TEXT: “Green From the Ground Up: Sustainable, Healthy and Energy-Efficient Home Construction (Builders Guide)”
By David Johnston and Scott Gibson; published by The Taunton Press, copyright 2008; $24.95 list price.
ISBN # 978-1-56158-973-9

NOTE: Students are responsible for getting copies of the textbook on-line from Amazon.com or other source; books will NOT be available from the Cabrillo College bookstore.

SUPPORTING TEXTS:

RECOMMENDED TOOLS:
Calculator
3-ring binder for Class notebook

CLASS SCHEDULE

<table>
<thead>
<tr>
<th>DATE</th>
<th>TOPIC/COURSE ACTIVITIES</th>
<th>HOMEWORK &amp; Reading (NOTE: ASSIGNMENTS DUE AT NEXT CLASS MTG)</th>
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| Feb 10| Introductions, Course Syllabus/Website, Intro to textbooks/class topics. Class "Notebook" review Class website review [http://www.cabrillo.edu/~smurphy/CEM162](http://www.cabrillo.edu/~smurphy/CEM162) SMALL GROUP set-up (6-8 people MAXIMUM per group) Introduction to Sustainable Construction | GET TEXTBOOKS Find article in magazine, newspaper or off internet on “ECONOMIC STIMULUS: Effect on Sustainable Construction”. Write a single page summary article (CURRENT EVENT ARTICLE #1) and prepare to discuss at
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<tr>
<th>Date</th>
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| Feb 17 | SMALL GROUP DISCUSSION of Current Event Article  
Textbook Review  
“SmartMarket Report” Review: McGraw-Hill | KEY REGISTRATION NOTES:  
• must be registered for course by Feb 21st  
• Last day to drop and get full refund- Feb 21’ |
| Feb 24 | Whole building design, site selection, passive solar fundamentals, building envelope components | Same as Feb 17  
Also read Ch 7 in textbook  
STUDY FOR QUIZ |
| Mar 3 | Site selection, passive solar, building envelope components (cont.)  
QUIZ #1 (text Chapters 1 -3 and 7; class lecture notes) | Review Green Point Checklists for “City of Santa Cruz” and “LEED for Homes” for class discussion  
KEY REGISTRATION NOTE:  
Last day to drop without “W” on record- Mar 7 |
| Mar 10 | Building/Home "GREEN" Rating Systems:  
• City of Santa Cruz/Build-it-Green Guidelines  
• LEED for Homes  
GUEST SPEAKERS:  
John Ancic & Joe Fullerton/City of Santa Cruz  
“Green Building Program”. | Read Ch 4, 5, 6 and 15 of text.  
1 page summary of newspaper/periodical article (Current Event Article #2)  
KEY REGISTRATION NOTE:  
Last day to take course CR/NC- Mar 14th |
| Mar 17 | SMALL GROUP DISCUSSION  
Alternative construction methods/framing systems/sustainable building construction materials:  
• Finish materials  
• Certified wood  
• VOC’s  
GUEST SPEAKER: Michele Landegger/BOA Construction | ARTICLE REVIEW #2 DUE  
Read Ch 14 of text.  
STUDY FOR QUIZ |
| Mar 24 | Indoor Air Quality, moisture control, ventilation systems.  
QUIZ #2 (text Chapters 4, 5, 6 and 15; class lecture notes) | 1 page summary of newspaper/periodical article (Current Event Article #3) |
<p>| Mar 31 | SMALL GROUP DISCUSSION | ARTICLE REVIEW #3 DUE |</p>
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<tr>
<th>Date</th>
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<tr>
<td>Apr 7</td>
<td><strong>Home Performance Contracting</strong>&lt;br&gt;<strong>GUEST SPEAKER:</strong> Mark Van Meter/Van Meter Construction</td>
<td>(NOTE- Article review #3 is EXTRA CREDIT assignment)</td>
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<td>Apr 7</td>
<td><strong>California Title 24 Standards/HERS rating guidelines</strong>&lt;br&gt;<strong>GUEST SPEAKER:</strong> Sharon Block/Block Energy Design</td>
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<td>Apr 14</td>
<td>SPRING BREAK</td>
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<td>Apr 21</td>
<td><strong>SMALL GROUP DISCUSSION</strong>&lt;br&gt;Electrical/lighting systems efficiency, daylighting, electrical power metering&lt;br&gt;<strong>GUEST SPEAKER:</strong> Yvonne Ross; Kitchen/Bath Lighting system demo</td>
<td><strong>ARTICLE REVIEW #4 DUE</strong>&lt;br&gt;Read Ch 9 of textbook&lt;br&gt;STUDY FOR QUIZ</td>
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<td>Apr 28</td>
<td><strong>Building/home heating and cooling systems</strong>&lt;br&gt;QUIZ #3 (text Ch 10 and 14; class lecture notes)</td>
<td><strong>ARTICLE REVIEW #4 DUE</strong>&lt;br&gt;Read Ch 8 and 16 of textbook</td>
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<td>May 5</td>
<td><strong>Heating/Cooling/Ventilation systems (cont.)</strong>&lt;br&gt;Water usage, plumbing fixture efficiency, appliance efficiency</td>
<td><strong>ARTICLE REVIEW #5 DUE</strong>&lt;br&gt;Independent group work on presentations.</td>
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<td>May 12</td>
<td><strong>Solar Thermal and radiant floor heating systems</strong>, Tankless hot water heating systems&lt;br&gt;<strong>GUEST SPEAKER:</strong> Bill Shady/Pacific Radiant Solar</td>
<td>Small group work on final project&lt;br&gt;1 page summary of newspaper/periodical article (Current Event Article #5)</td>
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<td>May 19</td>
<td><strong>Economic analysis, utility incentive programs for Green Building.</strong>&lt;br&gt;QUIZ #4 (text Ch 8, 9, 13 and 16; class lecture notes)</td>
<td><strong>ARTICLE REVIEW #5 DUE</strong>&lt;br&gt;Independent group work on presentations.</td>
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<tr>
<td>May 26</td>
<td><strong>Alternative/renewable energy systems, solar</strong></td>
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GUEST SPEAKER: Mike Arenson/Arenson Solar

Small group work in class.

June 2

**SMALL GROUP PRESENTATIONS**
Each SMALL GROUP to present **20 minute MAXIMUM** “Sustainability/Green Building” report on residential/light commercial building retrofit.

EXAMS & GRADES:
Grades are based on the following:
- Attendance/Participation - 5%
- Class Notebooks - 10%
- Current Event Articles - 25%
- Quizzes - 40%
- Final Group Presentation - 20%

If you desire the credit/no-credit option rather than a letter grade, the deadline for doing this is **March 14, 2009**.

CREDIT/NO CREDIT OPTION:
For this option, students shall have to complete the following MINIMUM guidelines to receive a CREDIT grade:
- Attendance/participation at 12 out of the 16 class sessions
- Achieve score of 70% or better on class notebook
- Achieve average score of 70% on all quizzes
- Achieve score of 70% on final class project
- Makeup assignments can be turned in for “extra credit” to offset deficiencies in any of the above 4 grading categories.

EXTRA CREDIT OPPORTUNITIES:
Students can earn extra points by completing the following work:
1. Additional “Current Event” articles
2. Independent Field Trips to Sustainable Construction project of your choice.
   Students are required to have photograph taken of them at the site and to turn in a “Top 10 List” of sustainable construction attributes of the site.

STUDENTS WITH DISABILITIES:
I encourage students with disabilities to explain their individual needs to me during office hours (listed above). Please bring verification of your disability (from the Learning Skills or DSP&S office and counselor and/or specialist’s recommendations) so that I may assist you in accommodating your needs.