

HUDSON COUNTY COMMUNITY COLLEGE

Construction Codes

Course: CNM-220

Course Title: **Construction Codes**

Credit: 3

Instructor:

Day(s) / Time (s):

Location:

Office Hours:

Office Location:

Email:

Course Description: Current urbanization trend dictates that minimum standards for the construction and maintenance of buildings should be developed to protect public health, safety and general welfare. Safety is a prime consideration in the construction industry. The intent of this course is to provide students theoretical understanding how to examine new and old structures to ensure they are built properly and follow applicable building codes and safety regulations. This course provides an introduction to the basics of working in the building inspection field with the knowledge of construction codes.

This course includes teaching student blueprint reading, zoning regulations, formwork installation inspection, and scaffold erection, installation of plumbing, electrical & mechanical components of a building, faced inspection methods and procedures. Because there is significant litigation due to negligence in non-compliance with safety codes in the construction industry, students will learn the required documentation protocol and standard practices followed.

Homework: Homework assignments are given every week.

Presentation: An individual presentation on the directed topics will be prepared and presented individually. All presentations are graded.

Course Prerequisite: EXIT MATH / EN.

Student Learning

Outcome/Objectives: Upon completion of this course you should be able to:

- **Develop** a basic knowledge and concepts related to building codes and system.
- **Identify** if construction is in compliance with federal, state & local building codes.
- **Apply** safety concepts, regulations and work practices as set forth by OSHA, NESC, ANSI and NFPA.
- **Cross reference** the guidelines and specifications as presented in the building codes.
- **Recognize** the duties of a building inspector and prioritize those inspection items having the greatest impact on the health, protection and safety of building occupants.

Text Book: **Proposed Student Texts.**

a. Building codes basics: Residential, International Residential code

Author(s): Stephen A. Van

b. Building codes illustrated: A guide to understanding 2015 international building code

Author(s): Frank Ching & Steven R Winkel

Attendance: The college policy is generally that a student may fail a course due to lack of attendance if s/he missed more than 6 hours of instructional time for a 3-credit course.

Grading Policy:

1. Class attendance and class participation – 5%

2. Assignments – 35%
3. Midterm Exam: 30%
4. Final Exam: 30%

Breakdown of Grading:

100 - 94 = A	69 - 64 = C+
93 - 90 = A-	63 - 54 = C
89 - 84 = B+	53 - 50 = D
83 - 75 = B	Below 50 = F
74 - 70 = B-	

Cell Phone Use Policy:

Cell phones should be on manner mode. In case of emergency, notify me and then leave. Leaving classroom for non-emergency calls will result a zero grade in one test.

NO texting during lectures or exams! Cell phones may NOT be used during exams.

Mandatory Use of

HCCC Email Address: Members of the HCCC community are required to check their official HCCC email address in order to stay current with College and course communications. All college business communication between faculty, students, and staff must be sent via an official HCCC email address. If an employer or student elects to forward or link his/her HCCC email to a separate and private account, that individual remains responsible for all material transmitted to that account. Employees of HCCC shall not be responsible for any material that remains undelivered, due to defects in the private non-HCCC accounts. Failure in the operations of private email accounts shall not be cause for excuse from communications between the students and the employee. Students that encounter difficulty with HCCC email should view the FAQ's section on the Portal.

Incomplete:

An INCOMPLETE grade for the course is given under specific conditions when a student, because of serious and unexpected reasons, cannot complete the requirements of the course. For example, if a student did not attend the final because of illness his or her excuse must be verified by a physician. Other absences from other assigned activities must be made up at another appointed time. To arrange for an incomplete grade, the student must see the instructor

before final exam, so proper documentations could establish and submitted to Division and The office of Academic Affairs.

Disability Support

Services:

Students with disabilities who believe that they might need accommodations in this class are encouraged to contact Disability Support Services at (201) 360-4157, as soon as possible to better ensure that such accommodations are implemented in a timely fashion. All disabilities must be documented by a qualified professional such as a Physician, Licensed Learning Disabilities Teacher Consultant (LDTC), Psychiatrist, Psychologist, Psychiatric Nurse, Licensed Social Worker or Licensed Professional Counselor, who is qualified to assess the disability that the student claims to have and make recommendations on accommodations for the student. All information provided to the Disability Support Services Program will be confidential between the program, professors involved with the student, and individual student.

Academic Integrity

Standards:

Academic integrity is central to pursuit of education. For students at HCCC, this means maintaining the highest ethical standards in completing their academic work. In doing so, students earn college credits by their honest efforts. When they are awarded a certificate or degree, they have attained a goal representing genuine achievement and can reflect with pride on their accomplishment. This is what gives college education its essential value.

Violations of the principals of academic integrity include:

- Cheating on exams
- Reporting false research data or experimental results
- Allowing other students to copy one's work to submit to instructors
- Communicating the contents of an exam to other students who will be taking the same test
- Submitting the same project in more than one course, without discussing this first with instructor
- Submitting **plagiarized** work. **Plagiarism** is the use of another writer's words or ideas without properly crediting that person. This unacknowledged use may be from published books or articles, the Internet, or another student's work.

Violation of Academic

Integrity:

When students act dishonestly in meeting their course requirements, they lower the value of education for all students. Student who violate the college's policy on academic integrity are subject to failing grades on exams or projects, or for the entire course. In some cases, serious or repeated instances of academic integrity violations may warrant further disciplinary action.

Detailed information on the College's Academic Integrity policy may found in the *HCCC Student Handbook*. The handbook also contains useful information for students on completing research projects and avoiding plagiarism.

Classroom Recording Policy at HCCC

Student Classroom Recording Policy

- Hudson County Community College prohibits the audio-visual recording, transmission, and distribution of classroom sessions. Classes may only be recorded with the advance written permission of the instructor. The Hudson County Community College classroom recording policy must be listed in all syllabi.
- All classroom recordings can only be used for academic purposes by students enrolled in that class. Recordings may not be shared, reproduced, or uploaded to public websites or other mediums, and these recordings may contain copyrighted material and are prohibited from any form of commercial use.
- All students and guests must be informed that the class may be recorded. Due to issues related to privacy and the possible inhibition of student participation, instructors should be mindful of the effects of permitting classroom recording.
- Instructors should retain electronic or paper copies of their written consent to grant classroom recordings.
- Students must destroy their recordings at the end of the semester.
- Students who are granted permission to record their class by the office of Disability Support Services should inform the instructor beforehand and are subject to the policies outlined in this document.
- Violation of this policy is subject to disciplinary action listed under the code of conduct as included in the Student Handbook.

Instructor Classroom Recording Policy

- Instructors may record their classes if students are informed in writing in advance that recording will take place. Instructors may distribute their own lectures, but this must be limited to the lecture portion of the class. Recordings of student presentations or activities may be used in the class if the students are notified in advance of the recording. Recordings of student presentations or activities may not be distributed in any way without the advance written consent of the students.

Successful people access support from others when needed. Hudson County Community College has many supportive services available to help you meet your goals. You are encouraged to contact your instructors or other professionals on campus. Below are resources available to you.

IN AN EMERGENCY, PLEASE CONTACT SECURITY or 911.

	Journal Square Campus	North Hudson Campus
<u>Counseling Services</u> counseling@hccc.edu	201-360-4150 A Building, Floor 2 https://myhudson.hccc.edu/advisement	201-360-4150 Enrollment Center, Floor 1 https://myhudson.hccc.edu/advisement
The National Suicide Prevention Lifeline: 1-800-273-8255 Crisis Text Line: Text HELLO to 741-741		
<u>Advising Services</u> advising@live.hccc.edu	201-360-4150 A Building, Floor 2 https://myhudson.hccc.edu/advisement	201-360-4150 Enrollment Center, Floor 1 https://myhudson.hccc.edu/advisement
<u>Career Development</u> career@hccc.edu	201-360-4181 A Building, Floor 3 https://myhudson.hccc.edu/career-development	201-360-4181 Floor 2, Room 204 https://myhudson.hccc.edu/career-development
<u>Disability Support Services</u> dss@hccc.edu	201-360-4157/4163 A Building, Floor 2 https://myhudson.hccc.edu/dss	201-360-4157/4163 Enrollment Services, Floor 1 https://myhudson.hccc.edu/dss
<u>Library</u> Journal Square librarian@hccc.edu North Hudson librarynhc@hccc.edu	201-360-4360 L Building, Floor 1 http://www.hccclibrary.net/	201-360-4605 Floor 3 http://www.hccclibrary.net/
<u>Tutoring Center</u> tc@hccc.edu	201-360-4187 Lower Level of Library Building https://myhudson.hccc.edu/tutoring	201-360-4623 Floor 5, Room 511 https://myhudson.hccc.edu/tutoring
<u>Writing Center</u> wc@hccc.edu	201-360-4370 J Building, Room 204 https://myhudson.hccc.edu/tutoring	201-360-4779 Floor 7, Room 703A https://myhudson.hccc.edu/tutoring/

Construction Codes

Tentative Course Schedule

1. Introduction to the course, grading policy, course Requirements.

Lecture 1, Building construction: Types of buildings (residential, commercial, industrial), Historical perspective of building, Federal, state, & local regulations

Remote: College Canvas

2. Lecture 2, Types of building codes: Codes interpretation and application during design/construction process, zoning regulations, Grandfather clause, permitting process, OSHA regulations

Remote: College Canvas

3. Lecture 3, Case study class project: Group formation, assigning the topic, work strategy, project deliverables.

Remote: College Canvas

4. Lecture 4, Inspection & code enforcement: Types of building inspections, role of inspector, worker safety plan, personal safety equipment, sequence of construction and code enforcement.

Remote: College Canvas

5. Lecture 5, Techniques & procedures for code compliance session I: Identify the potential hazards, excavation, fall protection, shoring, hoisting, techniques and tools to avoid potential hazards.

Remote: College Canvas

6. Lecture 6, Techniques & procedures for code compliance, session II: Identify the potential hazards, electrical installation and safety protocols, fire protection, techniques and tools to avoid potential hazards.

Remote: College Canvas

7. Lecture 7, Techniques & procedures for code compliance, session III: Identify the potential hazards, scaffold, welding, cutting, demolition, sand blasting, techniques and tools to avoid potential hazards.

Remote: College Canvas

8. Lecture 8, Mid Term Examination

Remote: College Canvas

9. Lecture 9, Techniques & procedures for code compliance, session IV: Identify the potential hazards, ladders and step ladders, working in confine spaces, working at isolated locations, techniques and tools to avoid potential hazards.

Remote: College Canvas

10. Lecture 10, Coordination with stakeholders: Stakeholders and their role, legal issues, record keeping and documentation, enforcement, violation & citation.

Remote: College Canvas

11. Lecture 11, Handling of hazardous material: Identification of hazardous material, manual and mechanical handling procedures, storage and disposal, required documentation and record keeping.

Remote: College Canvas

12. Lecture 12, HVAC inspection and code compliance: Compliance with building laws, efficiency compliance, and

compliance with environmental regulations, climate control, ducting system, and test and balance reports.

Remote: College Canvas

13. Lecture 13, Elevator inspection and code compliance: Compliance with building codes, compliance with American disability (ADA), elevator door and landing compliance.

Remote: College Canvas

14. Lecture 14, Course Review

Remote: College Canvas

15. Lecture 15, Final Examination

Remote: College Canvas