

CM 3110 – Residential and Light Construction Methods Fall 2009

Prerequisite: None

Classroom: J 264

Class periods: Monday/Wednesday 8:00 PM till 9:50 PM

Instructor: Paul Craig Thompson

Office Hours: By Appointment Only

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Required Text: *Building Construction: Principles, Materials, Systems*; Mehta, Scarborough, Armpriest

Course Description: A study of materials, techniques, and methods used in residential and light construction. Foundations, wood frame and masonry structural systems, interior and exterior finishes, residential electrical, plumbing, and mechanical systems are included. Also included are residential building code requirements.

Course Goals & Objectives: Gain an understanding that residential construction is the combined effort of designers, project managers, and construction personnel. The process must be done within a predetermined length of time by using the best possible combination of materials and construction methods, meeting all relevant building code and environmental concerns, and maintaining budgets.

Primary objective will be to become conversant with the basic materials and processes used in light construction projects. Special emphasis will be placed on terminology and vocabulary, quality standards, sequencing of work, and production efficiency.

Learning Outcomes:

- Ability to *recognize and describe* the materials used to construct residential/light commercial buildings and similar structures.
- Ability to *define* where and how basic materials are used in residential/light commercial buildings and similar structures.
- Ability to *sequence and estimate time* for construction activities in a residential construction project.
- Ability to properly *understand and implement* building codes.

Grading Policy

Homework	10%
Four Quizzes – 15% each	60%
Class Participation	5%
Group Projects	25%
Total	100%

There will be no curve. 90% and above will be an A, 80% to 89% will be a B, 70% to 79% will be a C, 60% to 69% will be a D, and anything below 60% will be an F. The only adjustment that will be considered is if you are in attendance at least 80% of the time, that means 25 class sessions, a 1% increase will be added to the final grade, which may affect the final score. Also, there will be no final exam, so you can ignore the Banner Web schedule of final exams.

Class Policies

1. Students are expected to attend all lectures as well as laboratory sessions.
2. You must be on time; attendance will be taken first thing in the class session. In other words, Atlanta traffic is no excuse – everyone knows how bad it is...plan accordingly. If you must be absent from class for any reason, you are expected to give the instructor prior notification by email.
3. It is expected that all reading assignments will be completed before class.
4. Homework and laboratory assignments will be provided for most classes; the group projects will require work in teams. Team members must participate in all portions of the assignment, including the presentation.
5. Assignments should be completed during the laboratory portion of the class, and must be turned in at the **beginning** of the class on the due date. Late assignments will not be accepted, except in the direst of situations, subject to the instructor's discretion. If you have to miss a class, email the assignment to me before the beginning of the class.
6. Make up quizzes will only be given with prior notice of absence, to the instructor. I'll give you plenty of notice of quiz dates – plan accordingly.
7. Plan ahead to meet deadlines. Consider your work to be similar to a bid submission. If your bid is late, it goes unopened, and you don't get the project. Plan accordingly. Remember Murphy's Law. I'm not responsible for your broken down car, or your computer that crashes, or Atlanta traffic, or the library fines you owe so that you can't use the computers.
8. Cell phones – shut them off before class begins. That doesn't mean vibrate or silent – shut them off. (Not applicable during lab time, when you're working on projects or assignments.)
9. Collaboration or cheating on examinations will result in a grade of zero and other penalties including possible failure of the course.

Course Outline

CM 3160

Date

Aug 24	Introduction	
Aug 26	Building Conceptions/Permitting	Chapter 1
Aug 31	Building Codes	Chapter 2
Sep 2	Soils, Foundations, Basements	Chapter 21
Sep 7	No class – Labor Day Holiday	
Sep 9	Concrete	Chapter 18
Sep 14	Concrete Slabs and Reinforcing	Chapter 19
Sep 16	Quiz 1 – Codes, Permits, Soils, Foundations, Concrete	
Sep 21	No class	
Sep 23	Wood	Chapter 11
Sep 28	Manufactured wood products	Chapter 12
Sep 30	Wood light frame construction	Chapter 13
Oct 5	Wood light frame construction	Chapter 14
Oct 7	Quiz 2 – Wood Construction	
Oct 12	Masonry materials	Chapter 22
Oct 14	Masonry materials	Chapter 23
Oct 19	Light gauge steel construction	Chapter 17
Oct 21	Exterior Walls	Chapter 26
Oct 26	Exterior Walls	Chapter 27
Oct 28	Roofing – Low slope roofs	Chapter 31
Nov 2	Quiz 3 – Masonry, LGS, Exterior walls, Roofs	
Nov 4	Glass	Chapter 28
Nov 9	Doors and windows	Chapter 29
Nov 11	Moisture Control	Chapter 25
Nov 16	Stair Construction	Chapter 33
Nov 18	Floor coverings	Chapter 34
Nov 23	Ceilings	Chapter 35
Nov 25	No school – Thanksgiving holiday	
Nov 30	Plumbing and Mechanical	
Dec 2	Project Presentations	
Dec 7	Project Presentations	
Dec 10	Quiz 4 - Moisture, Interiors, Plumbing, Mechanical, Glass	

Note – this is a guide only, and is subject to change at the discretion of the instructor.

CELL PHONE and PERSONAL DEVICE POLICY

The use of cell phones/PDAs/pagers during class will not be tolerated. Turn them OFF before entering class and they are to remain off until the class is completed. The classroom environment will be treated the same way as if this was a corporate meeting in a large conference room in which your boss was delivering a presentation. He/she would not tolerate their use and a “wise” young employee would probably shy away from their use in order to prevent their discharge from the firm as a result of their rudeness.

Use of cell phone/PDA/Pager/blackberry etc. during class 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. The second use of the device 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.