



**Purpose:** It is the intention of this Administrative-Master Syllabus to provide a general description of the course, outline the required elements of the course and to lay the foundation for course assessment for the improvement of student learning, as specified by the faculty of Wharton County Junior College, regardless of who teaches the course, the timeframe by which it is instructed, or the instructional method by which the course is delivered. It is not intended to restrict the manner by which an individual faculty member teaches the course but to be an administrative tool to aid in the improvement of instruction.

**Course Title -** Construction Estimating - I

**Course Prefix and Number -** CNST2351

**Department -** Engineering Design

**Division -** Technology and Business

**Course Type:** (check one)

- Academic General Education Course (from ACGM – but not in WCJC Core)
- Academic WCJC Core Course
- WECM course (This course is a Special Topics or Unique Needs Course: Y or N)

**Semester Credit Hours # : Lecture hours# : Lab/other hours #**

**3:3:3**

**Equated Pay hours for course -**  $3 + (3 \times .5) = 4.5$

**Course Catalog Description -** Introduction to the skills and tools necessary to prepare cost estimates for construction projects; focuses on blueprint reading and material quantity.

**Prerequisites/Co requisites -** CNST1301 or ENGT2304 and CNST2321

List Lab/ Other Hours
Lab Hours 3
Clinical Hours
Practicum Hours
Other (list)

**Approvals – the contents of this document have been reviewed and are found to be accurate.**

Prepared by Jo Ann Lurker	Signature JALurker	Date 11-22-10
Department Head Jo Ann Lurker	Signature JALurker	Date 11-22-10
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Vice President of Instruction or Dean of Vocational Instruction Leigh Ann Collins	Signature Lac	Date 11-9-12



**I. Topical Outline** – Each offering of this course must include the following topics (be sure to include information regarding lab, practicum, clinical or other non-lecture instruction):

- Architectural - including
  - wall and floor coverings; windows and doors; finishes and accessories
- Civil - including
  - underground utilities; earthwork
- Structural - including
  - reinforced concrete; structural steel; masonry units; timber construction
- Mechanical - including
  - pipng; instrumentation (P&ID's); Ducts; equipment and accessories
- Electrical Plans - including
  - cables and wires; conduits and cable trays; equipment and accessories

**II. Course Learning Outcomes**

<b>Course Learning Outcome</b>	<b>Method of Assessment</b>
Students will demonstrate the ability to: <ul style="list-style-type: none"> <li>read blueprints</li> <li>perform quantity takeoff for various work items</li> <li>utilize computer software to prepare required deliverables</li> </ul>	A portfolio containing student work projects will be assessed using the rubric attached to this document. Eighty percent of the students will earn a minimum of 70% of the points available.

**III. Required Text(s), Optional Text(s) and/or Materials to be Supplied by Student.**

- Basic Estimating for Construction, 2nd ed; by James A.S. Fatzinger
- Applied Cost Engineering by Forrest D. Clark
- Fundamentals of Construction Estimating, by Pratt; Thomson Delmar Learning

**IV. Suggested Course Maximum - 20**

**V. List any specific spatial or physical requirements beyond a typical classroom required to teach the course.**

Computer work station to include printers/plotters, projection system and appropriate software.

**VI. Course Requirements/Grading System – Describe any course specific requirements such as research papers or reading assignments and the generalized grading format for the course**

Written exams, projects, and daily lab work.

- A = 100 -90
- B = 89-80
- C = 79-70
- D = 69-60
- F = 59 or below

"C" or above in all degree specific classes

**VII. Curriculum Checklist**

- **Academic General Education Course** (from ACGM – but not in WCJC Core)  
No additional documentation needed
  
- **Academic WCJC Core Course**  
Attach the Core Curriculum Checklist, including the following:
  - Basic Intellectual Competencies
  - Perspectives
  - Exemplary Educational Objectives
  
- **WECM Courses**  
If needed, revise the Program SCANS Matrix & Competencies Checklist.