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

#### **BCN 4612C – Estimating II**

**Fall 2024** 

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 *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*).

RS Means Building Construction Cost Data, latest edition, R.S. Means Co., Inc.,

Required

Kingston, MA (\*may be available online)

Texts:

<u>Fundamentals of Construction Estimating</u>, Pratt, Delmar Publishing, latest edition.

Recommended Text:

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 110

All Sessions: Period 5 (11:45 AM - 12:35 PM)

Thursdays: RNK 215

<u>BCN4612C (11224):</u> Period 7 - 8 (1:55 PM - 3:50 PM) <u>BCN4612C (11223):</u> Period 4 - 5 (10:40 AM - 12:35 PM) Office Hours Thursdays: RNK 311

(12:35 PM - 1:55 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, with an up to the Full Grade 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:

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Attendance	Modules		InClass Assignments	EXAMS		<b>Final Project</b>
				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		
				EXAM 2		
100 Modul	Module 4	Subcontractor Bid Analysis	25	Module 4	100	300
	Module 5	Concrete Pricing	50	Module 5		300
	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%	
С	< 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 <a href="https://gatorevals.aa.ufl.edu/students/">https://gatorevals.aa.ufl.edu/students/</a>. 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 <a href="https://ufl.bluera.com/ufl/">https://ufl.bluera.com/ufl/</a>. Summaries of course evaluation results are available to students at <a href="https://gatorevals.aa.ufl.edu/public-results/">https://gatorevals.aa.ufl.edu/public-results/</a>.

**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 <a href="https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/">https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/</a>. 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 Aug22 – Aug24	Lecture	Course Introduction     Estimating II Intro & Review Course Content	
Week 2 Aug25 – Aug31	In-Class Lecture	N/A  Module 1: Introduction to Estimating II  BCN 4612C - M 1 - 1 - Intro RS Means	N/A
Week 3  Sep03 – Sep07	In-Class Lecture	<ul> <li>N/A</li> <li>BCN 4612C - M 1 - 2 - Specs and Plan Reading</li> <li>Masterformat_2018_web</li> </ul>	N/A
<b>Week 4</b> Sep08 – Sep14	In-Class  Lecture	Module 1 – In-Class Assignment  Module 2: Conceptual Estimating  BCN 4612C - M 2 - 1 - First Budget Estimate Procedures	Sep07
Week 5 Sep15 – Sep 21	In-Class Lecture In-Class	<ul> <li>N/A</li> <li>BCN 4612C - M 2 - 2 - Conceptual Estimates and Project Narratives</li> <li>BCN 4612C - M 2 - 3 - Conceptual Estimates</li> <li>Module 2 - In-Class Assignment</li> </ul>	N/A Sep21

Week/ Date	Туре	Topic/Description	Date/ Due_Date
Week 6 Sep22 – Sep28	Lecture	<ul> <li>Module 3: General Requirements</li> <li>BCN 4612C- M 3 - 1 - General Requirements</li> <li>BCN 4612C- M 3 - 2 GR/GC In-Class Example</li> </ul>	
	In-Class	Module 3 – In-Class Assignment	Sep28
	Lecture	• Modules 1, 2, and 3 Review	
Week 7	EXAM	Exam 1 – Modules 1, 2, and 3	Oct02
Sep29 – Oct05	Lecture	Exam 1- Review	
	In-Class	N/A	N/A
Week 8 Oct06 – Oct12	Lecture	<ul> <li>Module 4: Subcontractor Bid Analysis</li> <li>BCN 4612C- M 4 - 1 - Prequalification Process</li> <li>BCN 4612C- M 4 - 2 - Sub Bids</li> <li>Software / Autodesk Workshop</li> </ul>	
	In-Class	Module 4 – In-Class Assignment	Oct12
Week 9 Oct13 – Oct19	Lecture	<ul> <li>Module 5: Concrete Pricing</li> <li>BCN4612_PCC_In-Class Example #1</li> <li>BCN4612_PCC_In-Class Example #2</li> </ul>	
	In-Class	Module 5 – In-Class Assignment	Oct19
Week 10 Oct20 – Oct26	Lecture	<ul> <li>Module 6: Sitework Pricing</li> <li>BCN 4612C - M 6 - 1 - Sitework Pricing</li> <li>BCN 4612C - M 6 - 2 - Sitework Pricing</li> </ul>	
	In-Class	Module 6 – In-Class Assignment	Oct26
	Lecture	• Modules 4, 5, and 6 Review	
Week 11 Oct27 – Nov02	EXAM	Exam 2 – Module 4, 5, and 6	Oct30
30127 110102	Lecture In-Class	• Exam 2 Review N/A	N/A
Week 12 Nov03 – Nov09	Lecture	<ul> <li>Module 7: Masonry Pricing</li> <li>BCN 4612C- M 7 - 1 - Masonry Estimate</li> <li>BCN 4612C- M 7 - 2 - Masonry Estimate</li> </ul>	
	In-Class	Module 7 – In-Class Assignment	Nov09

Week/ Date	Туре	Topic/Description	Date/ Due_Date
Week 13  Nov12 - Nov16	Lecture	<ul> <li>Module 8: Finishes Pricing</li> <li>BCN 4612C- M 8 - 1 - Finishes Estimate</li> <li>BCN 4612C- M 8 - 2 - Finishes Pricing</li> </ul>	
	In-Class	Module 8 – In-Class Assignment	Nov16
Week 14 Nov17 – Nov23	Lecture	<ul> <li>Module 9: Bid Simulation</li> <li>BCN 4612C- M 10 - 1 - The Bidding Process</li> <li>BCN 4612C- M 11 - 2 - Closing the Bid</li> </ul>	
	In-Class	N/A	N/A
<b>Week 15</b> Nov24 – Nov30		HOLIDAY	
	In-Class	N/A	N/A
	Lecture	Modules 7, 8, and 9 Review	
Week 16 <u>Dec02 – Dec04</u>	EXAM	Exam 3 – Module 7, 8, and 9	Dec04
Finals Week	Report	Final Project Submission	Dec11