



BLDT 129 Green Building Concepts section name section credit hours Credits
Syllabus

Course Information

Meeting times and location: section meeting_times section location

Catalog description: Understand the basics of green building" design including the many products and structure choices available. As part of the laboratory experience students will utilize some of the products and techniques within their constructed house."

Prerequisites: Take BLDT-120

Terms offered: Spring Only

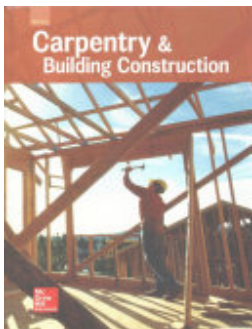
Section-specific Course Description:

Course Level Objectives

1. Define sustainability, green building, and high-performance building. Also, explain the whole building-design concept.
2. Analyze and interpret the building site(s) before designing a house, or a housing development, for environmental impact.
3. Apply solar design systems and technologies to the design and/or construction of a house.
4. Identify climate zones and discuss the climate-appropriate design and construction details.
5. Describe the impact of the building enclosure in green building.
6. Describe how a building works as a system.
7. Describe a sustainable/green-house which incorporates the whole systems approach that utilizes techniques to minimize environmental impact and also reduces the energy consumption of the building while contributing to the health of its occupants.
8. Apply pertinent energy codes to the design and/or construction of a house.

9. Select appropriate energy efficient HVAC systems, lighting, and appliances for a green-built house.
10. Describe the fundamentals of heat, air, and moisture flow with regard to the building enclosure.
11. Discuss how to incorporate water management strategies into building and site design.
12. Select materials, systems, and technologies that enhance the quality of the indoor environment with fresh air, ventilation, nontoxic materials, and filtration.
13. Select resource-efficient materials, systems, and technologies which have minimum impact on the health of our environment and people.
14. Describe a low-energy, resource-efficient house that reduces utility costs, improves indoor environmental quality, and preserves the environment for future generations.

Required Texts and/or Materials



Glencoe Carpentry and Building Construction, Student Edition

9780021402441

McGraw-Hill Education

McGraw-Hill Education

2015-07-29

Required Technology and Software

- Canvas
- Chrome, Safari, or Firefox

Technical Support

Technical support is available through the San Juan College Help Desk 24/7/365. The help desk can be reached at 505-566-3266 or by creating a ticket at [San Juan College Help Desk](#).

For tickets and password reset: [San Juan College Help Desk](#)

For Canvas support information: [Canvas Support](#)

Accessibility/Privacy Policies for all Technology Tools Used

Scroll to the middle of the linked page to view

[Accessibility/Privacy Policies for all Technology Tools Used](#)

Course Requirements

1. Students are required to wear long pants, leather work boots, safety glasses, and have their own personal tool pouch with them at all times while attending class.
2. Students will be learning in both indoor and outdoor environments subject to changing conditions and temperatures with regular exposures to dust, odors, heights, and loud noises. In addition to this type of environment, students:
 1. will be working on ladders and scaffolding at varying heights.
 2. should have effective verbal, auditory, and written capabilities to communicate in an articulate manner.
 3. could be standing, walking and/or working on the jobsite for an entire class period.
 4. should have dexterity of hands and fingers to operate a variety of specialized tools and equipment.
 5. will be reaching overhead, above the shoulders, and horizontally; bending, kneeling, or crouching.
 6. will be lifting, carrying, pushing, and pulling object(s).
 7. will be climbing ladders and working from heights as necessary.
3. Students are required to purchase their own tools. This list includes all tools required for students pursuing the Associate of Applied Science Degree.

Required Tools	
2 Pouch Tool Bag	End Nippers
Safety Glasses (Z87.1 rated)	Combination Screwdriver (Flat and Phillips)
White Hardhat	6" Combination Square
Stanley Tape Measure (25' – 35')	2 Permanent Black Markers
Swanson Speed Square	Mechanical Pencil
Framing hammer (waffle face)	Work Gloves (Optional)
Finish Hammer (smooth face)	Construction Master Pro Calculator Model 4065
Chalk Box (with RED chalk)	Quilted Disposable Dust Mask (3)

3/4" Wood Chisel	Disposable Paint Coveralls
Utility Knife (with extra blades)	Synthetic Bristle Paint Brushes: 2" angled sash and 3" straight
Nail Bar	
1/8" Nail Set	

COVID Safe Practices for Being on Campus

COVID Safe Practices for Being on Campus

What to do if you have COVID-19 symptoms, are exposed or test positive:

- Do NOT come to campus
- Contact your Instructor
- Complete the COVID Intake Form
 - [SJC COVID-19 Intake Form on SJC Work Order System \(samanage.com\)](https://samanage.com): You will need to scroll back to the top of the screen and click the Request Item button to submit the form.
- The Pandemic Coordinator will review the intake form and contact you with further guidance, including when you can return to campus.

Additional SJC COVID-19 information and resources can be found on the [Coronavirus](#) webpage.

Student Support

Student Services and Support

At San Juan College, we support your academic success and overall health. We know that students often experience a range of stressors that can impact learning and well-being. If you, or someone you know is experiencing mental health concerns, or could benefit from effective academic strategies, there are free and confidential resources available to enrolled students through the Counseling Center. To learn more, visit the [Counseling Center website](#) or call 505-566-3404.

The Student Support webpage provides information on counseling, tutoring, technical support, and many other support services available to San Juan College students.

[Student Support](#)

Academic Support

Academic Support webpage provides information on academic advising, the library, Testing Center, and the honors program.

[Academic Support](#)

Participation and Attendance Policy

A career in the construction industry is very much a team effort. It is common for carpenters to work together on tasks to produce the final product. One person's participation is important for others to complete their portion of the project.

1. To be successful your active participation is necessary each day during lecture and on the job site.
2. Participation is 25% of your grade. In order to participate you need to be present, and mentally/physically active. If you are absent you will not receive credit for the skill development of that particular day of class.
3. It is not possible to accurately re-create a day of information, questioning, and skill development.
4. Participation grades will be recorded based on skill development and successful completion of the task. Satisfactory performance will reflect a satisfactory grade; poor performance will reflect a poor grade.
5. A daily expectation in the construction industry includes setting up (rolling out) equipment, cleaning and maintaining equipment and facilities, and putting away (rolling up) equipment. We will spend 20% of each class performing these tasks and your participation in this process will be included in your participation grade.
6. Your phone is more than likely a big part of your life, but it is not a part of this class. Employers do not pay you to be on your phone. We do not want to see you on your phone or texting during class.

Inclement Weather Information

Students will receive notification of class delays and cancellations due to inclement weather via the SJC SunsAlert and SJC student email. Face-to-face classes will not meet in person; however, students are advised to check with instructors about alternative meeting options, as some may choose to meet via zoom. Hybrid classes will meet as scheduled via zoom. For questions regarding

your class delay or cancelation, please contact your instructor. If you have not already done so, [Sign up for SJC SunsAlert](#) to stay up to date on weather alerts.

Other Classroom Policies and Expectations

1. Safety glasses MUST be worn at all times when working in the shop or building compound.
2. No cell phones, iPods or other devices that use ear phones...period!
3. Alcohol, Tobacco and Firearms are strictly prohibited on San Juan College campus.
4. Do not over tighten tool adjustments.
5. Only the instructors change cutters and/or blades.
6. Roll up extension cords and air hoses properly.
7. Blow sawdust off of tools, roll cords, and return the tools to their exact location.
8. No San Juan College tools are to be kept overnight in tool pouches or lockers.
9. Never adjust table saw fences while the blade is operating.
10. Review all safety rules on each power tool and stationary tool before using.
11. Do not work on the ground. Always work off of sawhorses. Do not cut through sawhorses.
12. THINK! Think before you blindly start cutting! If in doubt, always ask questions.
13. Know where your cords are before you start cutting.
14. Prepare your tool pouch with only the fasteners you need for the day's work.
15. Do not mix fasteners.
16. Return all unused fasteners at the end of class.
17. Clean up begins 15-20 minutes before class ends. Everybody helps the cleaning process whether it is your mess or someone else's.
18. Students are NOT to leave the premises until shops, sheds, and work sites have been cleaned and inspected.
19. Beverages are allowed in the classroom, NOT in the shop or on the jobsite. Water is provided on the jobsite.
20. There is a ZERO tolerance policy for theft, alcohol use and drug use as indicated in the student handbook.

Canvas Participation and Expectations

Students should log into Canvas at least once per week to see their grade, attendance record, and to determine if they are missing any assignments or quizzes.

Instructor Response Time

Instructors will make every effort to reply to emails and phone calls, and to enter grades into Canvas within 48 hours.

Course Time Commitment

Students in the Building Trades Program spend a great deal of time in class each week. For lab-based courses, approximately 25% of class time is in the classroom and the remaining 75% is spent on the jobsite. For lecture-based courses, approximately 75% of class time is in the classroom and the remaining 25% is spent on the jobsite. Students are required to spend time each week completing assigned reading and the occasional homework assignment.

Grading

Final grades are calculated based on the following...

Grading	
Attendance	25%
Participation (Classroom, workshop & job site)	25%
Assignments and Quizzes	25%
Final Test or Project	25%
Total	100%

Key Dates to Remember

[Full Academic Calendar](#)

Course Schedule

1. Introduction to Green Building
 1. Eight Principles of Green Building
2. House as a System
 1. Insulation and Air flow
3. Structural Systems

4. The Building Envelope
5. Off Grid Principles
 1. Guest Speaker
6. Exterior Finishes and Fenestration
7. The Exterior Wall Finishes
8. Outdoor Living Space
9. Interior Finishes
10. Mechanical Systems
 1. HVAC and Electrical
11. Plumbing
12. Renewable Energy
13. Renewable Energy
14. Alternative Building materials
 1. Guest Speaker
15. Final Test

College Policies

The following information also applies to your work in this class. If you have special needs for campus emergency situations, please inform me immediately.

1. Academic Accommodations - American with Disabilities Act (ADA)

If you believe you need academic accommodations due to physical or other disabilities, you are encouraged to contact Disability Services as soon as possible. The coordinator can work with you to determine eligibility and appropriate accommodations strategies. Please go to your MY SJC portal page, click on Disability Services, and complete all the steps.

You can also contact the college's disability coordinator at 566-3271 or disabilityservices@sanjuancollege.edu. More information is available on the website listed above.

2. The Family Educational Rights and Privacy Act (FERPA)

Refer to the catalog for information regarding [FERPA](#).

3. Academic Honesty Rules

San Juan College expects all students to adhere to the [Academic Honesty Rules](#) as posted online. These are the official guidelines for all classes at San Juan College.

4. Student Conduct Statement

College is preparation for professional opportunities, and professional conduct is expected in courses, including online classes, as well as any written communications, and interactions with members of the college community. As part of our learning community, students are expected to interact and communicate in a mature, respectful, thoughtful, and supportive manner. Students who demonstrate disrespectful, hostile, belittling, bullying or other disruptive behavior will be subject to potential consequences and possible dismissal from the college. The college will take appropriate action when students demonstrate threatening behavior (to others or self). Students should refer to the Code of Conduct in the Student Handbook for additional information.

5. Student Safety

Keeping students safe is a priority, and part of that is ensuring that we have the ability to communicate emergency messages to you. SJC SunsAlert is San Juan College's Emergency Notification System that will provide you with real-time information about campus closures, extreme weather, and other emergencies through your San Juan College email, text alerts, and phone calls. Should an emergency occur prior to activating your SJC SunsAlert, you will only receive messages through your San Juan College email. To receive a phone call and text alert, you must activate your SJC SunsAlert account and register your phone number. To activate your SJC SunsAlert account, you will need to download the Everbridge App in the App Store or Google Play. Once the app is downloaded follow these steps:

- Open the app
- Click on "Find an organization or subscription" button
- In the search box, either type in San Juan College or 87402
- Click on "SJC SunsAlert"
- Sign on using your SJC email and password
- Once you sign in, you will want to click on "Manage My Profile"
- Click on "edit"
- Include your preferred communication methods.
- Enter your cell phone number in the personal text msg field to ensure you receive text messages.

- Confirm all information (phone number & email) is correct and up to date.
- If you need help with the app, please call John Myers at 505-566-4224 or Kenny Hibner at 505-566-3050.

In the event of an emergency, an SJC SunsAlert message will be sent, and depending on the situation, you will be instructed to do one of the following:

- Evacuate the building
- Shelter in place (Campus doors are locked, and operations continue as normal. During this situation, no one other than law enforcement is allowed in or out of the campus.)
- Lockdown (Campus doors are locked. All operations cease, and you should take cover in your immediate area. No one other than law enforcement is allowed in or out of the campus.)

The Department of Public Safety (DPS) is available 24 hours per day. In an emergency, you can reach DPS staff by calling (505) 566-4444.

6. Non-Discrimination, Sexual Harassment, and Retaliation.

San Juan College does not discriminate on the basis of race, color, religion, sex, sexual orientation, gender identity, national origin, disability, age, genetic, veteran's status, or on the basis of any other category protected under federal, state and local laws. If you have experienced sexual harassment, sexual assault, or any other form of protected class discrimination, we encourage you to make a report. If you report to a faculty member, she/he/they are obligated by policy to share knowledge, notice, and/or reports of harassment, discrimination, and/or retaliation with the Title IX Coordinator. These disclosures include but are not limited to reports of sexual assault, dating/domestic violence, and stalking. You may also make a confidential report to a SJC Counselor. Please refer to San Juan College's [Title IX](#) site for further details.

San Juan College's Title IX Coordinator is Stacey Allen, Assistant Director of Human Resources/Equity, Diversity, and Inclusion Officer. The office is located at the Educational Services Center Building, 2nd Floor, Human Resources, Room 4243 at (505) 566-3515 or allens@sanjuancollege.edu.

7. Drop for Non-Attendance and/or Non-Participation

Class Attendance and Participation Expectation:

Face-to-Face -- Students are expected to attend and participate in class regularly. Any student missing more than 10% of consecutive class time, (For example, in a regular 15-week class that meets twice a week, this equates to the student missing 3 consecutive classes) without consultation with the instructor may be considered as having abandoned the course.

On-line -- Students are expected to participate regularly and submit all course assignments, based on the course guide definition. A student who does not submit any assignments during a

consecutive 10% of the course (1.5 weeks of a 15-week semester) without consulting the instructor, may be considered as having abandoned the course. Logging in does not meet the attendance standard.

Competency-Based Education Classes -- Students are expected to have regular and substantive interactions with their instructor and to actively work on course content. A student who has not submitted coursework, nor had substantive interactions with the instructor over a consecutive 10% of the term, without the instructor's prior approval, will be considered to have abandoned the competency progression. Last date of attendance will be recorded as the last date that coursework was submitted or that the student met with the instructor. For on-line learners, logging in does not meet the attendance standard.

Failure to Meet Class Participation Expectation:

Students who fail to meet participation expectations will have their last date of attendance recorded. This date will be used to recalculate any financial aid received/veteran's benefits received, and the student may be required to repay the institution/government. If the student does not drop the course, an 'X' grade will be recorded. An 'X' grade impacts the grade point average the same as an 'F'.

8. Grading Policies

Incomplete: Incomplete Grade Assignment ([Incomplete Grades Information](#))

The grade of I (Incomplete) is given for passing work that could not be completed during the semester because of circumstances beyond the student's control. Ordinarily, the assignment of an I is given by the course instructor at the time final grades are due.

In no case is an I grade to be used to avoid assignment of D or F grades for marginal or failing work or to require a student to enroll in the class the next semester because work was not completed on time. Circumstances warranting the issuance of an I grade must be beyond the student's control and must be documented on the appropriate form prior to approval.

I grades can be removed only during the subsequent 16 weeks from the end of term, or within the time limit set by the instructor. Removal of an I is accomplished by completing the work in a manner acceptable to the instructor. Re-enrollment in the course under the repeat option does not remove the prior grade of I. Students should not re-enroll for the course. An I not made up within 16 weeks or within the time limit set by the instructor will change to an F grade thereafter and cannot be changed by work completion.

9. Grade Appeals

The policy for grade appeals is in the Academic Catalog ([Grade Appeal Policy](#)).

Student Handbook

The Student Handbook provides information on Student support, student organizations, and San Juan College policies.

[Student Handbook](#)