

Sam Houston State University
Huntsville, Texas

COLLEGE OF SCIENCE AND ENGINEERING TECHNOLOGY

Department of
ENGINEERING TECHNOLOGY

ETCM 4370-02 (3 credit hours)

Construction Plans and Documents

Syllabus for Spring 2018

<u>Days and Time:</u>	Thursdays 2:00 -4:50 p.m.
<u>Location:</u>	Westmorland Engineering Technology Laboratory 101
<u>Instructor:</u>	Dr. Nibert Saltibus
<u>Office:</u>	PETC 420 A
<u>Email:</u>	nes021@shsu.edu
<u>Office (Tel.):</u>	936-294-1201
<u>Office Hours:</u>	M W 8:00 a.m.-11:30 a.m., R 8:00 a.m. to 11 a.m., and by appointment.

Textbook: Print Reading for Construction-Residential and Commercial, Write-in Text with 140 Large Prints, 7th Edition (2019). Goodheart-Willcox Publisher, Tinley Park, IL.
Authors: Walter C. Brown & Daniel P. Dorfmueller.
ISBN-13: 978-1631269226

Other Items Required: Scale Rules:-Architect's Scale (1) & Engineer's Scale (1)

Course Prerequisite: ETEE 1340, ETDD 1361, and ETCM 1363 or or permission from the instructor for enrollment.

Course Description:

This course is designed to develop skills in the interpretation of plans and documents associated with the administration of residential and commercial construction projects. Topics include plan interpretation, construction mathematics, identification of materials and quantities, and material estimation. This course is writing enhanced and examples of students work will be retained.

Course Objectives:

- Explain why drawings are important in the construction industry
- Identify components of and interpretation of information contained in residential and commercial prints
- Demonstrate the use of scales and measurements and proficiency in construction mathematics
- Demonstrate proper and effective use of sketching and drawing to convey ideas and documentation
- Understand the principles of orthographic projection
- Understand how building code requirements impact the building process
- Identify materials and specifications contained on prints
- Interpret site and plot plans including topographical features
- Interpret architectural, framing, foundation, framing and structural plans
- Interpret mechanical plans which include plumbing, electrical, HVAC, and steel fabrication
- Explain weld details based on the welding symbol on a print
- Prepare construction material cost estimate
- Identify various types of professional architectural and construction documents*

This course consists primarily of lectures, student workbook sessions, and writing assignments, and a group project. Some workbook assignments may also be assigned for homework.

Homework/In-Class Assignments

Assignments will be given during the semester to assess the student's understanding of the various concepts that are covered under a particular topic/chapter. Assignments will also be given from one or more of the projects, which is to be completed individually. All assignments are to be submitted on time. There are no exceptions, except for reasons beyond the control of the student, such as health problems.

Exams

A total of three exams will be issued in the semester. Two during the semester and the third will be the final.

Project (Group)

There will be a group project assigned for this course. The main purpose of the project is for the student to implement the various concepts that are covered during the semester in the problem solving process as they relate to construction plans and specifications. The project is to be submitted toward the end of the semester.

Grading System

A	90-100
B	80-89
C	70-79
D	60-69
F	0-59

Course Evaluation

In-Class/Workbook/Writing Assignments (Individual- From Project/s):	40%
Exam 1:	15%
Exam 2:	15%
Group Project:	15%
Exam 3-Final Exam:	15%

Course Schedule and Topics to be covered in Class

Course Schedule	Topics
1-18-18	Review of Syllabus Course/Introduction/Construction Drawing Organization
1-25-18	Construction Math and Application
2-1-18	Reading Measuring Tools and Using Scales
2-8-18	Lines and Symbols
2-8-18	Fundamental Drawing Practices
2-15-18	Specifications and Building Codes & Exam 1
2-22-18	Construction Materials-Types and Uses
3-1-18	Site Plans
3-8-18	Architectural Drawings
3-15-18	Spring Recess
3-22-18	Foundation Prints
3-29-18	Structural Prints
4-5-18	Residential Framing Prints & Exam 2
4-12-18	Plumbing Prints
4-12-18	HVAC Prints
4-19-18	Electrical Prints
4-19-18	Welding Prints
4-26-18	Estimating Construction Costs- <i>Date Subject to Change</i>
5-3-18	Completed Final Group Project Due
5-7-18 to 5-10-18	Finals Week (Exam 3)

* The identification of various types of professional architectural and construction documents will be discussed at applicable times throughout the semester.

Print Reading Projects/Options/To be determined and assigned by the Instructor

Advanced Project A: Two-Story Brick & Stone Veneer Residence
Advanced Project B: Two-Story Brick & Stone Veneer Residence
Advanced Project C: Office & Warehouse
Advanced Project D: Parking & Office Building

Class Participation:

Class participation is strongly encouraged in this class.

Class Format:

Primarily Lectures

Personal Conduct in Classrooms and Laboratories:

Refer to **Student Guidelines**, “Code of Conduct and Discipline.”

Only language that is conducive to the learning environment will be tolerated in the class. If a student uses language that is not conducive, the student will be cautioned. If the student repeats the use of the unacceptable language in the learning environment, the student will be referred to the Chair of the Engineering Technology department or the student’s respective department Chair.

No food (water and acceptable liquid is permitted) is allowed during class sessions, and neither (water & food) is permitted when and if the computers are to be utilized. The student will be allowed to exit the classroom temporarily to eat if and when the need arises.

Academic Honesty:

The University expects all students to engage in all academic pursuits in a manner that is above reproach. Students are expected to maintain complete honesty and integrity in the academic experiences both in and out of the classroom. Any student found guilty of dishonesty in any phase of academic work will be subject to disciplinary action. The University and its official representatives may initiate disciplinary proceedings against a student accused of any form of academic dishonesty including, but not limited to, cheating on an examination or other academic work which is to be submitted, plagiarism, collusion and the abuse of resource materials.

Students are to attempt their own work, except, where permission is given by the instructor for students to work in groups or to be assisted by each other.

Students engaged in academic dishonesty will be referred to the Chair of the Engineering Technology department or the student’s respective department chair.

Class Attendance:

1. Regular and punctual attendance is expected of each student at Sam Houston State University.
2. Each faculty member will keep a written record of student attendance.
3. Attendance will be defined as the entire class period, or until the professor has ended the class, or given permission to leave. Students who depart from class early or come to class very late would have to provide a valid excuse beforehand to the instructor.
4. A student shall not be penalized for three or fewer hours of absences when examinations or other assigned class work has not been missed; however, at the discretion of the instructor, a student may be penalized for more than three hours of absences.
5. Excused absences must be documented by the student with a letter of confirmation from the sponsoring student organization, professor or doctor, or otherwise. Exemptions will include participation in departmental activities when prior approval is attained from the Department Chair.

6. No exams or assignments, or any other related academic work, will be issued to students at alternative times unless arrangements are made with the professor/instructor before the scheduled activity occurs.

7. Class absences will be recorded and counted only from the actual day of enrollment for the individual student in that specific class.

Missed Work Due to Excused or Unexcused Absences:

It is the student's responsibility to find out and get the class notes and/or assignments given and have it submitted on time.

Students with Disabilities Policy:

It is the policy of Sam Houston State University that individuals otherwise qualified shall not be excluded, solely by reason of their disability, from participation in any academic program of the university. Further, they shall not be denied the benefits of these programs nor shall they be subjected to discrimination. Students with disabilities that might affect their academic performance should register with the Office of Services for Students with Disabilities located in the Lee Drain Annex (telephone 936-294-3512, TDD 936-294-3786, and e-mail disability@shsu.edu). They should then make arrangements with their individual instructors so that appropriate strategies can be considered and helpful procedures can be developed to ensure that participation and achievement opportunities are not impaired.

SHSU adheres to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations for students with disabilities. If you have a disability that may affect adversely your work in this class, then I encourage you to register with the SHSU Services for Students with Disabilities and to talk with me about how I can best help you. All disclosures of disabilities will be kept strictly confidential. NOTE: No accommodation can be made until you register with the Services for Students with Disabilities. For a complete listing of the university policy, see:

<http://www.shsu.edu/dept/academic-affairs/documents/aps/students/811006.pdf>

Religious Days Policy:

Section 51.911(b) of the Texas Education Code requires that an institution of higher education excuse a student from attending classes or other required activities, including examinations, for the observance of a religious holy day, including travel for that purpose. A student whose absence is excused under this subsection may not be penalized for that absence and shall be allowed to take an examination or complete an assignment from which the student is excused within a reasonable time after the absence.

University policy 861001 provides the procedures to be followed by the student and instructor. A student desiring to absent himself/herself from a scheduled class in order to observe (a) religious holy day(s) shall present to each instructor involved a written statement concerning the religious holy day(s). This request must be made in the first fifteen days of the semester or the first seven days of a summer session in which the absence(s) will occur. The instructor will complete a form notifying the student of a reasonable timeframe in which the missed assignments and/or examinations are to be completed.

Academic Policy Statement 100728 Use of Telephones and Text Messagers in Academic Classrooms and Facilities:

The use by students of electronic devices that perform the function of a telephone or text messenger during class-time may be prohibited if deemed disruptive by the instructor to the conduct of the class. Arrangements for handling potential emergency situations may be granted at the discretion of the instructor. Failure to comply with the instructor's policy could result in expulsion from the classroom or with multiple offenses, failure of the course.

Any use of a telephone or text messenger or any device that performs these functions during a test period is prohibited, except when expressly permitted by the instructor. These devices should not be present during a test or should be stored securely in such a way that they cannot be seen or used by the student. Even the visible presence of such a device during the test period will result in a zero for that test. Use of these devices during a test is considered de facto evidence of cheating and could result in a charge of academic dishonesty (see student code of conduct <http://www.shsu.edu/students/guide/StudentGuidelines2010-2012.pdf#page=29>).

Cellphones or similar electronic devices are not permitted during class time.

Important Notice:

The above course schedule, policies, and assignments in this course are subject to change by the instructor or by mutual agreement between the instructor and the students.