

# Course Policy, Procedures, and Syllabus

## *Building Construction Program, Georgia Institute of Technology*

<b>Course Title:</b>	Construction Cost Management
<b>Course No:</b>	BC 3600
<b>Prerequisites:</b>	BC 2620
<b>Semester/Year:</b>	Fall/2010
<b>Instructor(s):</b>	Daniel Castro (dcastro@gatech.edu)
<b>Assistants:</b>	Laura Florez (lflorez3@gatech.edu) Maria Quiñones (mquinones3@gatech.edu)
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<b>Office Hours:</b>	By Appointment.
<b>Required Textbooks:</b>	Estimating in Building Construction 7th Ed. Dagostino, F. and Peterson, L. 2010. Prentice Hall, ISBN 0-13- 119952-8
<b>Recommended Readings:</b>	How to Estimate with Means Data and CostWorks 3rd Ed. RSMeans and S. Mubarak. 2006. Reed Construction Data, ISBN 0-87629-820-X.
<b>Course Description, Goal, and Objectives:</b>	This course goal consists of learning methods used to elaborate construction estimates, manual and computer-aided takeoff and pricing, bid components and preparation of building material quantities from plans of residential, commercial or other type of structures. You will be provided with background and skills in blueprint reading and estimating methods, so you will be able to prepare engineer's and bid estimates. Estimating software will be introduced and utilized in the lab sessions and assignments.

### Assignment and Evaluation:

Final grades will be based on an aggregate point total for exams, homework, papers, quizzes, classroom participation, and/or projects. **Grades may be curved to provide a balance of intellectual challenge and academic reward.** Course grading is as follows:

A	B	C	D	F
90% and above	80%-89%	70%-79%	60%-69%	<60%

**Points:** The following table summarizes the points for this course. Group assignments will be graded for the entire group, and evaluation of individual team members will become part of the final grade. Make-up exams/presentations are not allowed for any reason. All homework, projects, tests and exam grades will become final one week after they are returned in class. Class participation (discussion and quizzes) will contribute to the final grade. The final exam and project presentation/report are comprehensive.

	Points	Percent
Quizzes	150	10
Midterm Exam I	150	15
Midterm Exam II	150	15
Laboratory Assignments	300	30
Group Project Presentation/Report	100	10
Final Exam	150	150
<b>TOTAL</b>	<b>1,000</b>	<b>100%</b>

## Course Syllabus

Class	Date	Topic or Subject	Text/Topic/Reading Assignments	Professor/ Guest Speaker	Assignment/Project Due Date	Other
1	08/23	Course Introduction	Syllabus	DC		
2	08/25	Introduction to Estimating	Ch 1: 1-5	DC		
3	08/27	Lab Introduction Final Project Briefing	Team building Project selection	LF, MQ		
4	08/30	Overview of Bidding Process	Ch 1: 6-9	DC		
5	09/01	Sources of Estimating Information	Ch 1: 10	DC		
6	09/03	Blueprint Reading	Appendix C	LF, MQ	Lab 1	
7	09/06	Official School Holiday				
8	09/08	Contracts, Bonds and Insurance	Ch 2	DC		
9	09/10	Final Project Drawings	Building plans	LF, MQ	Lab 2	
10	09/13	Fundamentals of the Quantity Takeoff Pricing Extensions	Notes	DC		
11	09/15	Technical Specifications	Ch 3: 1-4, 12	DC		
12	09/17	Site Investigation Report	Building plans	LF, MQ	Lab 3	
13	09/20	General Excavation	Ch 9: 1-9	DC		
14	09/22	Special Excavation	Ch 9: 10-21	DC		
15	09/24	CSI Division 2	Blueprints	LF, MQ	Lab 4	
16	09/27	Forms and Conditions	Ch 3: 5-11	DC		
17	09/29	Organization of Estimate	Ch 4	DC		
18	10/01	On-Screen Takeoff / Timberline	Tutorials	LF, MQ		
19	10/04	Concrete	Ch 10	DC		
20	10/06	Concrete	Ch 10	DC		
21	10/08	Midterm Exam 1				
22	10/11	Masonry	Ch 11: 1-10	DC		
23	10/13	Masonry Reinforcement and Accessories	Ch 10: 11-23	DC		
24	10/15	CSI Division 3	Blueprints	LF, MQ	Lab 5	
25	10/18	Student Recess				
26	10/20	Overhead and Contingencies	Ch 6	DC		

27	10/22	CSI Division 4		Blueprints	LF, MQ	Lab 6	
28	10/25	Metals		Ch 12: 1-5	DC		
29	10/27	Metals Cont.		Ch 12: 6-9	DC		
30	10/29	CSI Division 5		Blueprints	LF, MQ	Lab 7	
31	11/01	Wood		Ch 13: 1-4	DC		
32	11/03	Wood Cont.		Ch 13: 5-14	DC		
33	11/05	CSI Division 6		Blueprints	LF, MQ	Lab 8	
34	11/08	Thermal and Moisture Protection		Ch 14: 1-11	DC		
35	11/10	Thermal and Moisture Protection Cont.		Ch 14: 12-24	DC		
36	11/12	CSI Division 7		Blueprints	LF, MQ	Lab 9	
37	11/15	Doors and Windows		Ch 15	DC		
38	11/17	Finishes		Ch 16	DC		
39	11/19	CSI Divisions 8-14		Blueprints	LF, MQ	Lab 10	
40	11/22	Plumbing, HVAC		Ch 18, Ch 19	DC		
41	11/24	Electrical		Ch 17	DC		
42	11/26	Official School Holiday					
43	11/29	Labor		Ch 7	DC		
44	12/01	Labor Cont.		Ch 7	DC		
45	12/03	Midterm Exam 2					
46	12/06	Estimating for Final Project					
47	12/08	Estimating for Final Project					
48	12/10	Bid Opening Day			DC, LF, MQ		

**Final Exam Information:**

Exam Date	Exam Time	Location
Dec 13th (Mon)	2:50 - 5:40p	ES&T L1255

## COURSE POLICIES

In the following policies, 'you' indicates the 'student' and 'instructor' means 'faculty' or 'professor.'

**Policies and Expectations:** This course will be an intense and sometimes frustrating educational experience; it is necessary that we all contribute to its success by following the course policies. You should not only be in class, but also strive to participate in class discussions when appropriate.

**Assignment Deadlines:** All assignments given are due on the date indicated. All students are expected to complete any and all assignments given. The instructor reserves the right to modify assignments as necessary. Exam problems are going to be more demanding and challenging than class assignments. It is your responsibility to find additional problems for practice. The instructor may provide you with additional references. You will not receive credit for late assignments (homework, projects, readings, and others). However, the instructor will accept and correct these assignments, in order to provide you with feedback that will be beneficial in the learning process.

**Class Attendance Policies:** Attendance is mandatory for all class lectures, labs, site visits, and exams, unless you are ill or officially excused by the instructor as the result of participation in a university function. There are no "free cuts" permitted and there will be a penalty (as decided by the instructor) for not attending the class. If you attend fewer than 75% of the scheduled class meetings, you will not receive credit for the course. Any student arriving late for class or leaving early from class will be counted as absent from that class period. This policy is in your best interest, since attendance is essential for understanding some of the complex reasoning processes covered in this course which is critical for doing well in this class. In the case of unavoidable absences, you are responsible for making up the work done in class. It is not the instructor's responsibility to provide the student with that information outside of class. It is your responsibility to obtain any missed information or handouts given in class from a classmate and you should exchange phone numbers or e-mail addresses with other students in the class to better facilitate note sharing, etc. No companions, friends, family, or pets are permitted in class.

**Methods of Communicating:** You can submit all written work to the instructor in class, in hard copy or by e-mail, if allowed by the instructor (the assignment must be received by the deadline given). You can also ask questions and ask for clarification by e-mail, in class, or by visiting the instructor by appointment at his/her office. Students are not permitted to discuss grades with the instructor via e-mail, only in-person.

**Method of Instruction:** The course may consist of a combination of lectures, discussion, guest speakers, site visits, videos, presentations by industry professionals, labs, and teamwork. This course is not a training course. You will not be trained to master a software package, a computer application or a professional certification. You will be taught to solve problems by understanding the problem, synthesizing it, hypothesizing potential solution methods and implementing a selected procedure toward its solution. It is your responsibility to learn the software tools.

**Readings, Preparation and Participation:** The reading assignments, problems cases and discussion forums are an integral element of the course. Students are expected to complete readings and other assigned work prior to each class, in order to fully participate in the discussion. Learning is approached as a participatory process, which benefits from student/teacher and student/student interaction. The lectures may not explicitly follow the assigned book reading, but are designed to bring together diverse information from various sources. Although the book is listed as "required", it does not guarantee a satisfactory performance. You must search additional sources on your own to complement class lectures.

**Field Trips:** Field trips visits are mandatory and are meant as an enrichment experience. Field trip locations will be announced prior to the scheduled visit. It is the student's responsibility to wear hard-toed shoes, hard hats, protective eye cover (on certain sites) and long trousers/slacks during the field trip. Students are required to fill out and sign the Georgia Tech's "Release and Waiver of Liability" form, as well as any other forms required by the company whose site is being visited.

**Laptop/Handheld Computer Use:** Laptop/handheld computers may be used in class to take notes ONLY, but not for other purposes, such as e-mail, Web site searches, chat, or other personal uses. Students using computers during class for work not related to that class must leave the classroom for the remainder of the class period. Abuse of this policy will result in the prohibition of laptop use by this student.

**Cell Phones:** All communication devices must be turned off in the classroom. The use of cell phones, beepers, or other communication devices is disruptive, and is therefore prohibited during class. No personal listening devices or personal transportation devices are permitted.

**Make-up Exams:** There will be no make-up exams under any circumstances, except medical reasons. Provide your instructor with a letter from your medical doctor to schedule a make-up exam.

**Food and Drink in the Classroom:** Students are not allowed to bring food or drinks into classroom unless approved by the instructor.

**Class Discussions:** Your active and productive participation in class discussions is encouraged. Various viewpoints and opinions are encouraged and welcome. Questioning the ideas of others, including the instructor, is similarly welcome. However, the instructor will exercise his/her responsibility to manage the discussions so that ideas and argument can proceed in an orderly fashion. If your conduct during class discussions seriously disrupts the atmosphere of mutual respect, you will not be permitted to participate further.

**Instructor's Absence or Tardiness:** If the instructor is late in arriving to class, you must wait a full 20 minutes after the start of class before you may leave without being counted absent, or you must follow any written instructions the instructor may give you about an anticipated absence or tardiness.

**Plagiarism:** Students are expected to do their own work in this course. To use another writer's or speaker's ideas without giving proper credit by means of standard documentation is plagiarism. All course papers, notes, homework, and projects submitted to the instructor are subject to textual similarity review for the detection of plagiarism. All submitted papers will be included as source documents in the reference database for the purpose of detecting plagiarism of such papers. The instructor will follow the Institute's policy for plagiarism.

**Academic Misconduct/Honor Code:** Students in this course are responsible for behaving in accordance with the Georgia Tech Academic Honor Code. The Institute Student Honor Code is printed in the Georgia Tech General Catalog, as well as available on the Web at: [www.honor.gatech.edu](http://www.honor.gatech.edu).

**Disabilities:** Any student that may need an accommodation for any sort of disability should contact the ADAPTS Office: Assistant Dean/Coordinator for Students with Disabilities, Smithgall Students Services Building, Suite 221. The phone number is (404) 894-2564.

**Computer Specifications:** For information on computer specifications to meet Georgia Tech standards, visit [www.coa.gatech.edu/computing/comp\\_specs.htm](http://www.coa.gatech.edu/computing/comp_specs.htm). Internet access is required for this course, as is an e-mail account for communication with the instructor.

**Policy Changes:** Information contained in the course syllabus, other than the grade and absence policies, may be subject to change with reasonable advance notice, as deemed appropriate by the instructor.

**Supplemental Policies:**

The following supplemental policies will supersede the previous policies listed above, at the discretion of the instructor.

**Regrading:** All grade disputes for homework, lab assignments, and exams are to be made on paper. The instructor does not discuss or argue regrades in person. A student has until one week after receiving his/her grade on a homework, lab assignment or exam to dispute the grade. Handling regrades in this manner eliminates the "end of semester" digging for points. When disputing a grade, you should state the question, the dispute, and the number of points you feel you should have received for the question. Note that when you ask for a question to be regraded, the entire assignment may be regraded, and there is a possibility of losing points. The above policy applies to the final exam as well.

**Assignment Standards:** All work is due on the date assigned and to be completed on engineering paper or computer-printed. All sketches will be made using a straight edge or computer-printed. Specific criteria for grading each assignment will be discussed in class, but the following general criteria will be used for grading:

- How effectively does the document accomplish its intended task? (This may include meeting reader's needs, meeting its organizational goals, providing a sound rationale and thorough treatment of the topic, and providing useful and accurate information.)
- How well constructed is the document? (This refers to orderly and coherent presentation of material, effective design and formatting, appropriate use of visuals, and professional style and tone.)
- How effectively was the document produced? (This relates to the quality of planning, collaboration, research, drafting, editing, and proofreading.)