

# Department of Agriculture & Industry IT 2355 | CONSTRUCTION ESTIMATING | | SPRING 2025

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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**

The objectives of this course of study are to provide the student with an opportunity to acquire basic knowledge and understanding in the area of construction estimating. This course will focus on several issues related to those topics. At the completion of this course, students will understand some of the characteristics of estimating construction projects, putting together project bids, leveling subcontractor bids, and submitting a proposal to a client.

# 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.
- Identify estimating tools.
- 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 Statement**

SRSU Accessibility Services. Sul Ross State University (SRSU) is committed to equal access in compliance with the 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 each semester for each class. Students seeking accessibility/accommodations services must contact Mrs. Mary Schwartze Grisham, LPC, SRSU's Accessibility Services Director or Ronnie Harris, LPC, Counselor, at 432-837-8203 or email <a href="mailto:mschwartze@sulross.edu">mschwartze@sulross.edu</a> or <a href="mailto:ronnie.harris@sulross.edu">ronnie.harris@sulross.edu</a>. Our office is located on the first floor of Ferguson Hall, room 112, and our mailing address is P.O. Box C122, Sul Ross State University, Alpine. Texas, 79832.

# **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.

Participation in this course via the Internet is the responsibility of the student. Students 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 for keeping 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 January 29, 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 mails among students and between individual students and professors. *Students are responsible for completing all assigned work*.

#### **Discussion Participation**

Discussion topics are 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.

#### **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% Tests (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.

## 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**

The final exam will be during the week of May 5-7, 2025. The specific date and time will be announced during the semester. The exam will include written, practical, and analytical portions, and will be comprehensive of the entire semester. Do not make any other plans for that day and time.

# **IT 2355 Construction Estimating**

Spring 2024

# Tentative 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	Chapters 1-2
Week 2	Construction Scopes – Concrete, Masonry, and Metals	Chapters 3-7
Week 3	Construction Scopes – Woods, Moisture	Chapters 8-10
Week 4	Construction Scopes – Finishes	Chapter 11
Week 5	Construction Scopes – Fire Suppression, Plumbing, HVAC, and Electrical	Chapters 12-15
Week 6	Construction Scopes – Earthwork, Exterior, and Utilities	Chapters 16-18
Week 7	Labor, Material, and Subcontractor Pricing	Chapters 19-24
Week 8	Markups and Proposal Submission	Chapters 25-28
Week 9	SPRING BREAK – NO CLASSES	
Week 10	Best Practices 1	Chapters 29-31
Week 11	Best Practices 2	Chapters 32-34
Week 12	Project Bid Week 1	
Week 13	Project Bid Week 2	
Week 14	Project Bid Responses and Resubmission	
Week 15	Class Review	
Week 16	***FINAL EXAM***	