Course Syllabus Semester: Spring 2012 Course: CM 3190 Sustainable Construction Construction Course Title: Sustainable Construction (3–0–3) Prerequisite(s): CM 3180 Classroom: H-321 Class Periods: Thursday 4:00 to 5:30 PM Text: LEED Reference Guide – Green Building Design and Construction – 2009 edition Available from US Green Building Council (student discount available) Grading Policy:

A = 90 to 100B = 80 to 89C = 70 to 79D = 60 to 69F = 0 to 59

examinations 30%, final 25%, homework 35%, class participation 10% total 100% students are expected to be to class on time and to participate

Instructor: Dr. John Mench Office: Room #H331 Office Hours: Wednesday, Thursday, and Friday - as posted Telephone: 678-915-7289 Fax: 678-915-4966 E-mail: jmench@spsu.edu

Class	Date	Subject of Lecture/Lab	Assignments Due	Reference(s)
1	12 Jan 12	Construction Project Financials	assignments posted	webct & handout
2	12 Jan 12	The time value of money	on VISTA	webct
3	19 Jan 12	Return on investment		webct
4	19 Jan 12	Examination One		
5	26 Jan 12	LEED credentials		VISTA & text
б	26 Jan 12	Overview of LEED Green D&C and Sustainable Sites with Prerequisite		VISTA & text
7	2 Feb 12	Credit 1 & 2		VISTA & text
8	2 Feb 12	Credit 3 & 4		VISTA & text
9	9 Feb 12	Credits 5 & 6		VISTA & text
10	9 Feb 12	Credit 7 & 8		VISTA & text
11	16 Feb 12	Overview of Water Efficiency		VISTA & text
12	16 Feb 12	Credits 1 & 2		VISTA & text
13	23 Feb 12	Credits 3 & Overview Energy & Atmosphere		VISTA & text
14	23 Feb 12	Examination Two		
15	1 Mar 12	Prerequisites and Credit 1		VISTA & text
16	1 Mar 12	Energy Modeling		VISTA & text
17	15 Mar 12	Credits 2 & 3		VISTA & text
18	15 Mar 12	Credits 4 through 6		VISTA & text
19	22 Mar 12	Overview of Materials & Resources		VISTA & text
20	22 Mar 12	Credits 1 through 3		VISTA & text
21	29 Mar 12	Credits 4 & 5		VISTA & text
22	29 Mar 12	Credits 6 & 7		VISTA & text
23	5 Apr 12	Examination Three		VISTA & text
24	5 Apr 12	Overview of Indoor Environmental Quality & Prerequisites		VISTA & text
25	12 Apr 12	Credits 1 through 3		VISTA & text
26	12 Apr 12	Credits 4 & 5		VISTA & text
27	19 Apr 12	Credit 6 & 7		VISTA & text
28	19 Apr 12	Credit 8		VISTA & text
29	26 Apr 12	Innovation & Design Process		VISTA & text
30	26 Apr 12	Q&A and review		

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.

# **Catalog Description:**

This course will emphasize the techniques and methods of sustainable construction/development. Importance of a collaborative team effort from owner, developers, architects, engineers, constructors, and consultants will be integrated into the course. Influences on the cost and schedule due to a sustainable construction/development project will be analyzed. Topics will include performance certification techniques for sustainable sites, water efficiency, energy & atmosphere, materials & resources, indoor environmental quality, innovation and design. MEP systems such as ventilation, air conditioning, heating, electrical lighting and building control systems will be covered from a sustainable perspective.

**Course Outcomes:** By the end of the course the student should be able to:

- 1. fill out the LEED credit templates
- 2. list why MEP building systems are very important for performance certification
- 3. list how construction management is influenced by the LEED process
- 4. show how to compare baseline data to design data concerning MEP systems performance and costs
- 5. calculate the return on investment used for making decisions concerning LEED credits

Course Structure/Approach: This is a lecture class that encourages class participation.

Assignments: All assignments are posted on VISTA.

**Specific Requirements for the Course:** Complete forms necessary to show compliance with ten LEED points.

Final examination: Refer to the university schedule for date

# Additional Notes:

### NOTE 1

The course description and course schedule handouts provide the general framework for the course. However, the instructor reserves the right to make any modifications or changes to the course, depending on the class progress, or on any special circumstance that may arise during the semester.

#### NOTE 2

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.

#### NOTE 3

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.

#### NOTE 4

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.