



INSTRUCTIONAL PACKAGE

AET 101

BUILDING SYSTEMS 1

Effective Term
Spring/2021

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Part I: Course Information

Effective Term: Spring 2021

COURSE PREFIX: AET 101

COURSE TITLE: Building Systems 1

CONTACT HOURS: 5.0

CREDIT HOURS: 3.0

RATIONALE FOR THE COURSE:

This course is an introduction to the various system assemblies and components of a building. The student will study building foundations, cast-in-place and pre-cast concrete framing, steel framing, load-bearing walls, curtain walls, roof systems and interior finishing systems. Students will become familiar with Designer reasoning for the use of the various building systems available today.

COURSE DESCRIPTION:

This course is a study of the fundamental concepts of design and construction techniques in residential, commercial, and industrial buildings.

PREREQUISITES/CO-REQUISITES:

COMPASS Reading 65 or ACT Reading 14 or SAT Critical Reading 380 or Credit level ENG 100 minimum Grade of C or Credit level ENG 155 Minimum Grade of C or Credit level ENG 101 Minimum Grade of C or Credit level ENG 101 Minimum Grade of TC or Credit level ENG 155 Minimum Grade of TC or Credit level ENG 032 Minimum Grade of C.

REQUIRED MATERIALS:

Textbooks: *Construction Materials, Methods and Techniques*, 3rd Edition, by Spence & Kultermann. ISBN: 978-1-4354-8108-4. **This text is required.**

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:

None

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.

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 [Online Netiquette](#).

Part II: Student Learning Outcomes

COURSE LEARNING OUTCOMES and ASSESSMENTS*:

Unit #1

Materials Covered:

Chapter 1: Overview of the construction industry
Chapter 2: Building codes, regulations and standards
Chapter 4: The building site
Chapter 5: Soils
Chapter 6: Foundations

***Assessment(s):** Unit I Test and chapter assignments

Learning Outcomes:

1. Gain knowledge about the current building codes: IRC and IBC
2. Describe the various types of soils
3. Interpret a Soils Engineering Report
4. List and describe the different type of building foundation systems

Unit #2

Materials Covered:

Chapter 8: Cast-in-place concrete
Chapter 9: Precast concrete
Chapter 14: Masonry construction
Chapter 17: Steel frame construction
Chapter 20: Wood and metal light-frame construction

***Assessment(s):** Unit II Test and chapter assignments

Learning Outcomes:

1. Describe the primary types of building framing systems: wood, concrete, steel
2. Distinguish load-bearing walls vs. non-load bearing masonry walls

Unit #3

Materials Covered:

Unit III

Chapter 22: Exterior and interior finishing in wood frame buildings

Chapter 25: Thermal insulation

Chapter 28: Roofing systems

Chapter 30: Window, Entrances and Storefronts

Chapter 31: Cladding systems

***Assessment(s):** Unit III Test and chapter assignments

Learning Outcomes:

1. Describe the various types of roof system assemblies.
2. Differentiate between a single-ply and built-up membrane roofing systems.
3. Explain how doors, windows and storefront entrances are utilized.
4. Identify the components of an exterior building cladding system.

****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 3 total	50%
Assignments	30%
Project	20%
	100%

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

GRADING SYSTEM:

State the College’s or departmental grading system as delineated in the Catalog. Please note the College adheres to a 10 point grading scale A = 100 – 90, B = 89- 80, C = 79 – 70, D = 69 – 60, F = 59 and below. You must have your Dean’s approval if changes in the scale are made.

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. 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 80 percent (80%) of their classes in order to receive credit for any course. Due to the varied nature of courses taught at the college, some faculty may require up to 90 percent (90%) attendance. Pursuant to 34 Code of Federal Regulations 228.22 - Return to Title IV Funds, once a student has missed over 20% of the course or has missed two (2) consecutive weeks, the faculty is obligated to withdraw the student and a student may not be permitted to reenroll. **Instructors define absentee limits for their class at the beginning of each term; please refer to the Instructor Course Information Sheet.**

Attendance for Face-to-Face Courses:

*For a 14 week course (fall and spring) the allowed number of absences for a MW or TR class is as follows: **5 absences are allowed regardless of reason. After the allowed number of misses, the student will be dropped from the course with a W or a WF.***

Part V: Student Resources



THE STUDENT SUCCESS AND TUTORING CENTER (SSTC):

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

1. **Academic tutors** for most subject areas, **Writing Center support**, and **college success skills**.
2. Online **tutoring** and academic support resources.
3. Professional and interpersonal communication **coaching** in the EPIC Labs.

Visit the [Student Success & Tutoring Center](#) website for more information. To schedule tutoring appointments using TutorTrac, visit the Student Services tab in WaveNet. Email sstc@hgtc.edu or call SSTC Conway, 349-7872; SSTC Grand Strand, 477-2113; and SSTC Georgetown, 520-1455, or go to the [Online Resource Center](#) to access on-demand resources.



CENTRAL STUDENT INFORMATION CENTER: TECH Central

TECH Central offers to all students the following **free** resources:

1. **Getting around HGTC:** General information and guidance for enrollment!
2. Use the [Online Resource Center \(ORC\)](#) including scheduled technology training, Office 365 support, password resets, and username information.
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.
5. **Chat with our staff on TECH Talk**, our live chat service. TECH Talk can be accessed on the student portal and on TECH Central's website, or by texting questions to (843) 375-8552.

Visit the [Tech Central](#) website for more information. Live Chat and Center locations are posted on the website. Or please call (843) 349 – TECH (8324).

DISABILITY SERVICES:

HGTC is committed to providing an accessible environment for students with disabilities. Inquiries may be directed to HGTC's [Accessibility and Disability Service webpage](#). The Accessibility and Disability staff 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, sex, national or ethnic origin, age, religion, disability, marital or family status, veteran status, political ideas, sexual orientation, gender identity, or pregnancy, childbirth, or related medical conditions, including, but not limited to, lactation in educational programs and/or activities.

TITLE IX REQUIREMENTS:

All students (as well as other persons) at Horry-Georgetown Technical College are protected by Title IX—regardless of their sex, sexual orientation, gender identity, part- or full-time status, disability, race, or national origin—in all aspects of educational programs and activities. Any student, or other member of the college community, who believes that he/she is or has been a victim of sexual harassment or sexual violence may file a report with the college's Chief Student Services Officer, campus law enforcement, or with the college's Title IX Coordinator, or designee.

*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/TITLE IX POLICIES:

Student and prospective student inquiries concerning Section 504, Title II, and Title IX and their application to the College or any student decision may be directed to the Vice President for Student Affairs.

Dr. Melissa Batten, VP Student Affairs

Title IX Coordinator

Building 1100, Room 107A, Conway Campus

PO Box 261966, Conway, SC 29528-6066

843-349-5228

Melissa.Batten@hgtc.edu

Employee and applicant inquiries concerning Section 504, Title II, and Title IX and their application to the College may be directed to the Vice President for Human Resources.

Jacquelyne Snyder, VP Human Resources

EEO and Title IX Coordinator

Building 200, Room 212A, Conway Campus

PO Box 261966, Conway, SC 29528-6066

843-349-5212

Jacquelyne.Snyder@hgtc.edu