



Instructor: Evan Vargas
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Office Hours in Levelland Campus:
 T: 11:00-1:30 TR: 11:00-1:30 F: 9:00-12:00
Or by Appointment

Engineering 1304 – Engineering Graphics 1
Section 001: Monday/Wednesday 8:00*-10:40* AM
Room: Technical Arts Center, 209, Levelland Campus

Course Information

Textbook *Technical Drawing with Engineering Graphics* by Gieseck, Lockhart, Goodman, and Johnson, 15th edition, 2018, Pearson

AutoCAD 2018: A Problem-Solving Approach, Basic and Intermediate by Tickoo, 24th edition, 2018, Purdue University

Materials Pencils, loose graphing paper, and ruler/calipers

Description This course provides an introduction to basic computer-aided technical drawing. Emphasis on drawing setup, creating and modifying geometry, storing and retrieving predefined shapes, rotating and scaling objects, and adding text and dimensions.

Purpose Acquaint student with solutions to different mathematical problems covering algebra, trigonometry, and analytic geometry.

Requirements A student should attend all class sessions, take notes, participate in class, complete all lab assignments, and complete drawing projects.

- Learning Outcomes**
1. Demonstrate knowledge, skills, and practical proficiency in using CAD software
 2. Use correct Layouts and Lettering
 3. Understand Visualization and Sketch Objects
 4. Develop Geometry for Modeling and Design
 5. Orthographic Projection
 6. 2D Drawing Representations
 7. Section and Auxiliary Views
 8. Dimensioning
 9. Architecture skills

Grading

Weights	Portfolio	5%	Grading Scale	90-100	A
	Daily Assignments	20%		80-89	B
	Quiz	15%		70-79	C
	Projects	30% each		60-69	D
			0-59	F	

Portfolio Students are expected to organize all course material in a single three ring binder as a portfolio of work completed. This binder should be brought to class every day as it will be periodically checked at random by the instructor during the semester; Assignments and Quizzes must all be separated by a labeled divider. Neatness and organization will be graded.

Daily Assignments	Every student must complete daily assignments during class lab time. This consists of completing the required drawing as presented by the instructor by either printing or presenting the completed drawing.
Quizzes	Quizzes will be given periodically through the course which covers material presented by the instructor as well as material covered by the assigned textbooks.
Projects	There will be two projects assigned during the semester in lieu of examinations. Projects will be a representation of each student's ability to show their skills using CAD software as it would be applicable for future job requirements. Each project will be addressed during class as the semester progresses. Instructions will be outlined and detailed in what is required.

Classroom Policies

Disclaimer	The instructor reserves the right to amend any class policies as deemed necessary by the instructor or South Plains College and will announce any changes in class. If a student has any questions about a change in policy ask the instructor.
Computer Class Policy	ABSOLUTELY NO FOOD ALLOWED. Drinks must have a threaded cap to be allowed and must be put away when not in use. Music devices during lab assignment times are acceptable. Each workstation must be cleaned and straightened before leaving the area.
Class Cancellation Policy	In the event of class being canceled by the school/instructor, the student will be responsible for the lecture material missed. The class will continue on the following class day. All information will be on Blackboard and/or sent via email to be accessed by the student.
Attendance Policy	Records of student attendance are maintained throughout the semester. Three absences, for any reason , are allotted to the student for the semester. Tardies count as one-half of an absence and will be applied for leaving early. Once this condition is exceeded, the instructor has the right to drop the student with an F or X grade at their discretion.
Withdrawal	To withdraw from this class, the student will need to go to the Admissions and Records office either on the Levelland campus or the Reese Center campus, and fill out a drop notification form.
Email Policy	The instructor will only acknowledge, respond, and send emails to your assigned SPC email. This ensures the intended recipient receives all correspondence from the instructor.
Final Grading Policy	All grades are rounded from the tenths place, e.g. 80.5 = 81, 80.49 = 80. Upon the submission of grades at the end of the semester. ALL GRADES ARE FINAL!
Returning Grades Policy	The instructor will attempt to return grades by the next class meeting; however, the instructor reserves the right to have at least one (1) week to grade assignments and post grades from the due date.
Religious Holy Days	Section 51.911, Texas Education Code, South Plains College will allow a student who is absent from class for the observance of a religious holy day to take an examination or complete an assignment scheduled for that day within seven (7) calendar days after the absence. Students are required to file a written notification of absence with each instructor within the first fifteen (15) days of the semester (Friday, 14 September 2018) in which the absence will occur. Forms for this purpose are available in the Student Services Office along with instructions and procedures. "Religious holy days" means a holy day observed by a religion whose place of worship is exempt from property taxation under Section 11.20, Tax Code.

Disabilities Statement	Students with disabilities, including but not limited to physical, psychiatric, or learning disabilities, who wish to request accommodations in this class should notify the Disability Services Office early in the semester so that appropriate arrangements may be made.
Diversity Statement	The instructor will establish and support an environment that values and nurtures individual and group differences and encourages engagement and interaction. Understanding and respecting multiple experiences and perspectives will serve to challenge and stimulate everyone to learn about others, the larger world, and ourselves. By promoting diversity and intellectual exchange, we will not only mirror society as it is but also model society as it should and can be.
Sexual Misconduct	It is important for students to know that all faculty members are mandated reporters of any incidents of sexual misconduct. Faculty cannot keep information about sexual misconduct confidential if students share that information. SPC offers advisors that students can confidentially seek out in the Health & Wellness Center. These advisors have the best interest in students and information can be accessed on campus or even in the local community.
Campus Concealed Carry	Campus Concealed Carry - Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in South Plains College buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and South Plains College policy, license holders may not carry a concealed handgun in restricted locations.
Academic Honesty	Students are expected to uphold the ideas of academic honesty; all work that is submitted for grading must be your own. Violation of this policy will result in an F for the assignment(s) and the student dropped with an F. For more details on what is considered cheating, see the South Plains College catalog.
Equal Opportunity	South Plains College strives to accommodate the individual needs of all students in order to enhance their opportunities for success in the context of a comprehensive community college setting. It is the policy of South Plains College to offer all educational and employment opportunities without regard to race, color, national origin, religion, gender, disability, or age.
Holiday/ Travel Statement	If a student has any pre-existing plans to travel during scheduled class times, the student must inform the instructor no later than Thursday, September 6th, 2018 . Failure to properly inform of any missed class will result in forfeiture of any graded class work with no allowable replacement/make-up work.
Recording Devices	Students are not allowed to use recording devices such as audio or video during class unless approved by the instructor
Resources	Students may utilize free tutoring provided by SPC. Tutoring is available at all SPC campus locations. Please consult with the instructor for further information.
Course Itinerary	Planned schedule; subject to change as necessary.

Week 1	August 27	Introduction, what is AutoCAD, drafting, and purposes
	August 29	Phases of design, Problem Identification to Documentation
Week 2	September 3	Labor Day Holiday extension, No Class
	September 5	Introduction to AutoCAD 2018 software
Week 3	September 10	Using toolbar/commands to create basic drawings for AutoCAD
	September 12	Further practice using AutoCAD
Week 4	September 17	Using a standardize template, appropriate layouts and lettering for drawings
	September 19	Using different Coordinate systems
Week 5	September 24	Fundamentals of visualization and sketching, glass box
	September 26	Projections and views
Week 6	October 1	2D Drawing representations
	October 3	Continue drawing 2D representations
Week 7	October 8	Project #1
	October 10	
Week 8	October 15	
	October 17	Project #1 Due
Week 9	October 22	Section Views
	October 24	Auxiliary Views
Week 10	October 29	Dimensioning
	October 31	Tolerancing
Week 11	November 5	Threads, Fasteners, and Springs
	November 7	Gears and Cams
Week 12	November 12	3D Modeling and assemblies
	November 14	Continue of 3D Modeling
Week 13	November 19	Architecture drawings
	November 21	Thanksgiving Break
Week 14	November 26	Project #2
	November 28	
Week 15	December 3	
	December 5	Project #2 Due