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: M/W: 8:00am-10:30am

F: 8:00am-12:00pm (by appt.)

COURSE INFORMATION

COURSE NUMBER ARCE-2352-001

COURSE TITLE Mechanical, Electrical and Plumbing (MEP) Systems

DFTG-1317 or consent of instructor PREREQUISITE(S)

LOCATION TA 207B

MEETING TIME T/Th 11:00A - 2:40P

TEXTBOOK Mechanical and Electrical Systems in Architecture, Engineering and Construction, 5th Edition.

By Joseph B. Wujek & Frank R. Dagostino, Pearson Publishing, ISBN 978-0-13300290-4

DESCRIPTION This course instructs students in the preparation of drawings for mechanical, electrical, and

plumbing, (MEP) systems with emphasis on applicable building energy codes, product references,

and specifications for construction.

SCOPE The scope of Mechanical, Electrical and Plumbing (MEP) Systems will be for sixteen (16) 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.

PURPOSE This course provides students with a basic knowledge of the interaction of MEP systems in

building construction and of how MEP relates to BIM software.

COURSE OUTCOMES Review and apply building and energy codes, select MEP components, and incorporate

specifications to produce MEP drawings including comprehension of related calculations and

coordination with building systems.

COURSE TOPICS 1) Introduction to MEP Systems

2) Lighting & Electrical Systems and Plans

3) HVAC Systems and Plans

4) Water & Plumbing Systems and Plans

5) MEP Calculations

6) Advanced MEP Systems and Networks

7) MEP Construction Documents

GRADING					
WEIGHTS	Attendance	30%	SCALE	Α	90 – 100%
	Assignments	40%		В	80 – 89%
	Final Project	30%		С	70 – 79%
				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:

1. Neatness

- 2. Line Criteria
- 3. Text Criteria
- 4. Systems designed to appropriate specifications and references
- 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 a 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 attendance grade will drop ten (10) percentage 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 ½ absence. A maximum of <u>six (6) late arrivals</u> are allowed per semester. Your attendance grade will drop ten (10) percentage 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 COVID-19 Protocol, 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/.

SPC TexBook Program

This course is in the SPC TexBook program, so you do not need to purchase a textbook or access code for this course.

- What is TexBook? The required textbook/digital content for this course is available to you in Blackboard from the first day of class. The charge for the textbook/digital content is the lowest price available from the publisher and bookstore and is <u>included</u> in your tuition.
- How do I access my TexBook? Your course material is in your Blackboard course from the first day of class.
 Access to your course material is provided either by VitalSource or other links inside your Blackboard course.
 VitalSource (and many publisher's) eBook features include the ability to hear the text read aloud, highlight, take notes, create flash cards, see word definitions, build study guides, print select pages, and download 100% of the book for offline access.
- Help with TexBook issues and support: check with your professor or visit:
 https://support.vitalsource.com/hc/en-us/requests/new (available 24/7 via chat, email, phone, and text)
- Opting out of TexBook: Participating in TexBook is not mandatory, and you can choose to opt out. However, by
 opting out you will lose access to the course textbook/digital content and competitive pricing, and you will need
 to purchase the required course material on your own. If you drop the class or opt-out before the opt-out
 deadline, the TexBook fee will be automatically refunded to your SPC account. The opt-out deadline for Fall and
 Spring is the twelfth class day. The opt-out deadline for shorter terms varies between the second and third class
 day.

*Please consult with your professor before deciding to opt-out. If you still feel that you should purchase the course textbook/materials on your own, send an **opt-out email** to **pwells@texasbook.com**. Include your first name, last name, student ID number, and the course you are opting out of. Once you have been opted-out, you will receive a confirmation email. If you need assistance with the process, contact the SPC Bookstore:

Email: pwells@texasbook.com / Phone: 806-716-2097

Email: agamble@texasbook.com / Phone: 806-716-4610