

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

BCN 4612C – Estimating II

Spring 2026

3 Credits

Instructor: Dr. Aladdin Alwisy, RNK 311, Rinker Hall
aalwisy@ufl.edu, Phone: 273-1157

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.

Course Leaning Outcomes (CLOs):

1. Analyze the professional, ethical, and legal duties of a construction estimator.
2. Interpret plans, specifications, and technical data to perform accurate quantity take-offs.
3. Develop conceptual estimates and detailed budget estimates using appropriate technologies.
4. Calculate General Requirements costs and evaluate subcontractor bids for inclusion in a comprehensive estimate.
5. Determine detailed pricing for major divisions, including concrete, sitework, masonry, and finishes.
6. Execute the final stages of the bidding process by synthesizing all cost components to close the bid.

CLO Relations to SLO	Course Leaning Outcome (CLO)	Aligned ACCE SLOs	Assessments
	1. Analyze the professional, ethical, and legal duties.	SLO 6: Ethics	Module 1 In-Class Assignment, Exam 1
	2. Interpret plans, specifications, and technical data.	SLO 4: Estimating, SLO 8: IT	Module 1 In-Class Assignment, Exam 1
	3. Develop conceptual estimates and detailed budget estimates using appropriate technologies.	SLO 4: Estimating, SLO 8: IT	Module 2 In-Class Assignment, Exam 1

4. Calculate General Requirements costs and evaluate subcontractor bids	SLO 4: Estimating	Module 3 In-Class Assignment, Module 4 In-Class Assignment, Exam 1, Exam 2
5. Determine detailed pricing for major divisions	SLO 4: Estimating	Module 5, 6, 7, 8 In-Class Assignments, Exam 2
6. Execute the final stages of the bidding process	SLO 4: Estimating	Bid Simulation Project

ACCE = American Council for Construction Education

Required Texts: RS 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 For time and location, please check your course schedule at <https://one.uf.edu/>

Office Hours TBD

By Appointment:

Email aalwisy@ufl.edu. 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: TBD

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 ZERO on that in-class assignment. Students will have until midnight of the following day 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 **CLOSED-BOOK** 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 Breakdown: Final grades will be calculated as follows:

50	EXAM 1			150	300	
	Module 1	Introduction to Estimating II	25			
	Module 2	Conceptual Estimating	25			
	Module 3	General Requirements	25		300	
	EXAM 2			150		
	Module 4	Subcontractor Bid Analysis	25			
	Module 5	Concrete Pricing	25			
	Module 6	Sitework Pricing	25			
	EXAM 3			150		
	Module 7	Masonry Pricing	25			
	Module 8	Finishes Pricing	25			
	Module 9	Bid Simulation	25	1000		
50		200	450	300		

Grade Makeup: Final grades will be calculated as follows:

Attendance	50
In-Class Assignments	200
Exams	450
Final Project	300
	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.** For instance, **89.99% is still considered as B+.**

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	Type	Topic/Description
Week 1	Lecture	<p>Course Introduction</p> <ul style="list-style-type: none"> • Estimating II Intro & Review Course Content
	In-Class	N/A
Week 2	Lecture	<p>Module 1: Introduction to Estimating II</p> <ul style="list-style-type: none"> • BCN 4612C - M 1 - 1 – Intro • RS Means
	In-Class	RS Means Overview
Week 3	Lecture	<ul style="list-style-type: none"> • BCN 4612C - M 1 - 2 - Specs and Plan Reading • Masterformat_2018_web
	In-Class	Module 1 – In-Class Assignment
Week 4	Lecture	<p>Module 2: Conceptual Estimating</p> <ul style="list-style-type: none"> • BCN 4612C - M 2 - 1 - First Budget Estimate Procedures
	In-Class	Autodesk Construction Cloud Workshop
Week 5	Lecture	<ul style="list-style-type: none"> • BCN 4612C - M 2 - 2 - Conceptual Estimates and Project Narratives • BCN 4612C - M 2 - 3 - Conceptual Estimates
	In-Class	Module 2 – In-Class Assignment
Week 6	Lecture	<p>Module 3: General Requirements</p> <ul style="list-style-type: none"> • BCN 4612C- M 3 - 1 - General Requirements • BCN 4612C- M 3 - 2 - GR/GC In-Class Example
	In-Class	Module 3 – In-Class Assignment
Week 7	Lecture	<ul style="list-style-type: none"> • Modules 1, 2, and 3 Review
	EXAM	Exam 1 – Modules 1, 2, and 3
	Lecture	<ul style="list-style-type: none"> • Exam 1- Review
	In-Class	N/A
Week 8	Lecture	<p>Module 4: Subcontractor Bid Analysis</p> <ul style="list-style-type: none"> • BCN 4612C- M 4 - 1 - Prequalification Process • BCN 4612C- M 4 - 2 - Sub Bids
	In-Class	Module 4 – In-Class Assignment

Week/ Date	Type	Topic/Description
Week 9	Lecture	Module 5: Concrete Pricing <ul style="list-style-type: none"> • BCN4612_PCC_In-Class Examples • BCN4612_PCC_In-Class Example #2
	In-Class	Module 5 – In-Class Assignment
Week 10	Lecture	Module 6: Sitework Pricing <ul style="list-style-type: none"> • BCN 4612C - M 6 - 1 - Sitework Pricing • BCN 4612C - M 6 - 2 - Sitework Pricing
	In-Class	Module 6 – In-Class Assignment
Week 11	Lecture	<ul style="list-style-type: none"> • Modules 4, 5, and 6 Review
	EXAM	Exam 2 – Modules 4, 5, and 6
	Lecture	<ul style="list-style-type: none"> • Exam 2 Review
	In-Class	N/A
Week 12	Lecture	Module 7: Masonry Pricing <ul style="list-style-type: none"> • BCN 4612C- M 7 - 1 - Masonry Estimate • BCN 4612C- M 7 - 2 - Masonry Estimate
	In-Class	Module 7 – In-Class Assignment
Week 13	Lecture	Module 8: Finishes Pricing <ul style="list-style-type: none"> • BCN 4612C- M 8 - 1 - Finishes Estimate • BCN 4612C- M 8 - 2 - Finishes Pricing
	In-Class	Module 8 – In-Class Assignment
Week 14	Lecture	Module 9: Bid Simulation <ul style="list-style-type: none"> • BCN 4612C- M 10 - 1 - The Bidding Process <ul style="list-style-type: none"> • BCN 4612C- M 11 - 2 - Closing the Bid
	In-Class	N/A
Week 15	Lecture	<ul style="list-style-type: none"> • Modules 7, 8, and 9 Review
	EXAM	Exam 3 – Module 7, 8, and 9
Week 16	Report	Final Project Submission