University of Southern California Department of Civil Engineering CE 556a – Project Cost Estimating and Control – 3 Units Spring 2008

Course Details and Contact Information

Time: 3:30 PM to 6:10 PM Class Location: OHE 120 (DEN)

Exam Location: TBD

Instructor: Carl L. Jablonski, CPE

Office Hours: By appointment, or online at http://learn.usc.edu

Contact: cjablons@usc.edu

Swinerton Management & Consulting 213 896-3434

Course Textbooks

Required:

<u>Architect's Essentials of Cost Management</u>, Michael D. Dell'Isola, AIA (Readings/Homework for this text designated on the DEN Class Schedule)

Reference: (Recommended)

Architectural Graphics Standards, Ramsey/Sleeper, John H. Wiley & Son's, Inc., John Ray Hoke Jr, Editor in Chief.

Means Estimating Handbook, R.S. Means, 2nd Edition.

CSI Uniformat Web Site, www.csinet.org

American society of Professional Estimators, <u>www.laestimator.org</u>

Introduction and Purpose

CE556a will provide the student with basic knowledge of the fundamental principles and practices of cost estimating, budgeting, and cost control of construction projects necessary for success as a professional in the construction/project management industry. The course explores cost estimating practices and project control issues as viewed through the perspective of the Owner, Architect, Engineer, Contractor and Construction Manager. Excel spreadsheets will be used with an introduction to other industry estimating software.

Course Requirements and Grades

Graduate standing in engineering, architecture, business or urban planning required.

Grading is based on four items as follows:

Homework	(Late Homework starts at 50% point value)	30 Pts. (15%)
In-class/DEN Participation		30 Pts. (15%)
Midterm	_	90 Pts. (20%)
Term Project		150 Pts. (50%)

Total Grade 300 Pts. (100%)

Grading scale:

A/A-	=	100% - 90%
B+/B/B-	=	89% - 80%
C+/C/C-	=	79% - 70%
D	=	69% - 60%
F	=	59%

Extra credit assignments are available for those seeking to raise any grade issues.

(Assignments available after Mid-Term Exam)

Course Requirements and Grades (continued)

A mid-term examination consisting of knowledge of the chapters covered will be given during the course. There will <u>not</u> be a final examination. In lieu of a final examination, term projects will be completed and presented the week before and during the scheduled final exam date. The term project presentations are a <u>required</u> classroom activity. <u>There are no excused absences</u>.

Mid term make-up examinations are allowed for extreme family emergencies only and must be requested in advance.

Laboratory / homework assignments must be dropped (electronically) into the DEN Network by the date due on the class schedule. <u>All</u> assignments are to be titled; Last name_Chapter Reference_Date (I.E., Smith_Chap.1.10_1.22)

Late assignments are not generally accepted, but the instructor may allow exceptions for extreme circumstances. Late assignments receive a point grade of no more than 50% of the available points. This class requires computer laboratory work. Previous computer estimating experience (Using an Excel Based Spreadsheet) is required. Although a specified amount of class time will be spent in the computer lab, it is likely that additional computer time (either at home or in the lab) will be required to complete your work. A "memory stick" or "travel" disc" is highly recommended. Reading assignments are identified on the course schedule in DEN. Assignments will be from the course textbook, or from reading materials handed out by the instructor. It is important to complete readings prior to the date listed, since they will form the basis for classroom discussions.

As part of the requirements for the course, each student will be required to submit a term project that will be a detailed project estimate, with project schedule and other critical criteria based on an actual construction project (plans and specifications will be provided). Term projects will include Oral and Power Point presentations. (Specific Term Project Requirements will be provided to all students mid-course)

Dates of assignment and due dates for all assignments, exams, and the term project are shown on the DEN course schedule.

DEN Course Requirements

Students using the Digital Education Network (DEN) will have specific course requirements due to the remote nature of their participation.

- 1. Lectures and Power Point presentations are structured for DEN student responses. DEN students are to respond to questions noted via written submission to the DEN network. The format for submission of these responses is available under "Course Documents" and is to be submitted no later than two (2) days after that scheduled class. DEN participation responses will be numbered according to the class lecture schedule.
- 2. Mid Term Examinations are set up as "Proctored" exams in a location TBD. This must be set up in advance of the mid-term.
- 3. Term Project Presentations are to be "presented" to the class according to the term project presentation schedule. At a minimum, the DEN student will "call in" and present their term project via an active link set up through DEN.

Return of course assignments

Returned paperwork, Term Projects, etc, unclaimed by a student, will be discarded after four (4) weeks and hence, will not be available should a grade appeal be pursued following receipt of his/her grade.

Students with Disabilities

Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to me as early in the semester as possible. Your letter must be specific as to the nature of any accommodations granted. DSP is located in STU 301 and is open 8:30 AM to 5:00 PM, Monday through Friday. The telephone number for DSP is 213.740.0776.

Academic Integrity

The University, as an instrument of learning, is predicated on the existence of an environment of integrity. As members of the academic community, faculty, students, and administrative officials share the responsibility for maintaining this environment. Faculty has the primary responsibility for establishing and maintaining an atmosphere and attitude of academic integrity such that the enterprise may flourish in an open and honest way. Students share this responsibility for maintaining standards of academic performance and classroom behavior conducive to the learning process. Administrative officials are responsible for the establishment and maintenance of procedures to support and enforce those academic standards. Thus, the entire University community bears the responsibility for maintaining an environment of integrity and for taking appropriate action to sanction individuals involved in any violation. When there is a clear indication that such individuals are unwilling or unable to support these standards, they should not be allowed to remain in the University.

(Faculty Handbook, 1994: 20)

Academic dishonesty includes: (Faculty Handbook, 1994: 21-22)

• Examination behavior – any use of external assistance during an examination shall be considered academically dishonest unless expressly permitted by the teacher.

- Fabrication any intentional falsification or invention of data or citation in an academic exercise will be considered a violation of academic integrity.
- Plagiarism the appropriation and subsequent passing off of another's ideas or words as one's own. If the words or ideas of another are used, acknowledgement of the original source must be made through recognized referencing practices.
- Other Types of Academic Dishonesty submitting a paper written by or obtained from another, using a paper or essay in more than one class without the teacher's express permission, obtaining a copy of an examination in advance without the knowledge and consent of the teacher, changing academic records outside of normal procedures and/or petitions, using another person to complete homework assignments or take-home exams without the knowledge or consent of the teacher.

The use of unauthorized material, communication with fellow students for course assignments, or during a midterm examination, attempting to benefit from work of another student, past or present, and similar behavior that defeats the intent of an assignment or midterm examination is unacceptable to the University. It is often difficult to distinguish between a culpable act and inadvertent behavior resulting from the nervous tensions accompanying examinations. Where a clear violation has occurred, however, the instructor may disqualify the student's work as unacceptable and assign a failing mark on the paper.

Course References

American Society of Civil Engineers, *Journal of Management in Engineering (TA 190 J687)* http://www.asce.org/

American Society of Civil Engineers, *Journal of Construction Engineering and Management (TA1 A47 C6)* http://www.asce.org/

Project Management Institute, *Project Management Journal (HD 69 P75 P76)* http://www.pmi.org/

 $E \& FN Spon, \textit{Construction Management and Economics} \ (HD 9715 A1 C667) \\ \underline{http://www.tandf.co.uk/journals/frameloader.html?http://www.tandf.co.uk/journals/routle} \\ \underline{dge/01446193.html} \ and \ \underline{http://www.rdg.ac.uk/~kcshuwil/cme/intro.html} \\ \\$

Blackwell Science, *Engineering, Construction, and Architectural Management* (HD9715 A1 E54) http://www.blackwell-science.com/~cgilib/jnlpage.bin?

Journal=ecam&File=ecam&Page=aims

International Project Management Association / Pergamon, *International Journal of Project Management* (T56.81537) http://www.elsevier.nl/inca/publications/store/2/0/4/3/5/

AACE International, *Cost Engineering* (TA183 A6) and *Transactions* (HD47 A197) http://www.aacei.org/

IEEE, *Engineering Management Review* (TA190 I577) http://www.ieee.org/products/periodicals.html

American Society for Quality (ASQ), *Congress Proceedings* (TS 155 A1 A5) http://www.asq.org/

Construction Industry Institute (the largest Construction research group in the United States) http://construction-institute.org/

Construction Management Association, www.cmaanet.org

American society of Professional Estimators, www.laestimator.org