



Name of Department:	Business and Technology
Instructor Name:	Sandra McCardell
Office Location	B110 (classroom)
Office Hours	Mondays at 5:30 pm and by Appointment
E-mail	EMAIL IS THE BEST METHOD OF COMMUNICATION: smccardell48@gmail.com or mccardel@unm.edu
Telephone	Cell (txts ok) 505 795-2702
Class Meeting Days/Times	Mondays starting August 17, 2015, 6 – 7 pm
Location	B110

Title of Course:	Introduction to Green Building
Course Number	Sust 120 501
Course Description	This course is an introduction to green buildings. It is a survey course which looks at traditional construction, recent construction techniques and their effects, a variety of “green” building types, and materials and techniques that are appropriate and cost-effective locally. Principles of design and construction will also be included. Course materials will consist of books and online resources, and homework will include papers and projects. Classes will focus on discussion and, as a “hybrid” course, significant online research, work, and reading will be required.
Credit Hours and Contact Hours	3 credit hours
Pre-requisites/co-requisites	None
Learning Objectives and Outcomes	• Understanding history and impact of buildings • Understand and apply principles of design and construction in conceptual projects • Develop an appreciation for alternative building materials and techniques • Understand how to look at the costs of buildings at construction and over their lifetimes

Course Outline

(WEEK	TOPICS	In-class Homework & Discussions	HOMEWORK FOR FOLLOWING CLASS	Notes
Week 1 August 17	• Introduction and review of syllabus • Introduction to books and the idea of online materials • Discussion of class goals and expectations, and instructor goals and expectations		• Research and describe 2 different buildings – how do they fit (or not) the purposes for which they were designed and the environment where they are located? • Ecological Home, Introduction	•

	○ Weekly “check in” – email or hand in 1 paragraph summary with name and date • History of buildings • Buildings in their environment		• Green from the Ground Up, Chapter 1	
Week 2 August 24	• A different way of thinking about building • General Principles • Holistic thinking and systems	•	• Ecological Home, Chapter 1 and 2 • Green from the Ground Up, Chapter 2 • Online readings to be assigned	•
Week 3 August 31	• The environment • The site	•	• Ecological Home, Chapter 3 • Green from the Ground Up, Chapter 3 • Project #1 assigned	•
Week 4 September 14	• “Healthy” buildings • “Well built” buildings • “Sustainable” buildings • “Comfortable” buildings	•	• Ecological Home, Chapter 4 • Online readings to be assigned	•
Week 5 September 21	• “Green” materials	• Project #1 due / presented	• Ecological Home, Chapters 9 and 10 • Online materials to be assigned	•
Week 6 September 28	• Natural Building • Study Sheet handed out	•	• Ecological Home, Chapter 6 • Study for Midterm	•
Week 7 October 5	• Midterm exam on all material to date	•	• Ecological Home, Chapter 7 • Online materials to be assigned	•
Week 8 October 12	• Energy efficiency in design, construction, maintenance, operations, and behavior • Elements of cost • Flexibility in designing for the future	• Midterm	• Green from the Ground Up, Chapters 4 and 5 • Ecological Home, Chapter 5 • Online materials to be assigned	•
Week 9 October 19	• Green building techniques ○ Foundations ○ Framing	•	• Green from the Ground Up, Chapters 6, 7, and 11 • Ecological Home, Chapter 8 • Online materials to be assigned • Project #2 Assigned	•
Week 10 October 26	• Green building techniques – continued ○ Roof / Attics ○ Windows / Doors	•	• Ecological Home, Chapters 11 and 12 • Online materials to be assigned	•
Week 11 November 2	• Green building out of the box ○ Sustainable systems	• Project #2 due / Presented	• Green from the Ground up – Chapters 8, 9, 10, and 14 • Online materials to be assigned • Choose focus areas for discussion	•
Week 12 November 9	• Green building techniques - systems	•	• Ecological Home, Chapter 15 • Green from the Ground Up, Chapters 12, 15, and 16 • Online materials to be assigned	•

Week 13 November 16	- Green building – “Finishing” - Discussion on focus areas chosen	•	- Ecological Home, Chapters 13 and 14 - Green from the Ground Up, Chapter 13	•
Week 14 November 23	- Renewables - Waste		Prepare for presentations and final exam	•
Week 15 November 30	- Presentations - Study sheet handed out	Final presentations		
Week 16 December 7	- Final Exam - Discussion / evaluation	Final exam		

Teaching Methods (Lecture, Discussion, On-Line Components and discussions, Group and/or Individual projects, Field Trips as possible):

This course will be a combination of lectures, discussion, projects, and online work. Since the class meets only once a week, significant research and report work (sometimes in groups) will be required between classes. Both group and individual projects may be assigned, and will be presented to the full class. In order to do well in this class, attendance and participation are important.

Evaluation/Grading Methods (*Attach Rubric if available*)

There will be a mid-term and a final exam as well as 2 group or individual projects assigned to be completed during the course, and a final project. The projects will be presented to the class for discussion. Projects may be assigned for extra credit at the discretion of the instructor. Students should understand that all components are important in order to succeed in this course. Late assignments will be marked down, and consistent late arrival will also be penalized. Each week, a “check in” piece of work will be required of each student, signed and dated; that will form part of the grade as well.

In-class discussion and “check in” homework: 30% Mid-term: 20% (2)Projects: 25% Final Project: 10% Final Exam: 15%

Required Text(s) & Supporting Materials (*Many programs will require these to be common across different sections --Check with Chair*)

REQUIRED PUBLICATIONS:

Green from the Ground Up: A Builder’s Guide. Sustainable, Healthy, and Energy-Efficient Home Construction. David Johnston & Scott Gibson. The Taunton Press.

The New Ecological Home: A Complete Guide to Green Building Options. Daniel D. Chiras. Chelsea Green Guides for Homeowners.

ADDITIONAL RESOURCES:

- Online articles on Green Building will be assigned and used extensively.
- Additional resources may be recommended, placed in the library for research, or loaned to students doing specific research.

A 3-ring binder and a thumb drive are also recommended for this course.

Other materials may be distributed through WEBCT or handed out in class, and links to additional web-based materials will be provided for much of the homework

Assessment Methods (*How learning objectives will be measured; attach rubric if appropriate*)

Grading Scale:

100-93= A	92 - 90 = A-	89-87 = B+	86-83 = B	82-80 = B-	79 - 77 = C+
76-73 = C	72-70 = C-	69-67 = D+	66-63 = D	62-60 = D-	Below 60= F

Grades will be issued based on the following criteria:

- Quality of work
- Quality of composition

- Timeliness of work
- Judgment and decision making
- Understanding of materials presented
- Quality of research
- Quality and professionalism of presentation
- Class discussion

Attendance Policy and policies on classroom behavior (use of cell phones, academic dishonesty, computers, etc.)

Attendance is expected in all class sessions and participation in discussion of topics is critical to success. Students who miss sessions should see the instructor as soon as is possible after the missed session. In Class Work is work that cannot be made up. You will have to be present to get credit for this work. The student's final grade will be lowered one point for each additional absence in excess of two (2). Students should note that it is highly unlikely they can pass this class without an excellent attendance record.

The Use of cellular telephones is not permitted during class. Computers are provided in the classroom, so either thumb drive or lap-top computers may be used for taking notes, accessing homework assignments and other relevant materials, and for reference when making class presentations. No non-class related use of lap-tops in class (social networking, VOIP programs, etc.) will be permitted.

Students are expected to read the assigned chapters and other materials prior to class, and to bring in homework assignments when those have been handed out. Late assignments will be marked down.

Students are expected to take tests and exams when they are scheduled. In unusual circumstances and if the instructor has agreed PRIOR TO THE TEST DATE, a test may be made up, but the results will be marked down.

Some projects may be group projects, and the reports and presentations for those group projects will be considered to be joint efforts. ALL other work submitted is to be an original, individual effort. Copying or exchanging of solutions will be reason to dismiss a student from class, thus receiving a grade of F.

PLAGIARISM: Plagiarism implies copying work produced by someone else. Each student is expected to produce his/her own work. A student who is found guilty of cheating and/or plagiarism will automatically receive an F for the course. **The student may also be suspended.**

Students must adhere to **UNM's policy on Dishonesty in Academic Matters**, which reads as follows:

"Each student is expected to maintain the highest standards of honesty and integrity in academic and professional matters. The University reserves the right to take disciplinary action, including dismissal, against any student who is found responsible for academic dishonesty. Any student who has been judged to have engaged in academic dishonesty in course work may receive a reduced or failing grade for the work in question and/or for the course.

Academic dishonesty includes, but is not limited to, dishonesty in quizzes, tests or assignments, claiming credit for work not done or done by others; hindering the academic work of other students; and misrepresenting academic or professional qualifications within or outside the University."

Computer Lab Responsibility:

Please be advised that use of computer labs on UNM properties is governed by "Policy 2500: Acceptable Computer Use" which can be found at <http://policy.unm.edu/university-policies/2000/2500.html>. Food and drink are also prohibited in any computer lab on campus. Anyone violating these policies is subject to possible suspension and loss of computer lab privileges.

UNM Email/Black Board Learn Access:

*Beginning Fall 2015 semester, all UNM-Valencia students will need a UNM Net ID which can be created by going to: <http://it.unm.edu/accounts/>. UNM Net ID will give you access to the computer labs on campus, blackboard learn and UNM Email. **All students MUST have a UNM Net ID to access these resources.***

Additional topics, information determined by the course instructor and not inconsistent with the syllabus may be added during the course.

