

# Construction Systems

## ETES 5040/7040

### Spring 2008

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**Office Hours:** By Appointment  
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#### Recommended Textbooks

WOOD: TECHNOLOGY & PROCESSES, Feirer, John L.  
Glencoe-McGraw-Hill; ISBN 0-07-865541-2

#### Other Required Materials

- ◆ Safety glasses
- ◆ Clothing and foot wear appropriate for light construction activities

#### Description of Course

The course is designed to engage students in the materials and processes used in the construction practices to produce products and structures. Construction techniques are employed in laboratory activities that center around the phases of wood product development and light construction. Special instruction will be provided on the use and care of hand and power tools and machines used in career and technical education laboratory programs.

#### Objectives of the Course

Students who successfully complete this course will be able to:

1. Describe the underlying principles of construction and structural design processes.
2. Analyze basic structural design problems and develop appropriate solutions.
3. Demonstrate safe use of laboratory hand and power tools and machines.
4. Apply appropriate analytical processes in the development of structural design solutions.
5. Demonstrate mastery of terminology relevant to light construction and woodworking applications.
6. Demonstrate teamwork processes when solving technical construction and wood working problems.

#### *Additional Graduate Level Objectives*

7. Explain the various instructional approaches for teaching construction and wood materials processes & systems as a component of technology education and workforce development.

8. Assess the effectiveness of various curriculum models for construction and wood materials & processes systems instruction in technology education and workforce development.

### Student Activities

1. Study of assigned readings.
2. Completion of assigned exercises, projects, and problems.
3. Participation in class discussions.
4. Completion of periodic papers and examinations.

### Evaluation

Individual Project Design & Construction -----	25
Class Project-----	10
House Model -----	10
Quiz 1 -----	5
Quiz 2 -----	5
Quiz 3 -----	5
Quiz 4 -----	5
Tool Safety Tests -----	5
Tool Safety Demonstrations -----	5
Mid-Term Examination -----	10
Final Examination -----	15

### Grading Scale:

A -----	94-100
A- -----	90-93
B+ -----	87-89
B -----	84-86
B- -----	80-83
C+ -----	77-79
C -----	74-76
C- -----	70-73
D -----	60-69
F -----	0-59

### Class Participation

Punctuality and attendance are important to successful completion of requirements for this course. For that reason, attendance will be taken at each class meeting. The class participation portion of the course evaluation will be based on punctual attendance to all class meetings, participation in class discussions, and appropriate care of computer equipment.

*Note: Students with disabilities who require reasonable accommodations in order to participate in course activities or meet with course requirements should contact the instructor during regular office hours or by appointment.*

**Learning Activities and Projects**

Several projects and learning activities will be used throughout the term to provide problem solving experience and opportunities for enriching the content covered in class. All written work should be prepared using appropriate word processor and printing technology and should be checked for correct spelling, punctuation, grammar, and usage.

*Teaching Presentation.* Students registered for ETES 7040 will complete additional graduate level objectives through participation in a teaching presentation. The topic to be presented will be agreed upon in consultation with the course instructor.

Learning Activities

- Text Readings/Quizzes (4)----- 20
- Power Tool Demonstrations ----- 5
- Power Tool Safety Tests ----- 5

Projects

- Individual Project Design & Construction 25
- Class Project ----- 10
- House Model (team work)----- 10

**Examinations----- 25**

There will be two (2) examinations during the term, a midterm (covering material from the first class meeting to the date of the exam) and a final (a comprehensive exam related to any/all material covered during the term). Mid-Term Exam – 10 Points; Final Exam – 15 Points

*Mid-Term Examination, March 17; 4:30-6:00pm*

*Final Examination, May 5; 4:30-6:30 pm*

**Attendance:**

Attendance is crucial especially considering the density of facts, concepts, principles, and procedures covered in each class. Missing even one class could set you seriously behind. Realize that if you are absent, even for valid reasons, you are responsible for the material and assignments discussed in each and every class. In addition, I expect each participant to take an active role by contributing and sharing thoughts and ideas, taking initiative, and seeking to help other members of the class. Each participant is expected to remain open to new ideas and different points of view.

Attendance records will be recorded at the beginning and at the conclusion of each class meeting. *Your grade in this class will be dropped 3% points for two (2) unexcused absence and you will be removed from the class role after three (3) unexcused absences. In addition, tardiness will result in a 3% point reduction in grade if more than three (3) unexcused tardy attendances occur.*

**Late Assignments**

I expect assignments to be completed on time. My standard policy regarding assignments is 10% penalty for late assignments turned in within 1 week of the due date and 50% penalty for assignments turned in thereafter until the end of the course (defined as the last regular class session). I use this system even in the event of "excusables," such as minor sicknesses or other unforeseen conflicts. However, any exceptions to this policy are made at my discretion.

**Honesty**

Cheating on class assignments, examinations, or other serious forms of academic activities will result in a grade of an "F" (and a required report to University officials). Persons "borrowing" someone else's work on an assignment will receive a zero on that assignment if it is the first offense. A second offense will be considered a serious form of academic dishonesty. (Borrowee is equally subject to penalties.) Refer to UGA's *A Culture of Honesty: Policies and procedures on academic honesty*.

**Withdrawal/Drop Policy**

Drop policy is as described in the university's undergraduate bulletin, page 45.