

Course Syllabus – CNST 1301

Construction Methods and Materials

Course Description:

This course introduces students to the basic building materials and systems used in constructing buildings, bridges, and infrastructure projects. It offers the basic understanding of the use of common systems such as foundations, structural framing/skeleton, building envelopes, and finishes. Namely, it introduces students to proper terminology and usage of wood, steel, and concrete materials and selected manufactured components.

Course Prerequisites:

Credit for or concurrent enrollment in CNST 1361 and CNST 1330 or CNST 1315.

Textbook:

Fundamentals of Building Construction, Materials and Methods by Edward Allen and Joseph Iano, 5th Edition, John Wiley & Sons, Inc.

Course Learning Outcomes:

Upon the completion of the course students will demonstrate the ability to:

1. Common terminology and units of measurements
2. Composition and properties of common building materials
3. Standard sizes and shapes
4. Conformance references and testing techniques
5. Products, systems and interface issues
6. Selected assembly techniques and equipment usage
7. Build codes functions, standards and requirements

Student Learning Outcomes:

8. Analyze methods, materials, and equipment used to construct projects
15. Understand construction quality assurance and cost control.

Course and Student Learning Outcome Mapping

Student Learning Outcome	Course Learning Outcomes
8	1,2,3,5,6
15	4,7

Student Learning Assessments and Assessment Target

Assessment	SLO#8	SLO#15	Assessment Target
Assess (A)	X	X	At least 70% of students receive a grade of 70 or better

Class Grading:

Attendance	5%
Quizzes and Homework	20%
Midterm Exam	35%
Final Exam	40%

Grading Scale:

Letter Grade	Score
A	90-100%
B	80-89%
C	70-79%
D	60-69%
F	< 60%

Class Schedule:

Subject to change.

WEEK#	TOPIC
Week 1	Introductions, Review Syllabus and Set Expectations
Week 2	Terminology, Building System Types and Selection
Week 3	Foundations
Week 4	Foundations
Week 5	Wood & Heavy Timber Construction
Week 6	Steel Construction
Week 7	Masonry Construction
Week 8	Mid-Term (online in Blackboard)
Week 9	Spring Break
Week 10	Glass, Glazing & Exterior Finishes
Week 11	Concrete Construction
Week 12	Concrete Construction (cont.)
Week 13	Roofing & Cladding Systems
Week 14	Interior Finishes, Safety & Ethics
Week 15	Final Exam (online in Blackboard)

Participation:

Class participation is for the benefit of the student and is highly expected.

Academic Honesty:

The instructor reserves the right to adjust letter grades, upward only, based on individual attendance and class participation if numerical grade warrants such consideration. Students who violate University rules on scholastic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and dismissal from The University. Since dishonesty harms the individual, all students, and the integrity of The University, policies on scholastic dishonesty will be strictly enforced.

Exam Policy:

Exams will include material covered in class discussions, assigned text reading and homework assignments. Make-up exams will be given only in the event of a verified emergency or doctor verified sickness. ***THERE ARE NO MAKE-UP QUIZ OPPORTUNITIES.*** Assignments turned in

late will be counted off 20 percent per day (only exceptions listed previously). The student is responsible for all reading assignments and class handouts whether or not covered in class or listed on the syllabus.

The last day of class is the deadline for students to verify their grades and the accuracy of their score. After this deadline, there will be no consideration for any changes.

University Counseling and Psychological Services:

Counseling and Psychological Services (CAPS) can help students who are having difficulties managing stress, adjusting to college, or feeling sad and hopeless. You can reach CAPS (UH main campus www.uh.edu/caps, or UH Sugar Land campus <http://www.uh.edu/dsaes/uhsugarland/>) by calling [713-743-5454](tel:713-743-5454) during and after business hours for routine appointments or if you or someone you know is in crisis. No appointment is necessary for the “Let’s Talk” program, a drop-in consultation service at convenient locations and hours around campus.

UH main campus: http://www.uh.edu/caps/outreach/lets_talk.html

UH Sugar Land campus: <http://www.uh.edu/dsaes/uhsugarland/>

Classroom Behavior:

High level of professionalism in the classroom is expected. The instructor has the right to set the rules in his/her classroom. A student does not have the right to make changes to the instructor’s way of managing the classroom. Disruptive behaviors, such as excessive talking, arriving late to class, and using unauthorized electronic devices during class is not permitted. Repetitive and seriously disruptive behavior may result in removal from class in accordance with policies and procedures set by the Dean of Students Office.

Course/Instructor Evaluation:

A course/instructor evaluation will be conducted in class during the last scheduled lecture. Any suggestions you have on improving the course, however, are welcome throughout the term.

Students with Disabilities:

University of Houston provides, upon request, appropriate academic adjustments for qualified students with disabilities. Any student with a documented disability (physical or cognitive) who requires academic accommodations should contact the Center for Students with Disabilities (713/743-5400) for more assistance.

For detailed information about Disabilities, Religious Holy Days, the Academic Calendar, and Academic Honesty, and other information, please visit the following website: <http://www.uh.edu/provost/policies/student/resources/>.