SR SUL ROSS THE FRONTIER UNIVERSITY OF TEXAS

Department of Industrial Technology IT 3355 | CONSTRUCTION ESTIMATING II | FALL 2023

Mr. Corey Sanders

Office: Industrial Technology Building, RM 101

Phone: 432-837-8138

Email: corey.sanders@sulross.edu Office Hours: By Appointment

Class Time and Location: ONLINE

Required Textbook:

Construction Estimating Using Excel 3rd Edition;

Author(s): Steven Peterson

Publisher: Pearson/Prentice Hall; *3rd Edition* Print ISBN: 9780134405506, 0134405501 eText ISBN: 9780134301341, 013430134X

Reference:

There will also be additional reading material assigned in the form of handouts that contain industry related information. Students will be responsible for that information on tests and quizzes.

Course Description

This course introduces students to the skills and tools necessary to prepare formal bids for construction projects. It focuses on pricing, indirect costs, bid analysis and use of computer aided software. The course addresses the bidding procedure from receipt of bid documents through work breakdown, work quantification, pricing and bid submittal for lump sum and unit price bids, and preparation of project proposals. This course is designed to do the following:

- 1) Provide an overview of the workflow and tools used to prepare and price bids.
- 2) Creating and formatting project estimates.

We will approach this course as if you are a newly hired estimator for a small startup construction company and are in charge of growing the estimating department. In addition to having a working knowledge of the Masterformat construction divisions, you will need to create a process for creating and submitting bids. The goal is to become familiar with the preconstruction process as well as some of the software tools used on a daily basis. Your comprehension of this material will be a valuable skill in your professional toolbox that can be immediately applied when starting a new position. It is not about memorization, but about understanding the key steps to take when putting together an estimate.

Course Objectives

Upon completion of this course the student will be able to:

- Demonstrate an understanding of the following topics by correctly answering various styles of questions presented on worksheets and tests, and completing a variety of lab and written exercises.
- The role of estimating in the success of a construction company.
- Setting up a cost database.
- Identify general scopes of work for a project.
- Perform quantity take off for different scopes of work.
- Prepare bid documents.
- Identify building components.
- Describe and calculate cost components of material pricing.
- Use historical costs.
- Know the difference between equipment ownership and operation costs.
- Calculate labor and crew rates.
- Calculate overhead, insurance, and profit (markups).
- How to submit a bid proposal.

Additionally, students will be exposed to the conditions that the contractor must perform under to deliver successful projects and to gain a perspective on the types of projects that you might encounter in your career. This class is to be a learning experience, and one that you want to come to each week. As such the class structure, lesson topics, and overall learning environment will emphasize more than just knowledge comprehension.

Accessibility

Sul Ross State University (SRSU) is committed to equal access in compliance with Americans with Disabilities Act of 1973. It is SRSU policy to provide reasonable accommodations to students with documented disabilities. It is the Student's responsibility to initiate a request. Please contact me, Ms. Rebecca Greathouse Wren, M.Ed., LPC-S, Director/Counselor, Accessibility Services Coordinator, Ferguson Hall (Suite 112) at 432.837.8203; mailing address is P.O. Box C-122, Sul Ross State University, Alpine, Texas 79832. Students should then contact the instructor as soon as possible to initiate the recommended accommodations.

Attendance – Student Expectations

Attendance (regular participation in the online classroom) is essential for maintaining the best learning environment. Learning occurs in relationship not only between student and course materials, but, just as importantly, peer to peer, professor to student, and student to professor.

receiving benefits from government agencies must adhere to policies stipulated by the specific agency.

NOTE: This Internet class demands that the student be self-motivated and self-disciplined. You are responsible to keep up with the schedule, assignments, and exams. I will be contacting you throughout the semester by email, and Blackboard is available at all times.

What You Should Understand About Internet Classes

- 1. Be realistic about the amount of time required to do the coursework.
- 2. On-line is NOT easier!
- 3. Schedule class time just as if you were attending class on-campus
- 4. Turn in your work ON TIME
- 5. Participate actively in the class
- 6. <u>Use e-mail and the discussion boards to communicate often with your instructor & classmates</u>
- 7. Log onto the class at least 5 times a week
- 8. Do NOT fall behind in your assignments
- 9. ASK for help when you need help

Distance Education Non-Participation Statement

Policies in effect for on-campus, traditional classroom instruction courses also apply to students enrolled in distance education courses, including Web-based and ITV courses. The University allows a maximum of 20% absences in a course before an instructor may drop a student for excessive absences. In Web courses, this policy is interpreted as not participating for more than 3 weeks in a long semester, 1 week in a summer session, or 3 days in the midwinter session.

Any student dropped for non-participation will receive an "F" in the course dropped. Inactivity may include the following:

- not logging on to the course not submitting assignments
- not participating in scheduled activities
- not communicating with the instructor by phone or email, and/or
- not following the instructor's participation guidelines stated in the syllabus

Any student who has not logged on to this course or submitted assignments by September 8, 2020 will be considered to have exceeded the University's policy on "excessive absences" and may be automatically dropped from the course. Blackboard statistics track the logins made and document the sections of the course accessed. These statistics will be used by your professor as a factor in documenting your participation in the course.

Your professor will use Blackboard statistics to document logins to the course and assignments accessed.

Class Structure

The course is totally online. Strategies include: Reading resources (papers); lectures with assignment instructions and use of the discussion board through Blackboard; written assessments at midterm and final; use of the Internet; and e-mails among students and between individual students and the professor. *Students are responsible for completing all assigned work*.

Discussion Participation

Discussion topics will be set up for each module; you are expected to contribute to each discussion by posting a comment and replying to at least 2 other posts. Five points can be earned for each discussion following the guidelines below. Spelling and grammar count.

Time Commitment

You will be expected to log on to the course site 5-6 times per week. You are also expected to participate in all assigned activities including discussions in the course. Students should be prepared to spend at least 4-6 hours per week outside of class on assignments that will include: Homework, Reading Assignments, Lab work and studying for tests and quizzes.

Assignments

All assignments are to be submitted via Blackboard. No late work will be accepted without proper documentation or prior approval by the instructor.

Course Communication: The official e-mail communications channel for this course is the Sul Ross State University e-mail account (yourname@sulross.edu) of each student and professor. For the purposes of this course, no other e-mail account is acceptable.

Due dates: All assignments and projects will be given due dates which must be met. All assignments will be due by 11:59 pm on the assigned day. Assignments and projects will not be accepted if they are turned in late without approval. **Late assignments will lose ten points per calendar day**. Students are responsible for meeting the deadlines even if classes are missed.

Grading: All work will be graded on specific criteria using the following guidelines. Any worksheets will be graded on a points-per-answer basis. Any sketches and drawings assigned will be graded on a 100point (percentage) scale. Criteria for grading will include accuracy of content, appropriateness of content for assignment, presentation, and clarity. Projects in the lab will be graded on accuracy, neatness, content, adherence to standards, adherence to assignment,

and workmanship. Graded items will be broken into specific categories and presented on grade sheets given at the time the assignments are given.

Grading Policy

Final grades will be determined by totals in these areas:

- 15% quizzes
- 25% final exam (comprehensive)
- 30% assignments: homework, lab work, and discussion participation
- 30% final project (group or individual project)

In the event one of the above categories is not completed during the course that percentage will automatically be divided between the other categories at the same level. All assignment points will be converted to percentages for individual assignment letter grades.

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

Grades will be earned on the basis that "C" is average work, "B" is above average work, and "A" is well above average work. Barring unusual circumstances, there will be <u>NO</u> <u>INCOMPLETES</u> given at the end of this semester.

Academic Honesty

All students are expected to complete their own work at all times. Any dishonest conduct will be promptly rewarded with an immediate "F".

Plagiarism

A student guilty of plagiarism and/or cheating will receive a grade of "F" in the course involved and the grade will be so recorded on the transcript. Students giving and receiving assistance in any unauthorized manner during an examination will subject themselves to this cheating policy. A pattern of cheating will result in suspension.

Lab Time

As with all the Industrial Technology classes there will be a substantial amount of lab work to be done. Normally 6 hours outside of scheduled class time each week for researching, reading, and general homework is expected for college level work. All required research, lab work, and practice will not be able to be completed within the scheduled class time.

Supplies

There are some expendable supplies you will need for the class such as pencils (lead), erasers, and paper. These supplies may be provided through the department through a set materials fee

based on the average material use by students.

Storage

The lockers in the hallway may be checked out and used for storing your equipment and supplies. These lockers must be signed out with the secretary in the IT main office. You must supply your own lock. Do not leave any of your work or equipment lying around in the lab!

Quizzes

You will not be given advance notice of quizzes. They will be primarily written in nature. There will be no make-up quizzes.

Tests/Exams

All exams will be given on the announced date.

Everything discussed and everything in the assigned reading, including laboratory material, is fair game for tests and quizzes. It is your responsibility to be in attendance the day of scheduled exams. Tests will be either administered through Blackboard or written in nature using various styles of questions covering terminology, equipment, processes, and other items discussed. Attendance for the tests is mandatory; no makeup tests will be given.

Midterm Exam

There will be no midterm exam given.

Final Exam

There will be no midterm exam given.

Course Project

This course will have a project due at the end of the semester that will be factored into the final grade.

IT 3355 Construction Estimating II

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Course Outline

The following is a tentative schedule for the semester. The dates provided are the dates the reading is assigned and the reading is to be completed by the following class day.

Date	Topic/Learning Experience	Reading
Week 1	Course Intro/Expectations	Appendix A, Chapters 1 & 2
Week 2	Which Type of Deliverable	Chapter 34
Week 3	Pricing and Markups	Chapters 24, 25, 26, 27
Week 4	Ethics	Chapter 31
Week 5	Review & Test	
Week 6	Course Project Start	Supplemental Reading – Provided by Instructor
Week 7	Open Q&A – Help with Project	Supplemental Reading – Provided by Instructor
Week 8	Course Project Due	