

CM 3710 Site Planning – Fall 2009

Construction Course Title: Site Planning (3– 2 – 4)

Prerequisite: CNST 2000

Classroom: H-320

Class Periods: Tuesday & Thursday 5:00 to 6:15 pm (Class) and Tuesday & Thursday 7:00 – 7:50 pm (Lab)

Instructor: John Hicks

Office: Room #H346

Office Hours: Monday, Tuesday, Wednesday and Thursday - as posted

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Catalog Description:

An integrated theory and applications course which provides an exposition of theoretical principles associated with the site planning process, and then involves students in hands-on exercises. The inter-relationship between site planning decisions and their potential consequences will be demonstrated through practical exercises.

Course Structure/Approach:

This is a lecture class that strongly encourages class participation. In addition to lectures, students will be required to participate in several discussions on actual case studies that will be presented by the instructor. Students will also be required to complete a site planning project to be turned in at the end of the semester. Each student will be required to make a brief 15-20 minute oral presentation to the rest of the class at the end of the semester in addition to turning in one bound written copy of their project. In addition to the above, field trips to job sites, guest speakers and current events will be implemented to help connect the student to the activities of the industry in the metro Atlanta area.

Course Objectives:

The course provides an overview of the site planning and the project approval process. The course will focus on the tools needed and the issues encountered in site selection, assessment and planning and on creating and obtaining governmental approval of the site plan.

Targeted Learning Outcomes:

The targeted learning outcomes are as follows:

1. Acquire an understanding of the basic principles that are relevant to site analysis, design and the approval phase of plan administration.
2. Develop the ability to inventory the physical, biological and cultural attributes of the site.

3. Understand how to transform site assessment results into a plan for site form, use and infrastructure.
4. Gain an overall understanding of the subdivision and permitting process.
5. Acquire a working knowledge of principles and procedures that are common in the site planning phase of land development.
6. Utilize the class project and exercises to underscore key practices and procedures used by the land development, his agents and employees to successfully complete site assessment, site planning and moving the project through regulatory approval.
7. Develop the ability to prepare a project schedule highlighting the major steps involved with a typical subdivision type land development project.
8. Develop the ability to prepare a development cost budget and subsequent financial proforma for a typical subdivision type land development project.
9. Gain exposure to business and land ethics as they apply to the site planning phase of the development process.

Lectures and Assigned Readings:

Lectures will be taken largely from assigned readings and supplemented by outside sources and the instructor's professional experience in the real estate development industry. The course will cover a lot of topics and even though the instructor will endeavor to cover the material as thoroughly as possible in the lectures. However, the student can greatly enhance their learning experience by reading the assigned readings in advance of the scheduled lecture on that topic.

Text and other Class Materials:

Required:

Dewberry, Sidney O., Land Development Handbook, McGraw-Hill, 2nd Edition, 2002

Supplemental:

LaGro, James A., Site Analysis, John Wiley & Sons, 2001

Kone, Linda D., Land Development, Home Builder Press, 9th Edition, 2000

Grading Policy:

Exams: There will be three exams and one "final exam". Tests and exams will be primarily objective in format consisting of fill in the blank, true/false and multiple choice answer questions. Short answer "essay type" questions will also be included that will be more subjective in their correctness. The final exam will be held on the date indicated by the University in its schedule of final exams. The weighting of the exam scores will be as outlined below in the Final Grade Calculation section below. Students who are not present during a scheduled exam will receive a grade of zero for that exam. Only under extenuating circumstances will students be allowed to make up an exam. In situations where the student knows in advance that he/she cannot be present on the date of an exam the student is expected to make prior arrangements with the instructor in order to be considered for a makeup. Last minute absences on the date of an exam will only be excused in the event of a valid medical or family emergency. All requests for an "excused" medical and/or family emergency must be accompanied by written justification of

the absence from a third party provider. All make up exams will be closed book and closed notes. *Note that all Exams will start at 5 :00 pm on the day that they are scheduled and will have a maximum time limit of 75 minutes for completion.*

Classroom Participation, Attendance and Quizzes: As noted above, students are expected to attend and participate actively in every class. While the decision to attend class is left to the student's discretion, class attendance and participation will impact the student's final grade. Roll will be taken for every class. *Any student who misses more than three (3) classes without having a **documented medical or family emergency excuse** for each absence will have their Classroom Participation grade reduced by two letter grades.* In short, any student that misses more than three (3) classes can expect at best a letter grade of "C" for Classroom Participation. The instructor reserves the right to utilize "pop quizzes" should he feel it necessary to encourage class participation and attendance. A student's score on any quizzes will be used as a factor in determining their final Classroom Participation grade. If a student is absent on the date that a quiz is given, the student will be given a zero for that quiz. *There will be no make ups for missed quizzes.* Finally, students should note that the instructor reserves the right to use the designated Lab period for lecture purposes should he feel the need to do so. Also to note , the majority of assignments will be distributed during the Lab period. As such, students are highly encouraged to attend all Lab periods.

Out of class assignments (homework): Out of class assignments are due on the date indicated in the Schedule of Lecture Topics and Assignments below. *Failure to turn in an assignment on its due date will result in the loss of one letter grade. Failure to turn in an assignment by the end of the next class date after its initial due date will result in a score of zero for that assignment.* As a means to encourage attendance, no assignments will be accepted electronically unless otherwise noted by the instructor. All out of class assignments must be typed and include the following information at the top of the first page:

Student Name: John Doe

Class: CM 3710

Date: August 26, 2009

Assignment Description: (ie. Land Development, Chapter One Review Questions 1, 2, 3 and 5)

If the assignment involves the answer to a question at the end of the chapter, only the answer needs to be included. The student does not need to retype the question, only the question number and its answer.

Team Project: During the first class meeting, students will be grouped into teams of four (4) students per team. Each group will be expected to turn in a bound, typed report at the end of the semester as well as make a brief 15-20 minute Microsoft "Power point" type presentation to the class covering the following topics/issues/plans on any site located in Cobb County, GA that has been approved by the instructor. *Students should select a site that can accommodate at a minimum 300 single family dwelling units that is not already being used for residential purposes.* A sample project that was done by a student in the past will be posted on VISTA for review. In

addition to the topics covered in the sample report, student will be expected to complete the additional requirements outlined in below related to the Project Schedule, Cost Budget and Pro-Forma.

Project Report (Minimum) Requirements:

Each group shall address the following issues as part of their report:

- a. Project Description to include the following information:
 1. Project Name
 2. Product Type to be delivered (ie. townhome, condos or SF detached)
 3. Project program
- b. Existing site conditions as outlined below:
 1. Using the exhibits provided in section e below, provide a bullet form narrative of all major issues that were discovered during the Existing Conditions investigation
 2. Provide a brief written paragraph summarizing your findings and the challenges that these pose.
- c. Proposed site plan to include the following topics:
 1. Provide written narrative on how your team addressed each one of the significant site constraints noted above in section b
 2. Provide written narrative describing your proposed site plan highlighting its attributes
- d. Project Schedule and Financials to include the following topics:
 1. Provide written narrative outlining major assumptions for the Project Schedule provided in g below. *All student teams should assume an average annual absorption of 75 lots for their project.*
 2. Provide written narrative outlining major assumptions for the Development Cost Budget provided in g below
 3. Provide written narrative outlining major assumptions and conclusions for the Pro-Forma provided in g below
- e. Exhibits related to the Existing Conditions section should include the following:
 1. Base Map
 2. Aerial Photograph outlining perimeter of site
 3. Transportation Map showing all major roads and public services (bus, etc.) serving the site
 4. Easements Map showing all easements and other significant legal encroachments/encumbrances
 5. Topographical Map showing major contours and features
 6. Drainage Map indicating major drainage pathways
 7. Floodplain and Wetlands Map indicating any areas lying under FEMA's or the US Army Corps of Engineer's jurisdiction
 8. Soils Map outlining major soil types present on the site
 9. Vegetation Map outlining major plant/tree species on the site
 10. Existing Infrastructure Map showing all utilities currently serving the site
 11. Existing Conditions Map showing all current structures on the site

12. Site Zoning Map showing in detail all applicable zoning types affecting the site
 13. Neighborhood Zoning/Land Use Map showing the zoning and land use designations of all parcels within a 2 mile radius of the site
 14. Proposed Developments Map showing (as applicable) any proposed developments within a 2 mile radius of the site that have plans currently on file with Cobb County
- f. Exhibits related to the Proposed Site Plan section should include the following:
1. Conceptual Site Plan using Google SketchUp or other similar software
 2. Schematic Site Plan using Google SketchUp or other similar software
 3. Slope Analysis and Grading Plan showing how the proposed site plan will be graded and how stormwater management issues will be handled
 4. Proposed infrastructure plan showing the proposed layout for all utilities
- g. Exhibits related to the Project Management Section should include the following:
1. Proposed Development Schedule using MS Project or other similar software
 2. Development Cost Budget
 3. Cut – to – fill calculations that were used for Development Cost Budget using grid method
 4. Financial Pro-Forma using absorption assumptions provided above and that matches logic used in team’s Project Schedule

Final Grade Calculation:

1. Exams: 45% - Exams One, Two and Three 10% apiece and Final 15%
2. Classroom Participation: 15%
3. Out of Class Assignments: 10%
4. Project: 20%

There will be no curve for the final grade, only straight averages. The minimum cutoff for an A is 89.5% and above; for a B is 79.5% and above; for a C is 69.5% and above; and for a D is 59.5% and above. Anything below 59.5% is considered an F. The instructor reserves the right to lower these cutoff values depending on specific circumstances surrounding the overall performance of the class.

Schedule of Lecture Topics and Assignments

Class	Date	Subject of Lecture/Lab	Assignments Due	Reference(s) & Text
1	25 Aug 09	Introductions Class Administration		
2	27 Aug 09	Land Development Process - Overview	Student Acknowledgement Form	Chapter 1 & Handout
3	1 Sept 09	Site Package Drawings <i>Lab: Site Package Exercise</i>		Chapter 28

4	3 Sept 09	Boundary & Topographical Surveys <i>Lab: Boundary Survey Exercise</i>	Assignment 1 - Site Package Exercise	Chapter 13 & Handout
5	8 Sept 09	Spatial & Aerial Mapping <i>Lab: Cobb County GIS Mapping Exercise</i>	Assignment 2 - Boundary Survey Exercise	Appendix A & Handout
6	10 Sept 09	Floodplain Studies <i>Lab: FEMA Map Exercise</i>	Project Report Site Selections Due Assignment 3- GIS Mapping Exercise	Chapter 18
7	15 Sept 09	Comprehensive Planning & Zoning Smart Growth <i>Lab: Sustainable Design Issues</i>	Assignment 4 - FEMA Map Exercise	Chapters 7 & 30 Handout
8	17 Sept 09	Site Plan Approval Processes Ordinances, Regulations & Codes <i>Lab: Planning & Zoning Research Exercise</i>		Chapter 8
9	22 Sept 09	Class Discussion for P&Z Assignment <i>Lab: Exam One Review</i>	Assignment 5 - Planning & Zoning Research Exercise	Handout
10	25 Sept 09	Exam One		
11	1 Oct 09	Site Feasibility & Analysis Site Inventory <i>Lab: Site Assessment Exercise</i>		Pages 23-33 & Handout
12	3 Oct 09	Geotechnical Issues <i>Lab: Site Assessment Exercise</i>		Handout
13	6 Oct 09	Environmental Assessments, Permits & Impacts – Potential Guest Speaker <i>Lab: Guest Speaker Presentation (cont.)</i>		Chapters 2, 3, 15, 17 & 31
14	8 Oct 09	Historic & Archaeological Issues <i>Lab: Review Site Assessments</i>	Assignment 6 – Site Assessment Exercise	Chapters 4 & 16
15	13 Oct 09	Engineering Feasibility Studies <i>Lab: Evansville State Hospital Exercise</i>	Assignment 7 – Historic Issues Exercise	Chapter 5
16	15 Oct 09	Real Property Law Issues <i>Lab: Site Selection & Programming</i>		Chapter 6
17	20 Oct 09	Evansville State Hospital Case Study <i>Lab: Exam Two Review</i>	Assignment 8 – Evansville State Hospital Exercise	Handout
18	22 Oct 09	Exam Two		

19	27 Oct 09	Traffic & Parking Issues - Potential Guest Speaker <i>Lab: Parking Layout Exercise</i>		Chapter 20 & Handout
20	29 Oct 09	Stormwater Management, Sediment & Erosion Control Lab: Project Report Assessment	Assignment 9- Parking Layout Exercise	Chapters 19, 21,22 & 27
21	3 Nov 09	Grading, Earthwork & Cut to Fill Analysis Wet & Dry Utilities <i>Lab: Cut to fill exercise</i>		Chapter 23, 24, 25 & 26
22	5 Nov 09	Master Planning & Landscape Design – Potential Guest Speaker <i>Lab: Building – Site Relationships</i>	Assignment 10 – Cut-to-fill Exercise	Handout
23	10 Nov 09	Land Development Project Mgmt Land Development Cost Budgets <i>Lab: Quantity Takeoff Exercise</i>		Handout
24	12 Nov 09	Land Development Scheduling <i>Lab: Scheduling Exercise</i>	Assignment 11 – Quantity Takeoff Exercise	Handout
25	17 Nov 09	Land Development Financial ProFormas <i>Lab: ProForma Exercise</i>	Assignment 12 – Scheduling Exercise	Handout
26	19 Nov 09	Concept Development Indian Trace Case Study Northwestern Hospital Case Study <i>Lab: Exam Three Review</i>	Assignment 13 – Pro-Forma Exercise	Handout
27	24 Nov 09	Exam Three		
28	26 Nov 09	Thanksgiving Holiday		
29	1 Dec 09	Project Work Session <i>Lab: Project Work Session</i>		
30	3 Dec 09	Project Presentations – Teams 1-4	Project Presentations	
31	8 Dec 09	Project Presentations – Teams 5-8	Project Presentations	
32	10 Dec 09	Final Exam Review		Handout
33	TBD	Final Exam		

NOTE: This syllabus is intended to represent the general format of the class. The instructor may make changes if it is determined that such changes will better suit the needs of the students.

Additional Policies:

Students with Disabilities:

Students with disabilities who believe that they may need accommodations in this class are

encouraged to contact the counselor working with disabilities at (678) 915-7226 as soon as possible to better ensure that such accommodations are implemented in a timely fashion.

Plagiarism:

It is assumed that by this time in the student's matriculation, he/she is well-versed with what constitutes plagiarism. Proper citation of references is required for this and all your coursework in the CNST program. Failure to comply with this requirement may result in disciplinary action.

Communications:

Students are strongly advised to check their *spsu.edu* email account on a daily basis throughout the semester as this will be the primary means outside of class in which the instructor will communicate with each student. In the “real world” good communications are essential and employees are expected to check their email accounts on a regular basis as this is the primary means by which all major private and public entities use to communicate with their associates. *Failure to check one's email account that results in a missed assignment will not be considered a valid excuse to have missed an assignment.*

Cell Phones/PDAs:

The use of cell phones/PDAs during class will not be tolerated. 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. Students should turn OFF their cell phones/PDAs at the start of the class and leave them in that position until the conclusion of the class. The first use of a cell phone 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.

Laptop Computers:

The use of laptop computers during the classroom period will be allowed so long as the student is using the laptop to research material related to the class. *The instructor does however, reserve the right to designate certain periods of time that all laptops must be closed and turned to the “off” position.* Examples of those time periods will be the administering any exams, quizzes, etc., whenever a guest speaker is conducting the class (see below for more policies related to guest speakers) and any other time at the instructor's sole discretion that he feels that it is not appropriate nor conducive to the overall learning experience.

Guest Speakers:

It is the intent of the instructor to line up 2-3 guest speakers throughout the semester to share their “real world” knowledge of certain topics. The instructor will endeavor to announce the upcoming guest speaker at least 4 class periods in advance of their presentation. Attendance at these presentations is strongly encouraged. Students need to remember that these speakers are taking time out of their personal/professional lives to spend an hour and a half with us. In short, they are doing us, the CNST program and university a tremendous favor. We need to show them that we appreciate their efforts and time. Students need to pay attention during these presentations and feel free to ask as many questions as they feel appropriate. “No question is a stupid question”. The instructor has been in charge of several hundred million dollar commercial

projects during his career and has found that if something is unclear to one person.....*it is probably unclear to several other people also.*

STUDENT ACKNOWLEDGEMENT

I, _____, have read the Syllabus for **CM 3710** and fully understand the class requirements as well as the grading policy.

Signed: _____

Name: _____

Date: _____