

INSTRUCTIONAL PACKAGE

CET 210

Strength of Materials

Effective Term Summer/2018

INSTRUCTIONAL PACKAGE

Part I: Course Information

Effective Term: 2017-2018

COURSE PREFIX: CET 210 COURSE TITLE: Strength of Materials

CONTACT HOURS: 5.0 CREDIT HOURS: 3.0

RATIONALE FOR THE COURSE:

This course enables the student to understand the behavior of structural members subject to internal forces, stresses, and deformations. An emphasis is placed on the analysis and design of simple beams and columns.

COURSE DESCRIPTION:

This course covers the effects of applying various types of loads to structural members and makes comparisons of allowable stresses and strains.

PREREQUISITES/CO-REQUISITES:

(Credit level <u>EGR 190</u> Minimum Grade of C or Credit level <u>EGR 190</u> Minimum Grade of TC) or (Credit level EGR 260 Minimum Grade of C or Credit level EGR 260 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.

<u>BOOKSTORE</u>. Enter the semester, course prefix, number and section when prompted and you will be linked to the correct textbook.

ADDITIONAL REQUIREMENTS:

Scientific or Engineering Calculator / Engineering Paper

TECHNICAL REQUIREMENTS:

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

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.

Part II: Student Learning Outcomes

COURSE LEARNING OUTCOMES and ASSESSMENTS*:

- 1. Determine centroids and centers of gravity of two-dimensional bodies
- 2. Calculate moments of inertia of an area.
- 3. Apply formulas related to stress and strain.
- 4. Determine reaction forces on loaded beams.
- 5. Calculate bending and shear stresses in beams.
- 6. Draw shear and moment diagrams of beams subject to uniform distributed loads.
- 7. Size lumber and steel beams according to structural design considerations.
- 8. Calculate deflection values on lumber and steel beams subject to uniform distributed loads.
- 9. Calculate the allowable loads on lumber and steel columns.
- 10. Calculate allowable loads for steel connections

*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*

Tests	45%
Class Participation / Assignments	35%
Lab Reports	20%
	1009

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

GRADING SYSTEM:

$$A = 100 - 90$$
, $B = 89 - 80$, $C = 79 - 70$, $D = 69 - 60$, $F = 59$ 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.

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!
- Use the <u>Online Resource Center (ORC)</u> 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 Jocelyn Williams, 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_	<u>Jacquelyne.Snyder@hgtc.edu</u>	