CNST-2351-CONSTRUCTION ESTIMATING-I

**Course Description**
This course introduces students to the skills and tools necessary to prepare cost estimates for construction projects. The course focuses on the blueprint reading and determination of quantities (materials takeoff).

**Course Prerequisites**
Credit for or concurrent enrollment in CNST 2321 or CNST 2325 or consent of instructor. Students from the College of Architecture have consent of instructor to take CNST 2351 once they have completed any of the following: ARCH 2325, ARCH 2326, ARCH 2327.

**Textbook**
You will not be required to purchase the above referenced books, but they are recommended reading as they do have some good information in them. You will be required to purchase a ½ size set of drawings for the project we will be studying this semester. These drawings will be available in class on 1/24/2014. The cost is $50 dollars and is a requirement. Cash only as checks or credit are not accepted.

**Learning Objectives**
Upon the completion of the course students will demonstrate the ability to:
1. Read blueprints
2. Perform quantity takeoff for various work item
3. Utilize computer software to prepare required deliverables.

In addition to the learning objectives above, this course emphasizes Ethics, Safety, and Oral/Written Communication.

**Schedule of Topics**

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<thead>
<tr>
<th>Week #’s</th>
<th>TOPIC</th>
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<tbody>
<tr>
<td>1</td>
<td>Introductions, general discussion of student and instructor expectations, basic estimating tools i.e. scales, etc.</td>
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<tr>
<td>2</td>
<td>CSI formats. Issue drawings and review Architectural and Engineering scales and their use.</td>
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<td>3</td>
<td>Civil drawing review and explanation PART 1. What do they show us and how are they interpreted? Examples; Building Placement, SWPPP, Earthwork. Team exercise Site Utilities, Site Storm, Site accessories, Site Concrete, etc.</td>
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<tr>
<td>4</td>
<td>Civil drawing review and explanation PART 2. What do they show us and how are they interpreted? Examples; Site Utilities, Site Storm, Site accessories, Site Concrete, etc.</td>
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<tr>
<td>5</td>
<td>Architectural drawing review and explanation PART 1. What do they show us and how are they interpreted? Examples; roof systems, interior and exterior elevations.</td>
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<tr>
<td>6</td>
<td>Architectural drawing review and explanation PART 2. What do they show us and how are they interpreted? Examples; interior and exterior schedules, overall Architectural review.</td>
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<tr>
<td>7</td>
<td>Review for Mid Term Exam.</td>
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<tr>
<td>8</td>
<td>MID TERM EXAM</td>
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<tr>
<td>9</td>
<td>Structural drawing review and explanation PART 1. What do they show us and how are they interpreted? Examples; masonry, concrete foundation types, concrete piers.</td>
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Structural drawing review and explanation PART 2. What do they show us and how are they interpreted? Examples; concrete footings, concrete slabs, poured in place concrete walls, elevated concrete slabs, concrete slabs on metal decking, rebar and rebar placement, structural steel framing, misc. steel.

Electrical drawing review and explanation. What do they show us and how are they interpreted?

HVAC drawing review and explanation. What do they show us and how are they interpreted?

Plumbing and HVAC drawing review and explanation. What do they show us and how are they interpreted?

Review For Finals.

Classroom and Attendance Policies
The university respects the rights of instructors to teach and students to learn. Maintenance of these rights requires campus conditions that do not impede their exercise.

1. Successful performance in this class requires that you attend class. Be understanding of the other members of your team. **Please do not be late to class.**

2. If you need to miss a class, discuss it with your team members and instructor. Make sure that you have taken measures to prevent any hardship on team members and that they in turn are ready to cover your absence. Also, understand that missed quizzes will not be made up and midterm and final tests will be made up if arranged prior to the test being taken by the rest of the class.

3. Cell phones need to be turned off during class. Cell phone calls, texting, or any other cell phone use will not be tolerated.

4. Web surfing during class or during a class exercise is not permitted unless specifically required as part of an assigned work project.

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 and homework assignments. Exam make-up will ONLY be given in the event of a verified emergency or doctor-verified sickness. 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](http://www.uh.edu/caps), or UH Sugar Land campus [http://www.uh.edu/dsaes/uhsugarland/](http://www.uh.edu/dsaes/uhsugarland/)) by calling 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](http://www.uh.edu/caps/outreach/lets_talk.html)
UH Sugar Land campus: [http://www.uh.edu/dsaes/uhsugarland/](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 Start-Stop-Continue survey & a course/instructor evaluation will be conducted at the middle and the end of this semester. Any suggestions you have on improving the course, however, are welcome throughout the semester.

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/.