School of Building Construction, Georgia Institute of Technology

Course Title	Program Management - Predesign		
Course No	BC 8833 FC		
Catalog Description	An in-depth examination of the Program Manager's role and responsibilities during the Pre-Design phase, including project feasibility and organization, financing methods, legal and entitlement issues, master planning and programming, conceptual budgeting and scheduling, and team selections. 3.000 Credit hours 3.000 Lecture hours		
Semester/Year	Fall 2012		
Instructor	Frank Crittenden		
Office	TBD		
Phone	404-906-0085		
Email Address	fcrittenden3@gatech.edu		
Office Hours	TBD		
Class Schedule/Location	Thursdays 6:00-9:00 pm, ES&T L1116		
Required Textbook	Readings (articles, book excerpts, etc.) will be posted on T-square.		
Computer Software	Microsoft Excel, Word and PowerPoint		
Learning Objectives:	At the end of the semester students should:		
	 The elements of the project which must be managed during the predesign phase The differences in approaching the predesign phase under different project delivery methods The feasibility and financing elements of the development process The various elements of a project launch plan Understand: The complex nature of the client engaged in a construction project, and how the program manager can deal with the client's characteristics to increase the likelihood of a successful project The interrelated roles of the various parties involved in the predesign phase The complexities involved in early project budgeting and scheduling Be able to: Identify the client's internal management style and decision-making structure, and develop strategies for managing the predesign effort and the overall project Develop a conceptual schedule for a project at the earliest stages Develop a comprehensive project launch plan 		

School of Building Construction, Georgia Institute of Technology

Presentation Methods:	The class will utilize a mixture of lecture and application opportunities. During the lecture portion of each class the instructor(s), along with appropriate guest experts, will present the general theories related to the topic under study, the skills and tools needed to apply those theories, and examples of practical application of those skills and tools to project situations.
	Practical Application involves opportunities for applying the theories and processes being presented in class to a specific set of project circumstances. Students will be presented with a fact situation adapted from a real project and asked to apply what they have learned to the project situation. In some cases students will work alone; in some cases small teams may be more appropriate.

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

Mid-term examination, 20% Final Exam, 30%

Group Project, 30%

Working in teams, you will be assigned a hypothetical project for which you will prepare a Project Ramp-Up plan, to include program, budget, schedule, project approach, and other contents to be assigned in the course.

Class Participation, 20%

You are expected to attend class regularly, read the material assigned, prepare to discuss work as assigned, and participate actively in the discussion periods. You should not only be in class, but also strive to participate in class discussions when appropriate.

Academic Honesty: Georgia Tech aims to cultivate a community based on trust, academic integrity, and honor. Students are expected to act according to the highest ethical standards. For policy information on Georgia Tech's Academic Honor Code, please see: http://www.catalog.gatech.edu/rules/18b.php.

Course Text:

There is no required textbook for the course. Readings (articles, book excerpts, etc.) will be posted on T-square.

General Information and Additional Reading:

<u>Program Management</u>, Chuck Thomsen FAIA, Construction Management Association of America, 2008. <u>The Standard for Program Management – Second Edition</u>, Project Management Institute, Inc., 2008. <u>Understanding the Construction Client</u>, Boyd and Chinyio, Wiley-Blackwell, 2006.

School of Building Construction, Georgia Institute of Technology

Course Policies:

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.

Emergencies: In case of emergency (i.e. fire, accident, criminal act), please call the Georgia Tech Police at 404-894-2500.

Students with Disabilities: Students with disabilities requiring special accommodations must obtain an accommodations letter from the ADAPTS Office [www.adapts.gatech.edu] to ensure appropriate arrangements. **Please obtain your ADAPTS letter by September 30**th to avoid delays at exam time.

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. 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. **NO EXCEPTIONS.**

Class Attendance: 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. 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 your responsibility to obtain any missed information or handouts given in class. 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 inperson.

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.

Field Trips: Field trips, if scheduled, will be mandatory (unless scheduled outside regular class hours) and are meant as an enrichment experience. Field trip locations will be announced prior to the scheduled visit. The site will typically provide hard hats, reflective vests and protective eye cover as required. However, it is the student's responsibility to wear hard-soled, closed-toe shoes, and long trousers/slacks

School of Building Construction, Georgia Institute of Technology

during the field trip. If you fail to comply with these basic safety requirements you may be refused entry into the site and miss participation in the class session.

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.

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: Given the scheduled meeting time for this class, drinks and snacks will be allowed in the classroom within reason (but please, don't bring your whole dinner).

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. Answering an exam question by transcribing language from the text, lecture slides, or other references does not show that you have mastered the material and will not be accepted (and it's usually 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.

Computer Specifications: For information on computer specifications to meet Georgia Tech standards, visit 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

School of Building Construction, Georgia Institute of Technology

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.)

All homework, projects, tests and exam grades will become final one week after they are returned in class. Quizzes may be unannounced. The final exam is comprehensive, but more emphasis is placed on the materials covered after the midterm exam.

BC 8833 – Program Management - Predesign – Fall 2012 Course Policy, Procedures, and Syllabus School of Building Construction, Georgia Institute of Technology

Syllabus

No.	Date	Title	Content
1	8/23/12	Introduction	 Class rules, policies, etc. Class background and experience Syllabus review Grading Reading
		Understanding the Owner/Client	 Types of clients Major characteristics Capital planning approaches Client organization structures Business case for projects Strategic framework for projects Owner's basis of design
		Where do projects come from?	Public sector projectsCorporateDevelopmentInstitutional
2	8/30/12	Feasibility for Public Sector and Institutional Projects Guest speaker(s): Yvonne Isaac, Full Spectrum New York	Feasibility studies for: Public sector clients Institutional (tax-exempt) clients Long-term financing strategies Project approval issues Public-Private Partnerships
		Feasibility for Private Sector Projects	 Feasibility studies for corporate projects Feasibility studies for commercial developments
3	9/6/12	Financing for Public & Institutional Projects	 Public building projects Public infrastructure Institutional (incl. private fund-raising) Public-Private Partnerships
		Financing for Private Sector Projects	Commercial developmentsCorporate projectsOwner-occupied vs multi-occupant
4	9/13/12	Project Delivery Methods	 Options available to the owner Pros and cons of different delivery methods Criteria for selection Implementing the delivery model through project contracts

BC 8833 – Program Management - Predesign – Fall 2012 Course Policy, Procedures, and Syllabus School of Building Construction, Georgia Institute of Technology

5	9/20/12	Program Management Plan	Internal and external organization Limits of Authority
			Limits of Authority
			Roles and responsibilities
			Ramp-up/Launch Planning
		Development Approach & Team	Options available for implementation
		Selection	 Public selection requirements
			 Determining support needed & team selection
			 Partnering and project charters
6	9/27/12	Site Analysis & Selection	Site characteristics – tangible and intangible
		•	 Cost to make ready
			 Incentives and other assistance
			 Purchasing property
7	10/4/12	Permits, Approvals & Consents	Regional Impact
			 Zoning
			 Building – permits & code compliance
			 Environmental
			• Easements and other encumbrances
		Milestone Scheduling	• Methods
			 Activities to be planned and monitored
			Short-term vs long-term scheduling
			 Schedule contingencies
8	10/11/12	Environmental Issues	Environmental Impact Studies
		Guest speaker:	 Wetlands
		Chuck Ferry, AMEC	• Brownfields
		Mid-Term Exam	
9	10/18/12	Class cancelled	
10-	10/25/12	Early Project Budgeting	 Methods
11	and	Guest speaker:	 Cost information sources
	11/1/12	Brian Bowen	 Risk analysis
			 Contingency planning
			• Examples
			 Value engineering at this stage

BC 8833 – Program Management - Predesign – Fall 2012 Course Policy, Procedures, and Syllabus School of Building Construction, Georgia Institute of Technology

12	11/8/12	Sustainability	LEED and other rating systems
			 Environmental & social issues
			 Energy analysis
			Life Cycle Costing
		Real-life Lessons Learned	
		Class Project	
		Mid-Term review	
13	11/15/12	Multi-Project Programs	
		Guest speakers:	
		Ken Demske, JLL	
		The Client in Change	
	11/22/12	Thanksgiving Break	
14	11/29/12	IT Platforms	Options available
			• Selection and implementation
		BIM Applications – Pre-Design	Use of BIM for design
		Guest speaker(s):	BIM capabilities for conceptual budgeting
		TBD	
15	12/6/12	Beer and pizza	
Exam	12/11/12	Final project due, 6:00 pm	
Week		1 0	
	12/13/12	Final Exam due, 6:00 pm	