

**SYLLABUS**  
**CNBT 1311**  
**CONSTRUCTION METHODS AND MATERIALS**

**COURSE DESCRIPTION**

An introduction to construction materials and methods and their applications.

This course will focus on building codes, properties of materials, past and current construction methods, and the use of technology in the construction industry and how each effects decisions made by architects, engineers, and constructors. **Credit Hours:** 3 (3 lecture, 0 lab)

**PREREQUISITE**

There is no prerequisite for this class.

**TEXT**

Spence, William P. and Kultermann, Eva Construction Materials, Methods, and Techniques, Fourth Edition. Cengage Learning, 2017.

Required course materials are available at the Brazosport College bookstore, on campus or online at <http://www.brazosport.edu/bookstore>. A student of this institution is not under any obligation to purchase a textbook from the college bookstore. The same textbook is/may also be available from an independent retailer, including an online retailer.

**COURSE GOALS**

1. Recognize the difference between zoning ordinances and building codes and the influence each plays in the design of a particular project.
2. Develop an understanding of the Construction Specification Index (CSI) and its uses.
3. Explain the mechanical, thermal, electrical, and/or chemical properties of materials and their relationship to the development of construction materials used for specific applications.
4. Identify the major types of soil, their classifications, and commonly used soil tests.
5. Identify the characteristics of concrete mixtures and commonly used concrete tests.
6. Identify the major groups of precast concrete units and discuss the difference between prestressed and non prestressed units and their applications.
7. Explain the process for the production of pig iron, steel, and secondary steel making.
8. Identify the types, sizes, and properties of wood products manufactured from wood.
9. Examine plumbing codes and identify various piping, tubing, and fittings used in plumbing systems.
10. Discuss considerations in designing heating and cooling systems in both residential and commercial buildings.
11. Examine the sources of electrical power and how it is distributed.

**INSTRUCTOR**

Jarrold Creswell

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*The Brazosport College District shall not discriminate against, or exclude from participation in any benefits or activities either on the staff or in the student body, any person on the grounds of sex, race, color, religion, national origin, age, or handicap.*

## **STUDENTS WITH DISABILITIES**

BC is committed to providing equal education opportunities to every student. BC offers services for individuals with special needs and capabilities including counseling, tutoring, equipment, and software to assist students with special needs. Please contact Phil Robertson, Special Populations Counselor at 979-230-3236 for further information.

## **ACADEMIC HONESTY**

Brazosport College assumes that students eligible to perform on the college level are familiar with the ordinary rules governing proper conduct including academic honesty. The principle of academic honesty is that all work presented by you is yours alone. Academic dishonesty including, but not limited to, cheating, plagiarism, and collusion shall be treated appropriately. Please refer to the Brazosport College Student Guide & Calendar for more information. This is available online at [www.brazosport.edu](http://www.brazosport.edu)

Academic dishonesty violates both the policies of this course and the Student Code of Conduct. In this class, any occurrence of academic dishonesty will be referred to the Dean of Student Services for prompt adjudication, and may, at a minimum, result in one grade lower in this course. Sanctions may be imposed beyond your grade in this course by the Dean of Student Services.

## **ATTENDANCE AND WITHDRAWAL POLICY**

Attendance is essential since this class meets only once a week. If you miss a class, it is your responsibility to schedule any make-up test, homework, or in class assignment with the instructor.

If you fall behind in this class it is your responsibility to withdraw from the class. Because you stop attending class, it does not mean that you have officially withdrawn from class. To officially withdraw and receive a "W" in this class, you need to complete a withdrawal form before the official deadline which is the end of the tenth week of classes.

During class, cell phones and pagers are to be turned off or set in "vibrate" mode for the entire class period. If you are expecting a call of an emergent nature, please inform me before class to make arrangements in handling the call.

## **ASSIGNMENTS AND MAKE-UP POLICY**

Students are responsible for completing all reading and homework assignments prior to class. All assignments are due on the date assigned. No late work will be accepted unless the student has an excused absence. An excused absence is when the student notifies the instructor of his or her absence prior to class.

## **COMPUTER USAGE**

**Computers are to be used for class assignments only.** If you are doing internet searches, playing games, sending or receiving email, on facebook or twitter, you will be asked to leave immediately. You will be counted absent and receive a zero for any work assigned during the class period. This includes homework as well as in-class assignments.

**GRADE DETERMINATION**

Participation/Homework	30%
Attendance	10%
Midterm Exam	20%
Presentation	20%
Final Exam	20%

**GRADING SCALE**

A =	100-90
B =	89-80
C =	79-70
D =	69-60

1. This class meets in room L-206
2. The midterm exam will be on week 8.
3. The final exam will be on Week 15 in accordance with the final exam schedule.

**Group Project**

1. A group presentation on an emerging construction technology. Each student will be responsible for presenting a portion of the presentation. Time will be given in class to research your topic.

**CNBT 1311 CONSTRUCTION METHODS AND MATERIALS\***

There are 42 chapters in the assigned textbook. We will cover 2 to 3 chapters a week to cover the material in the semester.

\*This is an approximate schedule of the material covered each week. It is understood that during the semester the instructor may have to make adjustments to the weekly class schedule.

Information about the Brazosport College Library is available at [www.brazosport.edu/sites/CurrentStudents/Library/default.aspx](http://www.brazosport.edu/sites/CurrentStudents/Library/default.aspx) or by calling (979) 230-3310.

Information about study skills and tutoring for math, reading, writing, biology, chemistry, and other subjects is available in Learning Services. See [www.brazosport.edu/sites/CurrentStudents/LAC/default.aspx](http://www.brazosport.edu/sites/CurrentStudents/LAC/default.aspx) or call (979) 230-3253..

Student Services provide assistance in the following:

Counseling and Advising	(979) 230-3040
Financial Aid	(979) 230-3294
Student Activities	(979) 230-3355

To reach the Information Technology Department for computer, Email, or other technical assistance call the Helpdesk at (979) 230-3266.

