

INSTRUCTIONAL PACKAGE

CET 245

Cost Estimating

Effective Term Spring/2019

INSTRUCTIONAL PACKAGE

PART I: COURSE INFORMATION

Effective Term: 2018.20

COURSE PREFIX: <u>CET 245</u> COURSE TITLE: <u>Cost Estimating</u>

CONTACT HOURS: <u>5.0</u> CREDIT HOURS: <u>3.0</u>

RATIONALE FOR THE COURSE:

Study of estimating concepts involving methods and calculations used to prepare material quantity takeoffs and determine unit pricing of material, labor, and equipment. This course also includes the calculation of general conditions costs and overhead and profit markups. Lab assignments will include print reading, search of building construction unit prices, and preparation of estimating forms in MS Excel or other estimating software.

COURSE DESCRIPTION:

This course includes a study of project cost and scheduling through the use of proven construction estimating techniques.

PREREQUISITES/CO-REQUISITES:

COMPASS Algebra 46 or SAT Mathematics 440 or ACT Math 21 or Credit level MAT 175 Minimum Grade of C or Credit level MAT 175 Minimum Grade of TC or Credit level MAT 101 Minimum Grade of C or Credit level MAT 101 Minimum Grade of C or Credit level MAT 110 Minimum Grade of TC or Credit level MAT 110 Minimum Grade of TC

REQUIRED MATERIALS:

Please visit the Bookstore online site for most current textbook information. Use the direct link below to find textbooks.

BOOKSTORE.

Enter the semester, course prefix, number and section when prompted and you will be linked to the correct textbook.

ADDITIONAL REQUIREMENTS:

Calculator / Architectural and Engineering scales / Construction prints

TECHNICAL REQUIREMENTS:

Access to Desire2Learn (D2L), HGTC's student portal for course materials.

WaveNet and D2L email access. Knowledge of AutoCad & Excel.

STUDENT IDENTIFICATION VERIFICATION

Students enrolled in online courses will be required to participate in a minimum of one (1) proctored assignment and/or one (1) virtual event to support student identification verification. Please refer to your Instructor Information Sheet for information regarding this requirement.

CLASSROOM ETIQUETTE:

As a matter of courtesy to other students and your professor, please turn off cell phones and other communication/entertainment devices before class begins. If you are monitoring for an emergency, please notify your professor prior to class and switch cell phone ringers to vibrate.

NETIQUETTE: is the term commonly used to refer to conventions adopted by Internet users on the web, mailing lists, public forums, and in live chat focused on online communications etiquette. For more information regarding Netiquette expectations for distance learning courses, please visit <u>Online Netiquette</u>.

Part II: Student Learning Outcomes

COURSE LEARNING OUTCOMES and ASSESSMENTS*:

Unit #1- Introduction to Cost Estimating

Materials Covered: Chapters: A, 1, 2, 3, 4, 19, 20, 21, 22, and 23

Introduction to estimating Review of estimating Math

Bid documents Labor productivity

Labor rates
Equipment costs
Profit and Overhead
General Conditions Costs

*Assessment(s): Lab Estimate Excel Sheets, Class Worksheets and Unit I Test

Learning Outcomes:

1. Gain an understanding of the estimating process

- 2. Learn to prepare a quantity takeoff
- 3. Determine material pricing
- 4. Determine hourly labor rates
- 5. Determine equipment costs

Unit #2-Estimating Building Construction Costs

Materials Covered: Chapters: 5, 6, 7, 8, 9, 10, and 11.

Concrete Masonry Metals Wood

Thermal and Moisture Protection

Openings Finishes

*Assessment(s): Lab Estimate Sheets, Class Worksheets and Unit II Test

Learning Outcomes:

1. Develop quantity takeoff sheets using MS Excel

- 2. Calculate concrete construction costs
- 3. Calculate masonry construction costs
- 4. Calculate steel construction costs
- 5. Calculate wood construction costs
- 6. Calculate roofing and insulation construction costs
- 7. Calculate interior finish construction costs

Unit #3-Civil Construction Costs, Markups and General Conditions

Materials Covered: Chapters: 16, 17, 18, 24, 25, 26, 27, and 28

*Assessment(s): Lab Estimate Excel Sheets, Class Worksheets and Unit III Test

Learning Outcomes:

- 1. Compute soil excavation quantities
- 2. Compute asphalt, curb and gutter and landscaping quantities
- 3. Compute utility pipe quantities
- 4. Calculate site work construction costs
- 5. Gain knowledge of subcontractor's pricing
- 6. Apply profit and overhead markups
- 7. List general conditions cost items
- 8. Write a cost proposal letter

^{*}Students – please refer to the Instructor's Course Information sheet for specific information on assessments and due dates.

Part III: Grading and Assessment

EVALUATION OF REQUIRED COURSE MEASURES/ARTIFACTS*

Students' performance will be assessed and the weight associated with the various measures/artifacts are listed below.

EVALUATION*

Exams (3 of equal weight)	50%
Class Worksheets	25%
Lab Estimates	25%
	100%

^{*}Students, for the specific number and type of evaluations, please refer to the Instructor's Course Information Sheet.

GRADING SYSTEM:

College Grading System as delineated in the Catalog, is as follows: A = 100 - 90, B = 89 - 80, C = 79 - 70, D = 69 - 60, F = 59 and below

Grades earned in courses impact academic progression and financial aid status. Before withdrawing from a course, be sure to talk with your instructor and financial aid counselor about the implications of that course of action. Ds, Fs, Ws, WFs and Is also negatively impact academic progression and financial aid status.

The Add/Drop Period is the first 5 days of the semester for **full term** classes. Add/Drop periods are shorter for accelerated format courses. Please refer to the academic calendar for deadlines for add/drop (<u>ACADEMIC CALENDAR</u>). You must attend at least one meeting of all of your classes during that period. If you do not, you will be dropped from the course(s) and your Financial Aid will be reduced accordingly.

Part IV: Attendance

Horry-Georgetown Technical College maintains a general attendance policy requiring students to be present for a minimum of eighty percent (80%) of his or her classes in order to be eligible to receive credit for any course. However, due to the varied nature of courses taught at the College, a more rigid attendance policy may be required by individual instructors. At a minimum, a student may be withdrawn from a course(s) after he or she has been absent in excess of ten percent (10%) of the total contact hours for a course. **Instructors define absentee limits for their class at the beginning of each term; please refer to the Instructor Course Information Sheet.**

For online and hybrid courses, check your Instructor's Course Information Sheet for any required on-site meeting times. Please note, instructors may require tests to be taken at approved testing sites, if you use a testing center other than those provided by HGTC, the center may charge a fee for its services.

Part V: Student Resources



The Student Success and Tutoring Center (SSTC)

The SSTC offers to all students the following **free** resources:

- 1. Academic coaches for most subject areas, Writing Center Support, and college success skills.
- 2. On-line student success and academic support resources.

Visit the SSTC website: <u>Student Success & Tutoring Center</u> and visit the student services tab in your WaveNet account to schedule appointments using TutorTrac. For more information, call: SSTC Conway, 349-7872; SSTC Grand Strand, 477-2113; and SSTC Georgetown, 520-1455. Room locations and Live Chat is available on the SSTC website.



Student Information Center: WaveNet Central (WNC)

WNC offers to all students the following **free** resources:

- 1. **Getting around HGTC**: General information and guidance for enrollment!
- 2. Use the Online Resource Center (ORC) for COMPASS support, technology education, and online tools.
- 3. **Drop-in technology support or scheduled training** in the Center or in class.
- 4. **In-person workshops, online tutorials and more services** are available.

Visit the WNC website: <u>Wavenet Central</u>. Live Chat and Center locations are posted on the website. Or please call one of the following locations: WNC Conway, 349-5182; WNC Grand Strand, 477-2076; and WNC Georgetown, 520-1473.

Disability Services

HGTC is committed to providing an accessible environment for students with disabilities. Inquiries may be directed to Beth Havens, Director of Student Development on the Conway Campus Jaime Davis, Counselor/Advisor on the Georgetown Campus or Kristin Griffin, Counselor on the Grand Strand Campus. These individuals will review documentation of the student's disability and, in a confidential setting with the student, develop an educational accommodation plan.

Note: It is the student's responsibility to self-identify as needing accommodations and to provide acceptable documentation. After a student has self-identified and submitted documentation of a disability, accommodations may be determined, accepted, and provided.

Statement of Equal Opportunity/Non-Discrimination Statement

Horry Georgetown Technical College prohibits discrimination and harassment, including sexual harassment and abuse, on the basis of race, color, gender, national or ethnic origin, age, religion, disability, marital status, veteran status, sexual orientation, gender identity, or pregnancy in educational programs and/or activities.

Title IX Requirements

Horry Georgetown Technical College prohibits the offenses of domestic violence, dating violence, sexual assault, and stalking. Any student who believe he or she has experienced or witnessed discrimination including sexual harassment, domestic violence, dating violence, sexual assault or stalking is encouraged to report such incidents to one of the College's Title IX Coordinators.

*Faculty and Staff are required to report incidents to the Title IX Coordinators when involving students. The only HGTC employees exempt from mandatory reporting are licensed mental health professionals (only as part of their job description such as counseling services).

Inquiries regarding the non-discrimination policies:	
Student and prospective student inquiries	Employee and applicant inquiries concerning
concerning Section 504, Title II, and Title IX and	Section 504, Title II, and Title IX and their
their application to the College or any student	application to the College may be directed to the
decision may be directed to the Associate Vice	Associate Vice President for Human Resources.
President for Student Affairs.	
Dr. Melissa Batten, AVP Student Affairs	Jacquelyne Snyder, AVP Human Resources
Title IX Coordinator	Section 504, Title II, and Title IX Coordinator
Building 1100, Room 107A, Conway Campus	Building 200, Room 212A, Conway Campus
PO Box 261966, Conway, SC 29528-6066	PO Box 261966, Conway, SC 29528-6066
843-349-5228	843-349-5212
Melissa.Batten@hgtc.edu_	Jacquelyne.Snyder@hgtc.edu