

M.E. Rinker, Sr.
School of Building Construction
University of Florida
Semester Course Outline

BCN 4612C – Estimating II

Spring 2022

3 Credits

Instructor: Dr. Aladdin Alwisy, RNK 311, Rinker Hall
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Prerequisites: BCN 3611, Senior Standing

Description: Analysis and determination of the cost of construction operations including labor, materials, subcontractor costs, and the associated indirect and overhead costs and profit. Conceptual estimating is introduced and used as a tool to review a project's feasibility, initiate value engineering analysis and establish budgets. Extensive analysis of material supplier, subcontractor and labor quotes for each technical section. Bidding various technical sections as a subcontractor and bid day simulation using estimating software. Post bid issues including change orders, schedule of values, contract modifications and professional ethics are discussed.

Method: Four (4) hour combination lecture/laboratory contact hours per week.

Objectives:

- The students will be able to identify the duties and responsibilities of the professional estimator (ACCE SLO 6 and 13)
- The students will have the skills and confidences needed to understand and accurately estimate and bid commercial and residential construction projects (ACCE SLO 4, 9, and 10).
- To help the students recognize that having the ability to accurately estimate the cost of any construction activity is a necessary and fundamental require in any construction career path (ACCE SLO 4, 9, and 10).

Required Texts: *Means Building Construction Cost Data, latest edition, R.S. Means Co., Inc., Kingston, MA (**may be available online*)

Recommended Text: Fundamentals of Construction Estimating, Pratt, Delmar Publishing, latest edition.
Estimating in Building Construction, Steven J. Peterson, Frank R. Dagostino, Pearson Publishing, latest edition.
Construction Estimates from Take-off to Bid, Norman Foster, McGraw-Hill Book Co., latest edition.

Other Requirements: EXCEL spreadsheet, software applications as necessary

Classes Mondays and Wednesdays: **RNK 240**
All Sessions: Period 2 (8:30 AM - 9:20 AM)

Thursdays: **RNK 215**
BCN4612C-5955 (23399): Period 4 - 5 (10:40 AM - 12:35 PM)
BCN4612C-5954 (11384): Period 6 - 7 (12:50 PM - 2:45 PM)

Office Hours Thursdays: **RNK 311**
 (Period 8 - 9) 3:00 - 4:55 pm

By Appointment:

Email aalwisy@ufl.edu. Subject line should read *BCN 4612 APPOINTMENT REQUEST-<your name>*.

Provide a brief description of what you want to discuss. Also please suggest one or two alternate times for scheduling other student requests. I will send you an e-mail about the appointed time.

TA: Zachary Delaney, Email zdelaney@ufl.edu

Attendance: Attendance is not mandatory.

In-Class Assignment: In class assignments are group assignment that *MUST* be solved during the class. If all the members of a group are absent for any in-class assignment, their assignment will not be graded.

Quizzes & Exams: *NO MAKEUP QUIZZES/EXAMS.*
 The results must be discussed in person within 24 hours after the quiz/exam has been taken. After 24 hours the grade is final. Again, *makeup exams will not be given.*

Final Project: The final project will cover a variety of topics taught throughout the year. It is a group project where a peer-review will be implemented to assign 50% (i.e., 100 points) of the report.

Final Exam: There is no final exam.

Bonus points: Bonus points opportunities will be given through the semester in class.

Grade Breakdown: Final grades will be calculated as follows:

Modules		InClass Assignments	Homeworks	Quizzes	EXAMS	Final Project
					EXAM 1	100
Module 1	Introduction to Estimating II	InClass	50	Fundamentals	25	
Module 2	Conceptual Estimating	InClass	50	HW#1	50	
Module 3	General Requirements	InClass	25	HW#2	50	
Module 3		InClass	25			
					EXAM 2	100
Module 4	Subcontractor Bid Analysis	InClass	25			
Module 5	Concrete Pricing	InClass	25			
Module 6	Sitework Pricing	InClass	25	HW#3	25	
				HW#4	25	
					EXAM 3	100
Module 7	Masonry Pricing	InClass	25			
Module 8	Finishes Pricing	InClass	25			
Module 9	Unit Price Contract	InClass	25			
Module 10	Bid Simulation					200
Totals			300	150	50	300
						1000

**Grade
Makeup:**

Final grades will be calculated as follows:

In-Class Assignments	300
Homework	150
Quizzes	50
Exams	300
Final Project	200
	<hr/>
	1000

Grade Scale:

Divide the total points you earn by **The total possible points**. Grades will be given according to the following scale. **Decimal points will not be Rounded.**

Name	Range	
A	100%	to 94%
A-	< 94%	to 90%
B+	< 90%	to 87%
B	< 87%	to 84%
B-	< 84%	to 80%
C+	< 80%	to 77%
C	< 77%	to 74%
C-	< 74%	to 70%
D+	< 70%	to 67%
D	< 67%	to 64%
D-	< 64%	to 61%
E	< 61%	to 0%

**Student
Evaluations:**

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

Accommodations:

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, www.dso.ufl.edu/drc/) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

Honor Code:

All students in this course are subject to the requirements of the University of Florida's Honor Code <https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>. Cheating will not be tolerated. Although joint work on assignments may be acceptable in some cases, duplication of an assignment either manually or electronically will be dealt with as an act of academic dishonesty. "We, the

members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.”

Counseling: Contact information for the Counseling and Wellness Center: <http://www.counseling.ufl.edu/cwc/Default.aspx> (Links to an external site.), 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies

Reservations And Remedies: The instructor reserves the right to modify the course schedule, grade make-up, grade scale, modules, and any other aspect of the course as deemed fit throughout the term without notice. The updated Syllabus will be uploaded on the course’s Canvas. For any questions, issues, or concerns about the course (assessment, policies, schedule, etc.), please contact the instructor to remedy them.

Weekly Course Schedule:

Week/ Date	Topic/Assignment (Question/Subject)
Week 1	Course introduction / important role of estimating Plan reading review, Complete and Accurate Estimates, organization of the specifications and introduction to CONSTRUCTION COST DATA, location modifiers, and Conceptual Estimating.
Week 2	Conceptual estimating using accepted techniques and recognized cost data references. Applying Time, Location and Size considerations to conceptual estimates.
Week 3	General requirements for takeoff and pricing. Project characteristics in relation to general requirements.
Week 4	Introduction to subcontractor bid analysis and its importance. Utilization of estimating software / templates and data bases.
Week 5	Spreadsheet layout and organization. Concrete takeoff and pricing. Use MEANS. Scope of work issues. Analysis of sample concrete subcontractor proposals and concrete supplier proposals.

Week/ Date	Topic/Assignment (Question/Subject)
Week 6	<p>Continue with scope of work issues.</p> <p>Analysis of Sitework subcontractor proposals.</p> <p>Analysis of prime contractor estimating for heavy/civil construction. Scope of work issues and spreadsheet layout. Use MEANS.</p>
Week 7	<p>Masonry quantity takeoff and pricing. Scope of work issues.</p>
Week 8	<p>Analysis of sample masonry subcontractor and supplier proposals.</p>
Week 9	<p>Finishes quantity takeoff and pricing. Scopes of work analysis</p>
Week 10	<p>Estimating a unit price contract.</p>
Week 11	<p>Estimating for different delivery systems.</p> <p>Bid Simulation. Preparation of the bid package.</p>
Week 12	<p>Factors affecting and impacting the bidding process.</p> <p>Logistics issues and bidding philosophies. Preparing for bid day!</p>
Week 13	<p>Group Project Review</p>
Week 14	<p>Group Project Review</p>