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

BCN 4612C – Estimating II

Spring 2023

3 Credits

Instructor: Dr. Aladdin Alwisy, RNK 311, Rinker Hall

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Prerequisites: BCN 3611, Senior Standing

Description: (1) Analysis and determination of the cost of construction operations including labor,

materials, subcontractor costs, and the associated indirect and overhead costs and profit. (2) Conceptual estimating is introduced and used as a tool to review a project's feasibility, initiate value engineering analysis and establish budgets. (3) Extensive analysis of material supplier, subcontractor, and labor quotes for each technical section. (4) 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 *Ethics* and 13 *Risk*)
- The students will have the skills and confidence needed to understand and accurately estimate and bid on commercial and residential construction projects (ACCE SLO 4 *Estimating*, 9 *Team*, and 10 *IT*).
- To help the student recognize that having the ability to accurately estimate the cost of any construction activity is a necessary and fundamental requirement in any construction career path (ACCE SLO 4 *Estimating*, 9 *Team*, and 10 *IT*).

Required

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

Texts:

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Recommended Text:

<u>Fundamentals of Construction Estimating</u>, Pratt, Delmar Publishing, latest edition. <u>Estimating in Building Construction</u>, 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 (5954): Period 6 - 7 (12:50 PM - 2:45 PM)

Office Hours

Thursdays: **RNK 311** (2:45 PM – 4:45 PM)

By Appointment:

Email <u>aalwisy@ufl.edu</u>. The subject line should read BCN 4612 APPOINTMENT

REQUEST-<your name>.

Please 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: Chao Xie, Email xie.chao@ufl.edu

Attendance: Attendance is mandatory. You have three unexcused absences. To have an absence

excused, you need to bring proof of why it was unavoidable (doctors note, etc.)

In-Class Group Assignments: In-class assignments are group assignments that must be solved during the class (lab sessions) by everyone in the group. If a student is absent during an in-class assignment, they will receive <u>ZERO</u> on that in-class assignment. Students will have until <u>midnight of the following day</u> to submit their in-class assignments, however, students are not allowed to leave the lab session early without confirming that they submitted their work.

Exams: NO MAKEUP EXAMS.

There are three <u>CLOSED-BOOK</u> exams; No appendices will be provided. The exams' results must be discussed in person within 24 hours after the quiz/exam has been taken.

After 24 hours the grade is final.

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 throughout the semester in class.

Grade Final grades will be calculated as follows: **Breakdown:**

Attendance	Modules		InClass Assignments	EXAMS		Final Project
				EXAM 1		
	Module 1	Introduction to Estimating II	25	Module 1	100	
	Module 2	Conceptual Estimating	50	Module 2	100	
	Module 3	General Requirements	25	Module 3		300
				EXAM 2		
100	Module 4	Subcontractor Bid Analysis	25	Module 4	100	
100	Module 5	Concrete Pricing	50	Module 5		
	Module 6	Sitework Pricing	25	Module 6		
	EXAM 3					
	Module 7	Masonry Pricing	50	Module 7	100	
	Module 8	Finishes Pricing	50	Module 8	100	
	Module 9	Bid Simulation		Module 9		
100			300		300	300
						1000

Grade Makeup: Final grades will be calculated as follows:

Attendance	100
In-Class Assignments	300
Exams	300
Final Project	300
•	1000

Grade Scale:

Divide the total points you earn by <u>The total possible points</u>. 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%	
В	< 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%	
Е	< 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	Туре	Topic/Description	Date/ Due_Date
Week 1 Jan08 – Jan14	Lecture	 Course Introduction Estimating II Intro & Review Course Content 	
	In-Class	N/A	N/A
Week 2 Jan 15 – Jan 21	Lecture	 Module 1: Introduction to Estimating II BCN 4612C - M 1 - 1 - Intro RS Means 	
	In-Class	N/A	N/A
Week 3 Jan22 – Jan28	Lecture	 BCN 4612C - M1 - 2 - Specs and Plan Reading Masterformat_2018_web 	
	In-Class	Module 1 – In-Class Assignment	Jan28
Week 4 Jan29 – Feb04	Lecture	 Module 2: Conceptual Estimating BCN 4612C - M 2 - 1 - First Budget Estimate Procedures Guest Speaker: Brian Sudduth, President of Miller Construction 	
	In-Class	N/A	N/A
Week 5 Feb05 – Feb11	Lecture	 BCN 4612C - M 2 - 2 - Conceptual Estimates and Project Narratives BCN 4612C - M 2 - 3 - Conceptual Estimates 	
	In-Class	Module 2 – In-Class Assignment	Feb11

Week/ Date	Туре	Topic/Description	Date/ Due_Date	
Week 6 Feb12 – Feb18	Lecture	 Module 3: General Requirements BCN 4612C- M 3 - 1 - General Requirements BCN 4612C- M 3 - 2 GR/GC In-Class Example 		
	In-Class	Module 3 – In-Class Assignment	Feb18	
	Lecture	Modules 1, 2, and 3 Review		
Week 7	EXAM	Exam 1 – Modules 1, 2, and 3	Feb22	
Feb19 – Feb25	Lecture	• Exam 1- Review		
	In-Class	N/A	N/A	
Week 8 Feb26 – Mar04	Lecture	 Module 4: Subcontractor Bid Analysis BCN 4612C- M 4 - 1 - Prequalification Process BCN 4612C- M 4 - 2 - Sub Bids Software / Autodesk Workshop 		
	In-Class	Module 4 – In-Class Assignment	Mar04	
Week 9 Mar05 – Mar 11	Lecture	 Module 5: Concrete Pricing BCN4612_PCC_In-Class Example #1 BCN4612_PCC_In-Class Example #2 		
	In-Class	Module 5 – In-Class Assignment	Mar10	
SPRING BREAK				
Week 10 Mar19 – Mar25	Lecture	 Module 6: Sitework Pricing BCN 4612C - M 6 - 1 - Sitework Pricing BCN 4612C - M 6 - 2 - Sitework Pricing 		
	In-Class	Module 6 – In-Class Assignment	Mar25	
Week 11	Lecture	• Modules 4, 5, and 6 Review		
Mar26 – Apr01	EXAM	Exam 2 – Module 4, 5, and 6	Mar29	
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	In-Class	N/A	N/A	

Week/ Date	Туре	Topic/Description	Date/ Due_Date
Week 12 Apr02 – Apr08	Lecture	 Module 7: Masonry Pricing BCN 4612C- M7 - 1 - Masonry Estimate BCN 4612C- M7 - 2 - Masonry Estimate 	
Week 13 Apr09 – Apr15	In-Class Lecture	Module 7 – In-Class Assignment Module 8: Finishes Pricing BCN 4612C- M8 - 1 - Finishes Estimate BCN 4612C- M8 - 2 - Finishes Pricing	Apr 08
Week 14 Apr16 – Apr22	In-Class Lecture	Module 8 – In-Class Assignment Module 9: Bid Simulation BCN 4612C- M 10 - 1 - The Bidding Process BCN 4612C- M 11 - 2 - Closing the Bid	Apr15
Week 15	In-Class Lecture	N/A Modules 7, 8, and 9 Review	N/A
Apr23 – Apr26	EXAM	Exam 3 – Module 7, 8, and 9	Apr26
Finals Week	Report	Final Project Submission	May03