



Architecture, Construction & Manufacturing Technologies Division

CNBT 1318: Construction Tools and Techniques | Lecture | #20876

Spring 2021 | 16 Weeks
workforce 2 | Tuesday-Thursday 8 A.M. - 9:50 A.M.
3 Credit Hours |

Instructor Contact Information

Instructor:	Arthur Ehmling	Office Phone:	(832) 256-2765(cell)
Office:	TBD	Office Hours:	Call
HCC Email:	arthur.ehmling@hccs.edu	Office Location:	TBD

Please feel free to contact me concerning any problems that you are experiencing in this course. Your performance in my class is very important to me. I am available to hear your concerns and just to discuss course topics.

Instructor's Preferred Method of Contact

I will respond to calls and emails within 24 hours Monday through Friday; I will reply to weekend email messages on Monday mornings.

What's Exciting About This Course

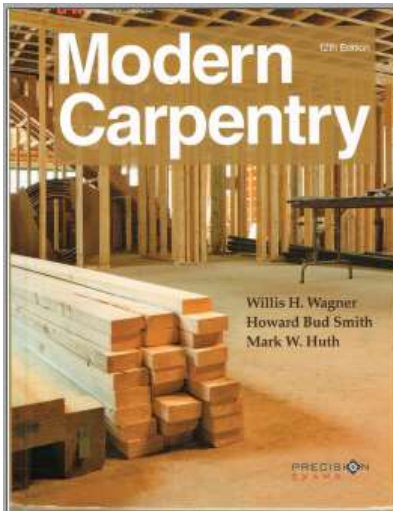
This course provides through understanding of the fundamental use of hand tools, portable and stationary power tools, materials and related construction equipment. Emphasis on safety in the use of tools, materials, methods and equipment for building construction projects.

My Personal Welcome

I would like to welcome anyone and everyone to take this course and enjoy themselves as much as I enjoy teaching my classes.

Instructional Materials

Textbook Information



Change the picture of the book. The textbook listed below is **required** for this course.

"Modern Carpentry:
(12th edition) by Willis H. Wagner, Howard Smith, Mark W. Huth
ISBN: 978-1-63126-083-4

It is for sale at the [HCC Bookstore](#). Order your book here: [HCC Bookstore](#)

Other Instructional Resources

Tutoring

HCC provides free, confidential, and convenient academic support, including writing critiques, to HCC students in an online environment and on campus. Tutoring is provided by HCC personnel in order to ensure that it is contextual and appropriate. Visit the [HCC Tutoring Services](#) website for services provided.

Libraries

The HCC Library System consists of 9 libraries and 6 Electronic Resource Centers (ERCs) that are inviting places to study and collaborate on projects. Librarians are available both at the libraries and online to show you how to locate and use the resources you need. The libraries maintain a large selection of electronic resources as well as collections of books, magazines, newspapers, and audiovisual materials. The portal to all libraries' resources and services is the HCCS library web page at <http://library.hccs.edu>.

Supplementary Instruction

Supplemental Instruction is an academic enrichment and support program that uses peer-assisted study sessions to improve student retention and success in historically difficult courses. Peer Support is provided by students who have already succeeded in completion of the specified course, and who earned a grade of A or B. Find details at <http://www.hccs.edu/resources-for/current-students/supplemental-instruction/>.

Course Overview

Building codes and standards applicable to building construction and inspection processes.

Core Curriculum Objectives (CCOs)

Upon completion of this course, the student will:

- > Explain safety practices and procedures.
- > Describe commonly used building codes
- > Describe construction documents
- > Identify the various codes in construction.
- > Identify tables, charts, and guidelines contained in codes.
- > Recognize methods and techniques for inspections.
- > Describe construction classifications and occupancy categories.
- > Demonstrate dexterity in inspecting projects.

Program Student Learning Outcomes (PSLOs)

Can be found at:

<https://www.hccs.edu/programs/areas-of-study/>

Course Student Learning Outcomes (CSLOs)

- > Identify various construction jobsite safety issues and considerations.
- > Identify residential building construction materials, methods and means.
- > Identify residential building construction implementation and coordination.
- > Identify jurisdictional regulatory requirements and inspections.

Course Requirements

- Internet connection(DSL,LAN,WI-FI, or cable connection desirable)

Student Success

Expect to spend at least twice as many hours per week outside of class as you do in class studying the course content. Additional time will be required for written assignments. The assignments provided will help you use your study hours wisely. Successful completion of this course requires a combination of the following:

- Reading the textbook
- Attending class in person and/or online
- Completing assignments
- Participating in class activities

There is no short cut for success in this course; it requires reading (and probably re-reading) and studying the material using the course objectives as your guide.

Instructor and Student Responsibilities

As your Instructor, it is my responsibility to:

- Provide the grading scale and detailed grading formula explaining how student grades are to be derived
- Facilitate an effective learning environment through learner-centered instructional techniques
- Provide a description of any special projects or assignments
- Inform students of policies such as attendance, withdrawal, tardiness, and make up
- Provide the course outline and class calendar which will include a description of any special projects or assignments

- Arrange to meet with individual students before and after class as required

As a student, it is your responsibility to:

- Attend class in person and/or online
- Participate actively by reviewing course material, interacting with classmates, and responding promptly in your communication with me
- Read and comprehend the textbook
- Complete the required assignments and exams
- Ask for help when there is a question or problem
- Keep copies of all paperwork, including this syllabus, handouts, and all assignments
- Attain a raw score of at least 80% on the departmental final exam
- Be aware of and comply with academic honesty policies in the HCCS Student Handbook

Assignments, Exams, and Activities

Tool Laboratories (IF APPLICABLE)

The labs will be made up of exercises and projects. They will include some tools that you MUST buy and some that I will provide for you to use. It is imperative that you buy your tools and bring them to class so you can get credit for this part of your grade. We will be doing a new tool lab every week except for test weeks. Make sure and show up with your required tools so you can get credit for this laboratory each week.

Quizzes

You will be assigned a total of 5 quizzes and a Final Project which will be online on your Canvas class shell. You are responsible for taking and completing the quizzes within the assigned time frame. Each quiz will count towards 10% of your final grade. There will be no extensions on quizzes under any circumstance.

Midterm & Final Exam

Each student is responsible for taking and passing a midterm and final exam. Both of these exams will consist of knowledge learned from in class lectures, readings in the textbook, online participation videos, and tool laboratories.

Grading Formula

Quizzes	30%
Midterm Exam	20%
Final Exam	30%
Final Project	20%
Total for class	100%

Grade	Total Points
A	90% - 100%
B	80% - 89%
C	70% - 79%

D	60% - 69%
F	0% - 59%

HCC Grading Scale can be found on this site under Academic Information:
<http://www.hccs.edu/resources-for/current-students/student-handbook/>

Course Calendar

Week	Dates	Topic/What's due
1	1/23, 24	Syllabus Class Rules and Orientation Textbook: HW - Read Chapter 2. Safety (handout quiz)
2	1/28, 30	Construction Jobsite Overview Textbook: HW - Read Chapter 2. Safety
3	2/4, 6	Review HW - Chapter 2. Safety (HW - Ch 2 quiz due) Test #1 , Chapter 2 Textbook: HW - Read Chapter 3. Building Materials (handout quiz)
4	2/11, 13	Review HW - Chapter 3. Building Materials (HW - Ch 3 quiz due) Test #2 , Chapter 3 Textbook: HW - Read Chapters 4 & 5. Hand & Power Tools (handout quiz)
5	2/18, 20	Review HW - Chapter 4 & 5. Hand & Power Tools (HW - Ch 4 & 5 quiz due) Test #3 , Chapter 4 & 5 Textbook: HW - Read Chapter 6. Scaffolds, Ladders, and Rigging (handout quiz)
6	2/25, 27	Review HW - Chapter 6. Scaffolds, Ladders, and Rigging (HW - Ch 6 quiz due) Test #4 , Chapter 6 Textbook: HW - Read Chapter 7. Plans, Specifications, and Codes (handout quiz)
7	3/3, 5	Review HW - Chapter 7. Plans, Specifications, and Codes (HW - Ch 7 quiz due) Test #5 , Chapter 7 Textbook: HW - Read Chapter 8. Building Layout (handout quiz)
8	3/10, 12	Review HW - Chapter 8. Building Layout (HW - Ch 8 quiz due) Test #6 , Chapter 8 Textbook: HW - Read Chapter 9. Footings and Foundations (handout quiz)

9	3/24, 26	Review HW - Chapter 9. Footings and Foundations (HW - Ch 9 quiz due) Test #7 , Chapter 9 Textbook: HW – Read Chapter 10. Floor Framing (handout quiz)
10	3/31, 4/2	Review HW - Chapter 10. Floor Framing (HW - Ch 10 quiz due) Test #8 , Chapter 10 Textbook: HW – Read Chapter 11 Wall and Ceiling Framing (handout quiz)
11	4/7, 9	Review HW - Chapter 11 Wall and Ceiling Framing (HW - Ch 11 quiz due) Test #9 , Chapter 11 Textbook: HW – Read Chapter 12 Roof Framing (handout quiz)
12	4/14, 16	Review HW - Chapter 12 Roof Framing (HW - Ch 12 quiz due) Test #10 , Chapter 12 Textbook: HW – Read Chapter 13 Framing with Steel (handout quiz)
13	4/21, 23	Review HW - Chapter 13 Framing with Steel (HW - Ch 13 quiz due) Test #11 , Chapter 13 Textbook: HW – Read Chapter 14 Roofing Materials and Methods (handout quiz)
14	4/28, 30	Review HW - Chapter 14 Roofing Materials and Methods (HW - Ch 14 quiz due) Test #12 , Chapter 14
15	5/5, 7	Final Review for final Exam
16	5/12, 14	Final Exam

Syllabus Modifications

The instructor reserves the right to modify the syllabus at any time during the semester and will promptly notify students in writing, typically by e-mail, of any such changes.

Instructor's Practices and Procedures

Missed Assignments

There will be no make up for missed assignments. I am allowing you a reasonable amount of time to get all online exercises and quizzes done. Also, there will be no makeup exam so make sure to not miss exam days. Any missed assignment or exam will earn a grade of "0" on that particular exercise.

Academic Integrity

Students are responsible for conducting themselves with integrity in fulfilling course requirements. Penalties and/or disciplinary proceedings may be initiated by college district officials against a student accused of scholastic dishonesty. "Scholastic Dishonesty" includes, but is not limited to, cheating on a test, plagiarism and collusion. Any instance of scholastic dishonesty may be reported to the Maxiant system. Possible punishments for scholastic dishonesty include a grade of "0" or "F" on the particular assignment, failure in the course, and/or recommendation for probation or dismissal from the college district. A recommendation for suspension or expulsion will be referred to the college Dean of Students for disciplinary disposition. Students have the right to appeal the decision. Cheating, plagiarism, collusion, etc. will result in a grade of F for the course and a report will be filed with the Dean.

Here's the link to the HCC information about academic integrity (Scholastic Dishonesty and Violation of Academic Scholastic Dishonesty and Grievance):

<http://www.hccs.edu/about-hcc/procedures/student-rights-policies--procedures/student-procedures/>

Attendance Procedures

You are encouraged to attend each class since regular attendance correlates with good grades. Be on time and attend the entire class. If you must be absent, you are, of course, responsible for the material covered in class in your absence (see the Course Calendar). Be advised that instructors must drop students who fail to attend class by the official date of enrollment ("Census Day"). In addition, instructors may drop students who miss four hours or 12.5% of class time.

Student Conduct

I expect students to conduct themselves professionally in their communications with me, classmates, and college staff and administration, whether in email or in class. Behavior inappropriate to the collegiate setting (including but not limited to abusive/derogatory/threatening/harassing language directed at the instructor or towards other students, staff or administrators) will not be tolerated and may result in removal from the course if severe and/or repeated. **To ensure privacy of your classmates, taking photos in class is strictly prohibited.**

Instructor's Course-Specific Information (As Needed)

We will adhere to a strict dress code in this class because of safety reasons. No shorts or sweat pants will be allowed in class. No flip flop or open toed shoes will be permitted. You must wear boots or rubber soled shoes like sneakers. At all times, all conductive materials to include earrings, rings, necklaces, and other type metal items must be removed during class.

Electronic Devices

The use of electronic devices by students in the classroom is up to the discretion of the instructor. Any use of such devices for purposes other than student learning is strictly prohibited. If an instructor perceives such use as disruptive and/or inappropriate, the instructor has the right to terminate such use. If the behavior continues, the student may be subject to disciplinary action to include removal from the classroom or referral to the dean of student services.

HCC Policies

Here's the link to the HCC Student Handbook <http://www.hccs.edu/resources-for/current-students/student-handbook/> In it you will find information about the following:

Academic Information	Incomplete Grades
Academic Support	International Student Services
Attendance, Repeating Courses, and Withdrawal	Health Awareness
Career Planning and Job Search	Libraries/Bookstore
Childcare	Police Services & Campus Safety
disAbility Support Services	Student Life at HCC
Electronic Devices	Student Rights and Responsibilities
Equal Educational Opportunity	Student Services
Financial Aid TV (FATV)	Testing
General Student Complaints	Transfer Planning
Grade of FX	Veteran Services

EGLS³

The EGLS³ ([Evaluation for Greater Learning Student Survey System](#)) will be available for most courses near the end of the term until finals start. This brief survey will give invaluable information to your faculty about their teaching. Results are anonymous and will be available to faculty and division chairs after the end of the term. EGLS³ surveys are only available for the Fall and Spring semesters. -EGLS3 surveys are not offered during the Summer semester due to logistical constraints.

<http://www.hccs.edu/resources-for/current-students/egls3-evaluate-your-professors/>

Campus Carry Link

Here's the link to the HCC information about Campus Carry:

<http://www.hccs.edu/departments/police/campus-carry/>

HCC Email Policy

When communicating via email, HCC requires students to communicate only through the HCC email system to protect your privacy. If you have not activated your HCC student email account, you can go [to HCC Eagle ID](#) and activate it now. You may also use Canvas Inbox to communicate.

Housing and Food Assistance for Students

Any student who faces challenges securing their foods or housing and believes this may affect their performance in the course is urged to contact the Dean of Students at their college for support. Furthermore, please notify the professor if you are comfortable in doing so.

This will enable HCC to provide any resources that HCC may possess.

Office of Institutional Equity

Use the link below to access the HCC Office of Institutional Equity, Inclusion, and Engagement (<http://www.hccs.edu/departments/institutional-equity/>)

disAbility Services

HCC strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability (including mental health, chronic or temporary medical conditions), please meet with a campus Abilities Counselor as soon as possible in order to establish reasonable accommodations. Reasonable accommodations are established through an interactive process between you, your instructor(s) and Ability Services. It is the policy and practice of HCC to create inclusive and accessible learning environments consistent with federal and state law. For more information, please go to <http://www.hccs.edu/support-services/disability-services/>

Title IX

Houston Community College is committed to cultivating an environment free from inappropriate conduct of a sexual or gender-based nature including sex discrimination, sexual assault, sexual harassment, and sexual violence. Sex discrimination includes all forms of sexual and gender-based misconduct and violates an individual's fundamental rights and personal dignity. Title IX prohibits discrimination on the basis of sex-including pregnancy and parental status in educational programs and activities. If you require an accommodation due to pregnancy please contact an Abilities Services Counselor. The Director of EEO/Compliance is designated as the Title IX Coordinator and Section 504 Coordinator. All inquiries concerning HCC policies, compliance with applicable laws, statutes, and regulations (such as Title VI, Title IX, and Section 504), and complaints may be directed to:

David Cross
 Director EEO/Compliance
 Office of Institutional Equity & Diversity
 3100 Main
 (713) 718-8271
 Houston, TX 77266-7517 or Institutional.Equity@hccs.edu
<http://www.hccs.edu/departments/institutional-equity/title-ix-know-your-rights/>

Office of the Dean of Students

Contact the office of the Dean of Students to seek assistance in determining the correct complaint procedure to follow or to identify the appropriate academic dean or supervisor for informal resolution of complaints.

<https://www.hccs.edu/about-hcc/procedures/student-rights-policies--procedures/student-complaints/speak-with-the-dean-of-students/>

Department Chair Contact Information

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