

# CM 3500-001 Fall 2009 Construction Codes 2 (Class) - 0 (Lab) - 2 (Credit)

**Classroom: H-322**

**Class Periods: Wednesdays, 1:00 PM – 2:30 PM**

**Required Text: The International Building Code, 2006**, International Code Council (ICC), Inc., Falls Church, VA. **As a student member of ICC for a fraction of the cost the students can get the text book for free! Here is the link to the ICC membership website:**

<http://www.iccsafe.org/membership/join.html>

**Reference Text: Building Codes Illustrated, A guide to understanding the International Code**, Ching and Winkel (CW), John Wiley & Sons, Inc., Hoboken, New Jersey (a copy of this book is available in the reference section at the SPSU Library)

Other Refs: Texts, Videos, WebCT (Vista), Internet and Handouts

## **Faculty Contact Info: Dr. Yar Makarechi, PE**

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Office Hours Posted On My Office Window & Internet. Please make appointments by email to avoid waiting for other students.

## **Catalog Description**

This course will provide an overview of building codes from the perspective of construction managers and superintendent. Various issues related to building codes, which must be considered by the PM/CM/superintendent, will be discussed and follow the scheduled reading assignments.

## **Course Outcomes Based on Historical Course Objectives:**

Upon completion of this course, students will be able to:

- 1) Demonstrate understanding of the nature and purpose of the building code
- 2) Demonstrate knowledge of the different components of the building code
- 3) Recognize the principal building codes and their application
- 4) Identify sources of information for building codes
- 5) Demonstrate professional responsibility during the construction process

## **Grading Policy**

Exams: 50%, Homework: 20%, Group Project: 20%, Class Participation: 10%

There will be no curve for this course. The minimum cutoff for an A is 90%; for a B is 80%; for a C is 70%; and for a D is 60%. Anything below 60% is considered an F.

## **Class Policy**

1. It is expected that students will arrive to class on time and if expected to be absent from class, prior notification to the instructor is required (e-mails are accepted for this purpose). Each student is expected to behave in a professional way and participate in an alert, prepared, and relevant manner.
2. **It is expected that students will complete the readings before the class date** so that any questions that arise may be discussed fully.
3. Students will be required to work individually for most and in teams for the preparations of several assignments. These will be presented in class and all team members are required to participate in the presentation of the homework. Team members will be assigned by the professor.
4. Assignments will be turned in at the **beginning** of class on the date due. It is each student's responsibility to deliver late assignments to the department mailbox of the instructor.

5. Assignments that are submitted after class has ended will receive a penalty of 10%. Assignments submitted the day after the class on which they are due will receive a penalty of 25%. From that point, assignments received up to one class session late will receive a penalty of 50%, and thereafter a 100% penalty.
6. Homework should have a professional appearance, being neat, logically formatted, and legible (by computer printout). **See specific homework requirements.** Adherence to this requirement is mandatory and will be strictly enforced.
7. Exams are open book and open notes.
8. Make-up exams will **NOT** be given under any circumstance. Students will be given the opportunity to drop the lowest exam grade.
9. Any request for grade revision must be made in writing and delivered to the course instructor or to department personnel in person (no email, no fax) before the one week deadline. After the one week deadline, students waive their rights for appeals. The request for grade revision must include the name of the student, the assignment, test, or description of the grade in question, and the reasons for requesting the revision. Students must present their argument clearly and substantiate with evidence. The course instructor will evaluate the request and take appropriate action.
10. The course instructor reserves the right to make exceptions as he deems appropriate. (if I make an exception with one students this does not mean that I will do the same for others)
11. Deadlines are to be met. No late work should be presented. If you turn in late work penalties apply. Plan ahead, be aware of "Murphy". (I am not responsible for malfunctioning computers, printers, software, or lost work)

### **Cell Phone and PDA policy:**

Use of cell phone/PDA/Pager/blackberry etc. during class is strictly prohibited and will result in the dismissal of the student from that particular class and the receipt of a "zero" for that class's particular assignment, exercise, exam, quiz, etc. This includes any noise or sound from the device during the lectures. The second incident/use of such devices during class will result in the withdrawal of the student from the class by the instructor. Withdrawal of the student by the instructor after the official "drop date" will result in the grade of a "WF" for the student.

### **Course Management:**

WebCT Vista will be used for managing this course. All course material will be available in the system as well as all grades for all work related to this course. Communication by any other means will not be accepted.

### **Specific Homework Requirements:**

Assignments must be prepared using the computer software presented in the course (i.e., body shall be typed in Times New Roman, size 11-font, single-spaced, 1" margins). Cover sheets shall accompany all assignments submitted by students. Cover sheets shall list the course number, instructor, date, student name and e-mail address, and subject of report. Students are responsible for turning in assignments that are grammatically correct. Misspellings and grammar mistakes will be taken into consideration when assigning grades. Students shall proof-read their work before submitting it for grading.

## **Research Project:**

Students will work in teams of at least 3 on a research project that will last the entire term. The project will enhance the learning experience by exposing students to information beyond the material covered in the class environment. Students will be given a series of topics to select from as research topic. After teams are formed and students select a topic they will meet with the instructor to discuss the plan for doing the research project.

### Goals of the Research Project:

1. Provide exposure to construction body of knowledge.
2. Provide experience in undergraduate research.
3. Test skills in use of basic IT.
4. Provide experience in public speaking.
5. Provide experience in collaborative work environments.
6. Provide practice in technical writing.

### Topics for the Research Project:

1. Building Codes and Disasters (Old and New)
2. A survey of the knowledge of Building Codes in the Atlanta contracting community
3. Failures resulting from Building Code Violations
4. Building Code Education in Construction Programs
5. Building Code Information on the Internet (tools)
6. How Building Codes address worker safety

### Rules for the Project:

- 3 students per group (one student should have some work experience)
- You will be tested in the use of MS office programs (Word for report, PP for presentation, Excel for data analysis)
- Paper format:
  - American Society of Civil Engineers (ASCE) paper format for journals in addition to the following
    - Cover page, Index or Table of Contents, Index of Figures, and Index of Tables, Appendix.
- Use of references:
  - ASCE journals and conference proceedings.
  - Engineering News Record (ENR).
  - Material made available in the library by instructor.
  - Must provide a copy of all references used.
  - No limit on maximum number of references cited. Minimum between 20 and 25 references.
- Progress Report Presentations (as indicated in course schedule))
  - Students will make presentation to class on progress (what you have learned, where you found information, who you spoke with, etc.)
- Grading (as indicated in the grading section)

## CNST 3500-001 Course Outline

Session	Topics	Reading	Assignments and other deliverables
8/26	Administrative Matters, Introduction to the Code	Syllabus, Ethics ICC-CH 1, 2 CW-CH 1,2	
9/02	Building Planning	ICC-CH 3, 4, 5, 6 CW-3,4, 5, 6	HW #1 Released
9/09	Building Planning Fire-Resistive Construction	ICC-CH 7 CW-CH 7	
9/16	<b>Exam 1 (ICC-CH 1 to 6)</b>	No Class	HW #1 Due HW #2 Released
9/23	Interior Finishes and Fire-Protection	ICC-CH 8, 9	
9/30	<b>Exam 2 (ICC-CH 7 to 9)</b>	No Class	HW #2 Due HW #3 Released
10/07	Means of Egress	ICC-CH 10 CW-10	
10/14	<b>Exam 3 (ICC-CH 10)</b>	No Class	HW #3 Due HW # 4 Released
10/21	Accessibility Interior Environment	ICC-CH 11 CW-CH 11 ICC-CH 12 CW-CH 12	Start Research Project
10/28	Exterior Walls Roof Assemblies <b>Project Progress Reports</b>	ICC-14 CW-CH 14 ICC-15 CW-CH 15	
11/04	Structural Provisions I Structural Provisions II <b>Exam 4 (ICC-CH 11, 12)</b>	No Class	HW #4 Due
11/11	Building Materials and Systems I Project Progress Reports	ICC-16 CW-CH 16 ICC-17 CW-CH 16	
11/18	<b>Exam 5 (ICC-CH 14, 15)</b>	No Class	
12/02	Building Materials and Systems III	ICC-CH 18 to 30	<b>Deliver Research Project</b>
12/09	<b>Final Exam (ICC-CH 16-30)</b>	No Class	

### Notes:

1. The outline is intended to represent the general format of class. The instructor may make changes to better suit the needs of the class.
2. ICC = International Code Council. This is the International Building Code 2003 that we will use as our text book.
3. CW = The book by Ching and Winkel that we will use as a reference book.