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-2352-001

COURSE TITLE

Mechanical, Electrical and Plumbing (MEP) Systems

PREREQUISITE(S)

DFTG-1317 or consent of instructor

LOCATION

TA 207B

MEETING TIME

M/W 11:00am - 2:40pm

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 <u>Mechanical</u>, <u>Electrical and Plumbing (MEP) Systems</u> 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.

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 digital content (either an eBook or Online Courseware) for this course is available to you via the Bibliu platform from the first day of class. This required digital content is provided as part of a program called "Inclusive Access." Which means that course related digital content is provided for you at the lowest price available from the publisher and the cost is <u>included</u> in your tuition.
- **How do I access my TexBook?** Course material can be accessed via the Bibliu link inside your Blackboard course or directly via the Bibliu app.
- **Help with TexBook issues and support:** If you experience any issues accessing course material, please contact your professor (<u>jbush@southplainscollege.edu</u>), the Bookstore Manager (<u>christian.bruno@bibliu.com</u>), or Bibliu Support (<u>support@bibliu.com</u>).
- **The Bibliu platform:** The Bibliu platform can be used to enhance your learning experience with features like highlighting, notes, and reading text aloud. For more details and support on how to use Bibliu, please visit the Bibliu support pages, or contact Bibliu Support via email at support@bibliu.com.
- Opting out of TexBook: Participation in the SPC TexBook Program is not mandatory, and you can choose to opt out of the TexBook Program up until the "Opt-Out" deadline via the banner displayed when you open the Bibliu platform. Please remember that "Opt-Out" deadlines vary by term and by opting out of the TexBook Program you will lose access to the required digital course content and the associated low-price option included in your tuition. If you choose to opt out of the TexBook Program, the fee will be refunded to your account, and it will be your responsibility to purchase the required course content and/or materials through a different method.

Useful Contacts:

- 1. Bookstore Manager: Christian Bruno at christian.bruno@bibliu.com
- 2. Bookstore Text Coordinator: Trish Wells at patricia.wells@bibliu.com
- 3. Bibliu Support: support@bibliu.com