



# Course Syllabus

## BCT2770 CONSTRUCTION ESTIMATING

BCT2770      84993      FALL 2026

Credit Hours/Contact Hours      3 CR – 3 LECTURE

Prerequisite: NONE.

### Contact Information

Instructor

Office Location -  
Office Hours (As posted)  
Response Time Monday 8am through Friday 12pm

Division Chair

Professor / Chair  
Mboyd@gulfcoast.ed850 872-3839 ext. 3839 Division Administrative Assistant

mweiman@gulfcoast.edu

### Course Information

Catalog Description:

The basic principles and current practices employed in estimating building costs. The student learns to prepare material lists and to take off quantities of materials and labor hours from working drawings and specifications. Project cost estimates are prepared.

## Student Learning Outcomes:

Upon completion of this course, the students will be able to:

- To demonstrate an understanding of the requirements of a good estimator based on the perspective of a General Contractor
- To demonstrate the various techniques used in construction estimating
- To show an understanding of working drawings and specifications, including dimensioning, abbreviations, and basic geometry calculations
- To describe the general construction process
- To introduce the step-by-step method of computing material and labor costs for the various components of the structure.
- To be able to produce a complete construction estimate for review

## Course Materials & Resources:

### TEXT:

#### **Fundamentals of Building Construction**

#### **Materials & Methods**

**By Edward Allen Joseph Iano**

**Fifth Edition, John Wiley & Sons, Inc.**

## Delivery Method:

This course meets face to face. Course material, assignments, and announcements may be offered via Canvas as a supplemental approach to learning at the discretion of the instructor. Please make sure that you have access to a computer with a webcam and internet service, in the event a change in course delivery is needed.

### **METHODS OF INSTRUCTION:**

- Reading
- Lecture
- Discussions
- Demonstrations
- Worksheets

## Student Expectations

In this course, communication and feedback will occur through various channels, including GCSC email, Canvas Inbox, Canvas Announcements, Canvas Discussions, Microsoft Teams or Zoom, assignment

feedback, and instructor office hours. Review the statements below so that you understand the expectations for communication.

As a student at Gulf Coast State College, you are expected to:

- **Adhere to Course Guidelines:** Follow the guidelines detailed in the course syllabus, along with any additional instructions provided by the instructor. This includes understanding and complying with the course objectives, grading criteria, and academic policies.
- **Maintain Regular Contact:** Keep in touch with your instructor and classmates via your GCSC email or other designated communication channels. Regular contact helps clarify doubts, share ideas, and foster a collaborative learning environment.
- **Active Participation:** Engage actively in class discussions and submit assignments on time. Your active participation is crucial for your academic success and contributes to a vibrant learning community.

As your instructor, my commitment to you is to:

- **Provide Timely Feedback:** I will review and provide feedback on your assignments and submissions promptly. My goal is to help you understand your strengths and areas for improvement, which is crucial for your academic growth.
- **Respond Via Canvas Inbox:** I will respond to your emails or messages within 24-48 hours (excluding weekends), unless otherwise noted. I understand the importance of clear and timely communication in addressing your questions and concerns.
- **Post Regular Announcements:** To keep you updated and help you manage your time effectively, I will send out weekly reminders via announcements. These reminders will include important dates, upcoming assignments, and any changes to the course schedule.
- **Maintain Weekly Office Hours:** I will maintain regular weekly office hours, but I can also be available by appointment. This is to ensure I'm available for any questions or concerns that may come up during the week.

## Course Schedule

Weekly SCHEDULE:

Week	#	Subject	Assignment
1	1	Introduction ... Orientation PP	Ch 1 (Intro) & skim Appendix D & E
	2	Estimating 101 PP ... Panera Architectural	Ch 2 (Contracts, Bonds, Ins)
2	3	Panera Architectural and Structural	Ch 10 (Concrete) & 12(Steel)
	4	Panara Structural ...Masonry& Conc. PP	<b>Take Home Test - A &amp; S</b>
3	5	Structural Systems ... Steel/ICF PP	Ch 11 (Masonry) &12 (Steel)
	6	Review Take Home Test ... Panera Civil	Ch 9 (Excavation)
4	7	Panera Civil and Landscaping PP	<b>Take Home Test - Civil and Land.</b>
	8	Panara Plumbing and Mechanical	
5	9	Review Take Home Test - MEP Con't	CH 18 & 19 (Plumbing and HVAC)
	10	MEP PP	Ch 17 (Electrical)
6	11	Panera Electrical ...	<b>Take Home Test - MEP</b>
	12	Electrical and Telecommunications	

7	13	Review Take Home Test - Wood PP & Light Gauge Metal	Team Estimating Project
	14		
8	15	Programs and Perspectives from an Architect	Ch 3 (Project Manual)
	16		Ch 4 (The Estimate)
9	17	Work on Team Estimate	
	18	<b>Midterm</b>	
10	19	Springfield Construction Estimate - A case study	
	20	WW ... Springfield Jobsite Visit ... 3:30 start	
11	21	Doors and Windows	Ch 15 (Doors and Windows)
	22	Thermal and Moisture Protection	Ch 14 (Thermal and Moisture)
12	23	Finishes	Ch 16 (Finishes)
	24		
13	25	Misc. Estimating Considerations	Ch 7 & 8 (Labor and Equipment)
14	26	The business side of Construction	Ch 6 & 20 (OH/Cont./Profit)
	27		
15	28	Other Estimating Resources and Methods	Chapter 21 (Other Methods)
16	29	Construction Industry Outlook & Job Opportunities PP	
	30	Review and Misc. PP	
	31	<b>Final Exam</b>	

## Grading

### GCSC Grading Scale

These outcomes are directly measurable through:

- Attendance and Participation 10%
- 3 Take home tests (10% each) = 30%
- Midterm 30%
- Final Exam 30%

### Calculation of Grades

A = 90 – 100%

B = 80 – 89%

C = 70 – 79%

D = 60 – 69%

F = 0 – 59%

#### Grade A – Exceptional Achievement

**Demonstrates an exceptional understanding of construction estimating principles and practices. Quantity takeoffs, material lists, labor calculations, and project cost estimates are consistently accurate, complete, and professionally prepared. Work reflects outstanding analytical skills, attention**

to detail, proper use of construction documents, and a thorough understanding of estimating methods.

#### **Grade B – Above Expectations**

**Demonstrates a strong understanding of construction estimating concepts and exceeds the minimum course requirements. Quantity takeoffs and cost estimates are accurate and well organized, with only minor errors that do not significantly affect the overall estimate. Work reflects solid technical competence and careful attention to detail.**

#### **Grade C – Satisfactory Achievement**

**Demonstrates an adequate understanding of construction estimating principles. Material takeoffs, labor calculations, and cost estimates meet the minimum course requirements and are generally accurate, although some errors or omissions may be present. The work demonstrates acceptable competency in interpreting construction drawings and specifications.**

#### **Grade D – Marginal Achievement**

**Demonstrates limited understanding of construction estimating methods. Quantity takeoffs, material lists, labor calculations, or cost estimates contain significant errors, omissions, or inaccuracies that substantially affect the reliability of the estimate. Performance indicates only partial achievement of the course learning outcomes.**

#### **Grade F – Unsatisfactory Achievement**

**Demonstrates little or no understanding of construction estimating principles. Assignments are not submitted, are substantially incomplete, or contain major deficiencies that prevent the preparation of an accurate cost estimate. The work fails to demonstrate achievement of the course learning outcomes.**

## Incomplete Grades

Grades of Incomplete in any course can only be assigned to students who have an emergency arise during the last two weeks of the course. To receive an Incomplete, students must:

- Submit a written request to the instructor prior to the last face-to-face class meeting. For online courses, a written Incomplete request must be received no later than the week before the Final Exam period begins.
- Have completed no less than 60 percent of the course requirements and be passing the course at the time the request for an Incomplete is submitted.

**Important Note:** The Incomplete option provides 30 days from the date grades are due to make up any missing work; if work is not submitted during this period, the grade will automatically change to an “F” in Lighthouse.

## Course Policies

### Accessibility Statement

Gulf Coast State College supports an inclusive learning environment for all students. If there are aspects of the instruction or design of this course that hinder your full participation, reasonable accommodations can be arranged. Prior to receiving accommodations, you must register with Student Accessibility Resources. Appropriate academic accommodations will be determined based on the

documented needs of the student. Please visit [GCSC's Student Accessibility Resource \(SAR\) webpage](#) to learn more. For information regarding the registration process, email [sar@gulfcoast.edu](mailto:sar@gulfcoast.edu) or call 850-747-3243.

## Attendance Policy

Regular class attendance and participation are significant factors that help to promote success in college. Students are expected to attend all class meetings of all courses for which they are registered.

You are expected to know the instructor's specific attendance policy, as stated in the syllabus for each course. In the event of absence, you should contact your instructor as soon as possible to indicate the reason and to inquire whether make-up work is possible. (Make-up work is offered solely at the discretion of your professor.)

If your absences in a class become excessive, as stated in the course syllabus, your professor may contact you, indicating that further absence may result in your withdrawal from the course. Your professor can withdraw you from a course for excessive absences without your permission.

Instructors will monitor attendance at the beginning of each semester. If you are not in attendance during this period, you may be withdrawn from the course. You will be financially responsible for the course and a "W or NS" will appear on your transcript. Withdrawal from a course may also have implications for financial aid.

### Make-Up Work Policy

Student can reschedule a test by email.

## Withdrawal Policy

Two withdrawals are permitted per credit course. After that, a grade will be assigned. Please be concerned about withdrawals. When admitting students into certain programs, universities may calculate withdrawals as grades. It is your responsibility to verify the effects of enrollment and/or withdrawal upon your financial assistance (financial aid, scholarships, grants, etc.). There are two kinds of withdrawals---student and administrative.

- *Student Withdrawal (W1)* - Students wishing to withdraw must complete the online Student Withdrawal Form before the scheduled withdrawal deadline as published in the College catalog. Student withdrawals initiated prior to the scheduled withdrawal deadline will be recorded as a grade of "W." The withdrawal deadline for an off-term or condensed term is one week after midterm.
- *Administrative Withdrawal (W2)* – A faculty member may withdraw a student up to the published withdrawal deadline for violation of the class attendance policy in which case the student will receive a grade of "W." The withdrawal deadline for an off-term or condensed term is one week after midterm.

Students cannot withdraw from developmental studies courses (college-preparatory classes) after the drop/add period without written permission from their instructor and/or their academic advisor.

## Academic Integrity

Honest participation in academic endeavors fosters an environment in which optimal learning can take place and is consistent with the college's mission. Academic misconduct, including cheating or plagiarism, is destructive to the spirit of an educational environment. GCSC professors report every instance of student academic misconduct to the college for inclusion on the student's records. Most course syllabi include an academic honesty policy and the consequences for violating this policy. Familiarize yourself with course policies regarding authorized or unauthorized use of AI to avoid the pitfalls of academic dishonesty.

The following definitions will apply:

### "Cheating"

includes but is not limited to use of any unauthorized assistance in taking quizzes, tests, or examinations; dependence upon the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments; the acquisition without permission of tests or other academic materials belonging to a member of the College's faculty.

### "Plagiarism"

includes, but is not limited to, the use by paraphrase or direct quotation of the published or unpublished work of another person without full and clear acknowledgment as well as the purchase of papers or projects. It can also include overuse of an editing program like Grammarly or submitting work written by an Artificial Intelligence (AI) generator like ChatGPT. Make certain to consult your course syllabi for your instructor's guidelines of AI material.

### "Self-plagiarism"

occurs when a student submits the same or considerably similar document to fulfill requirements in different classes. For example, if a student submits a term paper in Religion they originally wrote for an English class, this is self-plagiarism. Once a paper receives a grade in one class, it cannot be submitted again for another class.

### "Generative Artificial Intelligence (AI)"

is technology that uses machine learning to create new content, such as text, images or code, based on user input. These systems are trained on vast amounts of data, including large language models and image or code generators. Common examples include ChatGPT, GitHub, Copilot, Google Gemini, Perplexity, and the Grammarly AI function.

Sanctions for incidences of academic misconduct, depending on the severity of the incidence and/or its repetition, may range from receiving an F grade (or 0) for the test, assignment, or activity, to failure of the course, to suspension or dismissal from the college.

## Classroom Recording

In accordance with federal and state privacy laws, students may record class lectures for their own personal educational use, in connection with a complaint to the college, or as evidence in internal or external legal proceedings. Students may not publish or upload the recordings or any components thereof without the knowledge and written permission of the faculty member. Failure to obtain permission to publish could lead to the students' having to pay damages, attorney fees, and court

costs. For more information about what can be recorded, please see the guidelines in the GCSC Student Handbook.

This course is recorded every week on BIG BLUE BUTTON Conferences, the student must download the recording within 2 weeks from the date.

## Generative Artificial Intelligence (AI) Policy

The use of generative AI tools in academic work requires clear guidelines to maintain academic integrity. Please review the policy selected for this course regarding the use of AI tools such as ChatGPT, Copilot, Grammarly's AI features, and similar platforms for assignments, research, and other coursework.

See the student handbook for further information. Students with questions about acceptable use should consult their instructor.

### Prohibited Use of AI

*The use of AI-generated content is strictly prohibited in all assignments, coursework, and throughout all stages of the work process, such as brainstorming, outlining, or drafting. This includes but is not limited to, tools such as ChatGPT, Copilot, and Grammarly's AI function. Use of AI tools will be treated as a violation of academic integrity and may result in penalties, including a zero on the assignment and additional disciplinary actions as outlined in the college's academic integrity policy.*

## Anti-Discrimination Policy

Gulf Coast State College does not discriminate against any person in its programs, activities, policies or procedures on the basis of race, ethnicity, color, national origin, marital status, religion, age, gender, sex, pregnancy, sexual orientation, gender identity, genetic information, disability, or veteran status. All questions or inquiries regarding compliance with laws relating to non-discrimination and all complaints regarding sexual misconduct or discrimination may be directed to Amanda Reed, Executive Director of Human Resources/Title II/504/Title IX Coordinator and Employment Equity Officer, Gulf Coast State College, 5230 W. US Highway 98, Panama City, FL 32401; 850-769-1551, ext. 3516. Rules, policies, fees, and courses described in this catalog are subject to change without notice.

## Syllabus Policy

For any syllabus posted prior to the beginning of the term, the instructor reserves the right to make minor changes prior to or during the term. The instructor will notify students via e-mail or Canvas announcement when changes are made in the requirements and/or grading of the course.

## Student Support Resources

Gulf Coast State College is committed to providing you with the resources you need for success as a student and beyond. View all the academic and student support resources provided at GCSC on the [Student Services web page](#).

## Course Technology & Support

To successfully participate in this online course, students must have basic computer and digital information literacy skills and meet the following technology requirements:

- **Computer:** Up-to-date web browser that supports the Canvas learning management system; please refer to the system requirements for compatibility and information on using the Canvas app on mobile devices.
- **Internet Speed:** Minimum bandwidth of 8 Mbps upload/download speed to effectively engage in online activities and access multimedia.
- **Office 365 software:** Available for free download through GCSC Information Technology Services (ITS).

If you need technical support, contact the ITS Help Desk, available 24/7 at (850) 913-3303.