

BCN 5618C Construction Estimating I – Fall 2025

Tuesday and Thursday (8:30 am - 10:25 pm), 140 Rinker Hall

Instructor: Dr. Laura Rui LIU
Office Location: 321 Rinker Hall
Email: liurui@ufl.edu
Phone: (352) 273-1168
Office hours: Tuesday 10:40 pm - 11:30 pm,
Thursday 10:40 pm - 11:30 pm and by appointment

Teaching Assistant: Muhammad Hasnain
Office Location: 326 Rinker Hall
Email: m.hasnain@ufl.edu
Office hours: Monday 11:00-noon
Wednesday 11:00-noon

Course Description:

Processes for preparing construction cost estimates that include the classification of work, advanced techniques for performing material quantity takeoffs, methods used for pricing of labor, materials, equipment, overhead, and profit, and the compilation of competitive bids and proposals. Instructional materials for this course consist of only those materials specifically reviewed, selected, and assigned by the instructor(s). The instructor(s) is only responsible for these instructional materials.

Prerequisite Knowledge and Skills:

Graduate Standing; able to read and measure plans; have knowledge of algebra, geometry, and trigonometry; be familiar with construction materials and methods.

Purpose of Course:

To teach the student the background and skills necessary to accurately estimate the cost of construction projects, prepare a complete and concise report of the estimated costs, and submit a formal bid package.

Course Learning Outcomes (CLOs):

Upon completion of the course, students will demonstrate their ability to:

1. Recognize different types of estimates and their uses
2. Perform quantity takeoffs based on the drawings and specifications and generate detailed estimates.
3. Accurately estimate the cost of construction projects including direct and indirect costs
4. Assemble a complete and concise report of the estimated costs of a project and submit a formal bid package.
5. Prepare and use construction cost databases and use IT to assist in the preparation of the estimate.

Assessment Methods and Targets

Assessment	CLO 1	CLO 2	CLO 3	CLO 4	CLO 5	Targets
Exam 1	X					At least 80% receive a C- or better
Exam 2		X	X			At least 80% receive a C- or better
Exam 3				X		At least 80% receive a C- or better
Assignments					X	At least 80% receive a B- or better
Final Project		X	X	X		At least 80% receive a B- or better

Additional information on the BCN undergraduate learning outcomes is available at:

<https://catalog.ufl.edu/ugrad/current/construction/ALC/building-construction.aspx>.

Recommended Texts:

1. Peterson, S. J., and Dagostino, F. R. (2018). *Estimating in Building Construction*, 9th Ed., Prentice Hall.
2. Contract Documents: Drawings and Specifications for the “St. Augustine Airport Multi-purpose Building” project. The electronic version of the contract document is available on the course website.

Course Policy:

1. **No** late homework, late quiz, or make-up exams (excuses for such are defined by the university rules and regulations).
2. **Arriving late** to the class or **leaving before** the end of the class will **not be accepted**. If you are attending the class, you need to be there from the beginning until the end of the class.
3. Class **attendance** is required. If absence is necessary, the instructor is to be notified before the fact.
4. Each and every student is entitled to as much consultation time as may be required. To preserve the privilege of obtaining individual assistance, each student is expected to attend class regularly.
5. In-class participation and questions are encouraged. They may positively influence grading decisions in borderline cases.
6. All cell phones must be **off**, not vibrate, but off while in class. All cell phones will be inside backpacks or otherwise stored away from the student during all examinations. Laptops can only be used when instructed.
7. All students are required to have a University network account to access the computers and e-Learning. Requirements for attendance, make-up exams, assignments, and other work in this course are consistent with UF policies found at: <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>.

Grading Policy:

Students are responsible for the content of all reading materials, whether or not the material is covered in class. See the detailed course schedule for deliverable due dates. Students are responsible for addressing grades within one week of the grade being posted on the course’s e-Learning website. After one week, the grade stands for the class regardless of cause or circumstance.

Attendance and Participation	5%
Quiz	5%
Research Manuscript	10%
Assignments	20%
Final Project	20%
Exams	40%
Total	100%

Grading Scale:

Final grades will be assigned according to the following scale. Divide the total points you earn by the total possible points to obtain your percent. Decimal points will not be rounded.

Percent	Letter Grade	Grade Points			
			77.0 - 79.99	C+	2.33
			73.0 - 76.99	C	2.00
93.0 - 100	A	4.00	70.0 - 72.99	C-	1.67
90.0 - 92.99	A-	3.67	67.0 - 69.99	D+	1.33
87.0 - 89.99	B+	3.33	63.0 - 66.99	D	1.00
83.0 - 86.99	B	3.00	60.0 - 62.99	D-	0.67
80.0 - 82.99	B-	2.67	0 - 59.99	E	0.00

More information on grades and grading policies at UF is available at:

<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

Course Method:

- This course will be conducted with a two-period session of lecture, followed by a two-hour period of lab sessions. You are expected to follow along during the lecture and take notes in order to apply the new concepts to your assignments during the lab period. The lab period will be a workshop style time where you are expected to work on the assignment and ask questions to help you successfully master each topic.
- Students are expected to **stay in the class** until they satisfactorily complete and turn-in their lab assignments. A student is allowed to complete an assignment at home only if he/she has remained for the full class period and needs additional time to complete the assignment.

Assignments and Final Project Submission:

- **Late submissions will not be accepted, regardless of circumstances.** For late submission, the student will receive a zero on the assignment/final project. The instructor reserve the right to check the procedure of the submitted assignments with any student at any time.
- All work turned in for this course should have professional quality in content and presentation.
- All the assignments and final project have to be **submitted exclusively in Canvas**.
- It is **your responsibility** to verify the successful submission of the assignments/final project in Canvas. Submission by **email** or the **digital media** (such as USB drive) **will not be accepted**.
- In the case you have technical difficulties with Canvas, please contact the UF Help Desk at learning-support@ufl.edu, or (352) 392-4357 - select option 2, or go to Ground floor of the Hub. If your technical difficulties will cause you to miss a due date, you **MUST** report the problem to UF Help Desk **before the due date/time**. Include the ticket number that you are given in an e-mail to the instructor to explain the late assignment due to problem with Canvas.

UF Policy:

University Policy on Accommodating Students with Disabilities: Students requesting accommodation for disabilities must first register with the Dean of Students Office (<http://www.dso.ufl.edu/drc/>). The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation. You must submit this documentation prior to submitting assignments or taking the quizzes or exams. Accommodations are not retroactive. Therefore, students should contact the office as soon as possible in the term for which they are seeking accommodations.

University Policy on Academic Misconduct: Academic honesty and integrity are fundamental values of the University community. Students should be sure that they understand the UF Student Honor Code at <http://www.dso.ufl.edu/students.php>.

University Policy on Teaching Evaluation: 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.bluer.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

Class Demeanor:

It is expected that everything submitted for a grade will be professional, with correct spelling and grammar. The expectations and caliber of the work expected in this course are elevated to the level of the business community and evaluated against that baseline. Work that may have been previously accepted during your academic career may no longer be acceptable here. When available, use software to produce your work. If your work product is considered unacceptable in the workplace, then it is unacceptable here. The goal is for all work to represent what you would submit to your immediate boss in a job scenario. If your boss won't accept, then we won't either.

This course has been taught for many years, and as a result there may be a temptation to "rely on the work of others" for inspiration. Should the instructor determine that a student's work is substantially similar to that of another (either past or present), the student may be subject to a rejection of that assignment and will be cited with an honor court violation. Similarly, the use of materials, worksheets, or data from previous semesters is considered cheating. Your work is subject to electronic verification by TurnItIn® or other technologies.

Honor Code:

- **The Honor Code will be applied in the class.** We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity. On all work submitted for credit by students at the university, the following pledge is either required or implied: **"On my honor, I have neither given nor received unauthorized aid in doing this assignment."**
- **Duplication of an assignment and quiz/exam/project/activity** both manually or by computer will be considered an act of academic dishonesty and dealt with accordingly. Any violation of the Honor code will not be tolerated. A student that is found guilty of Academic Dishonesty will be given a **failing grade** for the course.
- Do not allow others to access your files as that will also be considered violation of the Honor Code.
- Visit the website <http://www.dso.ufl.edu/sccr/honorcodes/honorcode.php> for more information about the University of Florida Student Honor Code.

Accessing University Academic Policies and Campus Resources

To support consistent and accessible communication of university-wide student resources, please use this link to academic policies and campus resources: <https://go.ufl.edu/syllabuspolices>.

Getting Help:

For issues with technical difficulties for e-Learning in Canvas, please contact the UF Help Desk at:

- Learning-support@ufl.edu
- (352) 392-HELP - select option 2
- <https://lss.at.ufl.edu/help.shtml>

Other resources are available at <http://www.distance.ufl.edu/getting-help> for:

- Counseling and Wellness resources
- Disability resources
- Resources for handling student concerns and complaints
- Library Help Desk support