
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 | ARCE-1352-001 |
| COURSE TITLE | Structural Drafting |
| PREREQUISITE(S) | <i>DFTG 1317</i> |
| LOCATION | TA 207B |
| MEETING TIME | T/Th 11:00am – 2:40pm |
| TEXTBOOK | None |
| DESCRIPTION | A study of structural systems including concrete foundations and frames, wood framing and trusses, and structural steel framing systems. Includes detailing of concrete, wood, and steel to meet industry standards including the American Institute of Steel Construction and The American Concrete Institute. |
| SCOPE | The scope of <u>Structural Drafting</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 | Identify components of structural systems, use reference materials, produce drawings for concrete, wood, and steel framing systems, draw design details and connections for framing components, draw column and beam details for manufacture and assembly utilizing various fastening methods |
| COURSE TOPICS | <ol style="list-style-type: none">1) Classifications of Structural Elements and Systems2) Plan Development (including framing plans, foundation plans, etc.)3) Elevations and Sections4) Drawing and detailing Concrete, Wood and Steel Structural Systems5) Understanding Reference Materials6) Title Blocks and Construction Documents7) Plotting, Printing & Publishing |

GRADING

| WEIGHTS | | 30% | SCALE | A | 90 – 100% |
|---------|---------------|-----|-------|---|--------------|
| | Attendance | 30% | | B | 80 – 89% |
| | Assignments | 40% | | C | 70 – 79% |
| | Final Project | 30% | | D | 60 – 69% |
| | | | | F | 59% or Below |

| | |
|--------------------|---|
| ASSIGNMENTS | Practical drawing and/or research assignments will be periodically assigned to demonstrate proficiency in 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: <ol style="list-style-type: none">1. Neatness2. 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

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/>.