall course grade and/or the student's assignment grade in the case of academic dishonesty (cheating) and/or plagiarism due to the severity of the student's actions and disregard for the learning objectives of the course.

Students should adhere to all other standards established in the SPC Catalog found under *Student Conduct*.

ACCOMMODATIONS

Students can find statements regarding Intellectual Exchange, Disabilities, Non-Discrimination, Title IX Pregnancy Accommodations, CARE (Campus Assessment, Response, and Evaluation) Team, and Campus Concealed Carry at <https://www.southplainscollege.edu/syllabusstatements/>.