Basic Course Information

Semester	**Spring 15**	Instructor Name	**Jose Velasquez**
Course Title & #	**BLDC 170**	Email	**Jose.velasquez@imperial.edu**
CRN #	**20021**	Webpage (optional)	
Room	**3117**	Office	**3118**
Class Dates	**4/17-6/12**	Office Hours	**M-R 1:00-4:00pm**
Class Days	**M Lecture** **W Laboratory**	Office Phone #	**(760) 355-5758**
Class Times Units	**M 6:30 -8:35 pm** **W 6:30-9:40pm** **3.0**	Office contact if student will be out or emergency	**(760) 623-6274**

Course Description

This course in an introductory study in sustainable building resources and applications, LEED certification requirements, home performance concepts, California Energy Codes, green building, and their relationships to the environment and residential construction. Instruction will be based on types of materials, inspections, construction applications, material retrofitting, career opportunities, and analysis of retrofitting costs. Included will be the discussion on the standard setting organizations that influence sustainable building, their design, and efficiency. Learning opportunities will be enhanced through a combination of lecture and laboratory activities. (Nontransferable, AA/AS degree only)

Student Learning Outcomes

Critical Thinking Skills

Students will identify and describe the role of LEED Certification to be able to determine the responsibility of each participant in the Construction of a project.

Information Literacy

Students will be able to compare the identify variations of green building materials. Identification and installation of materials will be reinforced by a comprehensive review of the latest building codes and LEED Standards.

Course Objectives

Upon successful completion of this course, the students will:

A. Investigate renewable and alternative energy and building regulatory organizations.

B. Study and comprehend home performance, site evaluation, design analysis of various systems, codes, U.S. Building Council: Leadership in Energy and Environmental Design(LEED), green building.

C. Investigate various renewable energy technologies and their relationship with energy conservation, scarce resources and the environment.

D. Compare, contrast and understand green building materials and their installation

E. Critically assess energy efficient products, technologies for home performance and energy conservation, water, HVAC and natural light, electrical and solar .

F. Understand layout and design requirements for green buildings and LEED certification in residential construction

G. Compare and contrast value engineering for energy efficient construction materials and installation methods.

Textbooks & Other Resources or Links

Gibson, S. & Johnston, D. Green from the ground up: Sustainable, healthy, and energy efficient home construction. Taunton, 2008, illustrated Edition.

Course Requirements and Instructional Methods

Required Information—discretionary language
This section is where faculty would list detailed information related to types of class activities, assignments, tests, homework, etc.

Out-of-class assignment:
Identify a built, LEED-certified building for which you can obtain sufficient information to answer the following questions:
1. What level of certification has the building achieved?
2. List at least six design strategies or features of this building that contribute to its LEED certification.

Indicate how many points each feature is worth in the LEED Project Checklist and explain how each contributes to sustainable building.
3. Identify the source of your information (magazine article, website, etc.) Attach one or two pages of information about the project taken from this source.

Reading and Writing:
Students will be required to read chapters as assigned. Students will also be required to write a comprehensive 300 word essay of the information documented for the chosen LEED certified building.

Out of Class Assignments: The Department of Education policy states that one (1) credit hour is the amount of student work that reasonably approximates not less than one hour of class time and two (2) hours of out-of-class time per week over the span of a semester. WASC has adopted a similar requirement.

Course Grading Based on Course Objectives

A= 90%-100% Excellent

B= 80%-89% Good

C= 70%-79% Satisfactory

D= 60%- 69% Pass, less than satisfactory

F= 59%&Below Failing

The course grade will be determined by various factors such, as class participation, classroom assignments, chapter reviews & drawing project, midterm & final exams. The grading range is as follows:

Class Participation	**25%**
Laboratory	**25%**
Midterm	**25%**
Final Exam	**25%**

Attendance, Late Assignments:

Absences and tardiness provide an opportunity to miss valuable instruction presented by the instructor, guest speakers, and site administrators. Tardiness will contribute to lower scores on assignments and subsequently a lower course grade. All assignments are due on the specified completion dates and all students have the same and equal time to complete all assignments as per the course calendar. Considerations will be given to those late assignments

accompanied by a written medical statement from a physician. 25% of possible points will be penalized for late work. Any assignment can be turned in prior to the due date!

Attendance

Required language

- A student who fails to attend the first meeting of a class or does not complete the first mandatory activity of an online class will be dropped by the instructor as of the first official meeting of that class. Should readmission be desired, the student's status will be the same as that of any other student who desires to add a class. It is the student's responsibility to drop or officially withdraw from the class. See General Catalog for details.
- Regular attendance in all classes is expected of all students. A student whose continuous, unexcused absences exceed the number of hours the class is scheduled to meet per week may be dropped. For online courses, students who fail to complete required activities for two consecutive weeks may be considered to have excessive absences and may be dropped.
- Absences attributed to the representation of the college at officially approved events (conferences, contests, and field trips) will be counted as 'excused' absences.

Classroom Etiquette

Required Information --Discretionary language
This is where an instructor explains his/her policy on these matters. Here is some suggested language:

- Electronic Devices: Cell phones and electronic devices must be turned off and put away during class, unless otherwise directed by the instructor. **Consider:** specifics for your class/program
- Food and Drink are prohibited in all classrooms. Water bottles with lids/caps are the only exception. Additional restrictions will apply in labs. Please comply as directed.
- Disruptive Students: Students who disrupt or interfere with a class may be sent out of the room and told to meet with the Campus Disciplinary Officer before returning to continue with coursework. Disciplinary procedures will be followed as outlined in the General Catalog.
- Children in the classroom: Due to college rules and state laws, no one who is not enrolled in the class may attend, including children.

Academic Honesty

Required Language

- Plagiarism is taking and presenting as one's own the writings or ideas of others, without citing the source. You should understand the concept of plagiarism and keep it in mind when taking exams and preparing written materials. If you do not understand how to 'cite a source' correctly, you must ask for help.
- Cheating is defined as fraud, deceit, or dishonesty in an academic assignment, or using or attempting to use materials, or assisting others in using materials that are prohibited or inappropriate in the context of the academic assignment in question.

Anyone caught cheating or will receive a zero (0) on the exam or assignment, and the instructor may report the incident to the Campus Disciplinary Officer, who may place related documentation in a file. Repeated acts of cheating may result in an F in the course and/or disciplinary action. Please refer to the General School Catalog for more information on academic dishonesty or other misconduct. Acts of cheating include, but are not limited to, the following: (a) plagiarism; (b) copying or attempting to copy from others

during an examination or on an assignment; (c) communicating test information with another person during an examination; (d) allowing others to do an assignment or portion of an assignment; (e) using a commercial term paper service.

Additional Help – Discretionary Section and Language

The instructor can add the information pertinent to his or her class here. Some suggested language:

- Blackboard support center: http://bbcrm.edusupportcenter.com/ics/support/default.asp?deptID=8543
- Learning Labs: There are several 'labs' on campus to assist you through the use of computers, tutors, or a combination. Please consult your college map for the Math Lab, Reading & Writing Lab, and Study Skills Center (library). Please speak to the instructor about labs unique to your specific program.
- Library Services: There is more to our library than just books. You have access to tutors in the Study Skills Center, study rooms for small groups, and online access to a wealth of resources.

Disabled Student Programs and Services (DSPS)

Required Language: Any student with a documented disability who may need educational accommodations should notify the instructor or the Disabled Student Programs and Services (DSP&S) office as soon as possible. The DSP&S office is located in Building 2100, telephone 760-355-6313, if you feel you need to be evaluated for educational accommodations.

Student Counseling and Health Services

Required Language: Students have counseling and health services available, provided by the pre-paid Student Health Fee. We now also have a fulltime mental health counselor. For information see http://www.imperial.edu/students/student-health-center/. The IVC Student Health Center is located in the Health Science building in Room 2109, telephone 760-355-6310.

Student Rights and Responsibilities

Required Language: Students have the right to experience a positive learning environment and due process. For further information regarding student rights and responsibilities, please refer to the IVC General Catalog available online at http://www.imperial.edu/index.php?option=com_docman&task=doc_download&gid=4516&Itemid=762

Information Literacy

Required Language: Imperial Valley College is dedicated to helping students skillfully discover, evaluate, and use information from all sources. Students can access tutorials at http://www.imperial.edu/courses-and-programs/divisions/arts-and-letters/library-department/info-lit-tutorials/

Anticipated Class Schedule / Calendar

Required Information –Discretionary Language and Formatting: The instructor will provide a tentative, provisional overview of the readings, assignments, tests, or other activities for the duration of the course. The faculty may find a table format useful for this purpose.

Date or Week	Activity, Assignment, and/or Topic	Pages/ Due Dates/Tests
Week 1	Course Introduction/Alternative Energy	
Week 2	Building Regulatory Organizations/Energy Resources	
Week 3	Home Performance	

Week 4	**Value Engineering/Retrofit Cost Analysis**	
Week 5	**Energy Building Codes**	
Week 6	**Leadership in Energy Technologies,**	
Week 7	**Energy conservation, Water, Electricity, HVAC**	**Midterm**
Week 8	**Spring Recess (April 6-11)**	
Week 9	**Green Building Materials**	
Week 10	**Types of materials/Installation layout and design requirements**	
Week 11	**LEED Certification in Residential Construction**	
Week 12	**Site Evaluation**	
Week 13	**Design Analysis**	
Week 14	**The Environment**	
Week 15	**Scarce Resources**	
Week 16	**Special Projects**	**Final Exam**