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## COURSE SYLLABUS

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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](mailto:jbush@southplainscollege.edu)  
**Office Hours:** T/Th: 8:00am-10:30am  
F: 8:00am-12:00pm (by appt.)

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### COURSE INFORMATION

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<b>COURSE NUMBER</b>	ARCE-2352-001
<b>COURSE TITLE</b>	Mechanical, Electrical and Plumbing (MEP) Systems
<b>PREREQUISITE(S)</b>	DFTG-1317 or consent of instructor
<b>LOCATION</b>	TA 207B
<b>MEETING TIME</b>	T/Th 11:00A – 2:40P
<b>TEXTBOOK</b>	<i>Design of Mechanical &amp; Electrical Systems</i> . Trost, Pearson Publishing, ISBN 978-0-13097235-4
<b>DESCRIPTION</b>	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.
<b>SCOPE</b>	The scope of <u>Mechanical, 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.
<b>PURPOSE</b>	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.
<b>COURSE OUTCOMES</b>	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.
<b>COURSE TOPICS</b>	<ol style="list-style-type: none"><li>1) Introduction to MEP Systems</li><li>2) Intro to BIM and Revit</li><li>3) Lighting &amp; Electrical Systems and Plans</li><li>4) HVAC Systems and Plans</li><li>5) Water &amp; Plumbing Systems and Plans</li><li>6) MEP Calculations</li><li>7) Advanced MEP Systems and Networks</li><li>8) MEP Construction Documents</li></ol>

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## GRADING

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<b>WEIGHTS</b>	Daily Assignments	<b>20%</b>	<b>SCALE</b>	<b>A</b>	90 – 100%
	Review Questions	<b>20%</b>		<b>B</b>	80 – 89%
	Projects	<b>30%</b>		<b>C</b>	70 – 79%
	Exams	<b>20%</b>		<b>D</b>	60 – 69%
	Attendance	<b>10%</b>		<b>F</b>	59% or Below

**DAILY ASSIGNMENTS** Practical drawing assignments and/or practical drawing tests will be completed during laboratory time. Practical drawing assignments will be graded on the following:

1. Neatness
2. Line and text Criteria
3. Dimensioning Criteria
4. Systems designed to appropriate specifications and references
5. Choice & Location of Views
6. Correctness & Accuracy of Views
7. Nomenclature
8. Printing and Plotting

**REVIEW QUESTIONS** Students will be assigned review questions for each chapter covered in the textbook, as well as for other topics covered in lecture.

**PROJECTS** Projects will be periodically assigned to demonstrate a practical proficiency in the various drawing elements in architectural drafting.

**EXAMS** Exams will be comprised of practical skills and objective material.

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## CLASSROOM POLICIES

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**DISCLAIMER** The instructor reserves the right to amend any class policies or syllabus content as deemed necessary by South Plains College and will announce such changes ahead of time to the class. If a student has any questions about a change in policy, they have the right to discuss said change with the instructor.

**ATTENDANCE** **Three absences**, for any reason are allowed per semester. Tardies, defined as not being present in class within 5 minutes of the start of class, will count as ½ absence. Your grade will drop one letter grade per each absence over the allowable limit. Six absences will be grounds for the instructor to drop the student from the course.

If a student has not participated in a course(s) in any form for a minimum of 3 weeks, without any communication from the student and is earning a solid “F”, an administrative withdrawal will be considered. The student will be contacted and encouraged to initiate a student withdrawal. After an additional week, faculty will initiate an administrative 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. This form must be signed by the instructor.

**OTHER POLICIES** Food and drink will be allowed at a student’s work station as long as computers are not affected in a negative way. All drinks must be stored away from computer so as not to damage any component. All workstations must be thoroughly cleaned before a student leaves class.

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

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

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

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## ACCOMMODATIONS

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### **Diversity Statement**

In this class, the teacher 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 all of us to learn about others, about the larger world and about 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.

### **Disabilities Statement**

Any students who, because of a disability, may require special arrangements in order to meet the course requirements should contact the instructor as soon as possible to make and necessary arrangements. Students must present appropriate verification from the SPC Disability Service Office during the instructor's office hours. Please note that instructors are not allowed to provide classroom accommodations until appropriate verification from the SPC Disability Service Office has been provided. For more information, you may contact the Disability Services Office (located in the Health & Wellness Center) at 806-716-2529 or visit <http://www.southplainscollege.edu/health/disabilityservices.php>

### **Equal Opportunity, Harassment, and Non-Discrimination Statement**

South Plains College does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs and activities. The following person has been designated to handle inquiries regarding the non-discrimination policies: Vice President for Student Affairs, South Plains College, 1401 College Avenue, Box 5, Levelland, TX 79336. Phone number 806-716-2360.

South Plains College is dedicated to providing a safe and equitable learning environment for all students. Discrimination, sexual assault, and harassment are not tolerated by the college. The Health and Wellness Center offers confidential support (806-716-2529) and Voice of Hope has a 24-hour hotline (806-763-7273). You are encouraged to report any incidents online at <http://www.southplainscollege.edu/about/campussafety/complaints.php>

### **Title IX Pregnancy Accommodations Statement**

If you are pregnant, or have given birth been within six months, under Title IX you have a right to reasonable accommodations to help continue your education. Students who wish to request accommodations must contact the Health and Wellness Center at 806-716-2529 to initiate the process.

### **Title IX Sexual and Gender-based Misconduct Statement**

South Plains College is committed to maintaining a positive learning, working and living environment and will not tolerate acts of sexual harassment or sexual violence or related retaliation against or by any employee or student. When sexual harassment or sexual violence has occurred and is brought to the attention of a Title IX official, SPC will take steps to end the harassment or violence, prevent its re-occurrence and address its effects. For more information, view the sexual and gender-based misconduct policy.

### **COVID Statement**

Consistent with the latest CDC recommendations, we have revised our guidance for students, faculty, and staff who have a known exposure or have tested positive. Anyone with a known exposure should wear a mask for 10 days and should seek a COVID-19 test on day five after exposure. If you test positive or develop symptoms, you should immediately self-isolate and seek a COVID-19 test. Please immediately notify your instructor, supervisor, and DeEtte Edens, Associate Director of Health and Wellness, any time you test positive for COVID-19. Anyone who tests positive is

required to self-isolate for five days. Following the five-day isolation period, if you are asymptomatic or your symptoms are resolving, you may return to work or class but should wear a mask for five additional days. If you are still symptomatic, please contact DeEtte Edens at [dedens@southplainscollege.edu](mailto:dedens@southplainscollege.edu) or 806-716-2376 prior to your return date.

### **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. For a list of locations, please refer to the SPC policy at:

[http://www.southplainscollege.edu/human\\_resources/policy\\_procedure/hhc.php](http://www.southplainscollege.edu/human_resources/policy_procedure/hhc.php)

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all South Plains College campuses. Report violations to the College Police Department at 806-716-2396 or 9-1-1.