GEORGIA PEACH STATE PATHWAYS

Career, Technical, & Agricultural Education

ACCT — ARCHITECTURAL DRAWING

Architectural Drawing & Design PATHWAY:

Architectural Drawing & Design I COURSE:

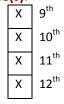
UNIT 4: **Building Codes**



Annotation:

Students will explain how building codes and ordinances affect design.

Grade(s):



Time:

5 hrs

Author:

Connie Highnote

Additional Author(s):

Students with Disabilities:

For students with disabilities, the instructor should refer to the student's IEP to be sure that the accommodations specified are being provided. Instructors should also familiarize themselves with the provisions of Behavior Intervention Plans that may be part of a student's IEP. Frequent consultation with a student's special education instructor will be beneficial in providing appropriate differentiation.



GPS Focus Standards:

ACT-ADDI-1 Students will identify components related to the design process. e. Explain how building codes and ordinances affect design.

GPS Academic Standards:

SCSh9. Students will enhance reading in all curriculum areas. ELA9RL5. The student understands and acquires new vocabulary and uses it correctly in reading and writing. ELA11LSV1. The student participates in student-to-teacher, student-to-student, and group verbal interactions.

National / Local Standards / Industry / ISTE:



Enduring Understandings:

Building codes are the minimum requirements dictated by the building authority of a certain jurisdiction. Designs should include elements required by building codes and ordinances to ensure that the home will meet the standards.

Essential Questions:

What is BOCA, SBCCI, ICBO? What is the difference in a building code and a building ordinance? Why do building codes exist? What happens if the building code is not followed?

Knowledge from this Unit:

Students will understand the importance of building codes and ordinances and how they affect the design of a residence.

Skills from this Unit:

Students will identify elements of a home given a floor plan and determine if the elements exist to meet a building code.



Assessment Method Type:

	_ Pre-test
	Objective assessment - multiple-choice, true- false, etc.
	Quizzes/Tests
	Unit test
х	Group project
	 Individual project
х	Self-assessment - May include practice quizzes, games, simulations, checklists, et
	x Self-check rubrics
	Self-check during writing/planning process
	Journal reflections on concepts, personal experiences and impact on one's life
	Reflect on evaluations of work from teachers, business partners, and competition judge
	Academic prompts
	Practice quizzes/tests
	_ Subjective assessment/Informal observations
	Essay tests
	Observe students working with partners
	Observe students role playing
	_ Peer-assessment
	Peer editing & commentary of products/projects/presentations using rubrics
	Peer editing and/or critiquing
Х	Dialogue and Discussion
	Student/teacher conferences
	_x _ Partner and small group discussions
	_x_Whole group discussions
	Interaction with/feedback from community members/speakers and business partners
	_ Constructed Responses
	Chart good reading/writing/listening/speaking habits
	Application of skills to real-life situations/scenarios
	Post-test

Assessment(s) Title:

Understanding of building codes

Assessment(s) Description/Directions:

Invite a local builder or someone from the building permit office in your area to visit your class and discuss the building codes adopted and explain how they are enforced. Have students write a summary of the information given.

Attachments for Assessment(s):



Sequence of Instruction

- 1. Identify the Standards. Standards should be posted in the classroom for each lesson.
 - ACT-ADDI-1 Students will identify components related to the design process.
 - e. Explain how building codes and ordinances affect design.

2. Review Essential Questions.

What is BOCA, SBCCI, ICBO? What is the difference in a building code and a building ordinance? Why do building codes exist? What happens if the building code is not followed?

3. Identify and review the unit vocabulary.

ADA	Forward approach
IRC	Parallel approach
ICC	Egress
Group R-1	Glazing
One hour wall	Footcandle
	IRC ICC Group R-1

4. Interest approach – Mental set

Students are accustomed to having rules to follow even though they would prefer not to. Authorities enforcing building codes exist to protect the health and safety of the occupants and the integrety of the structure. Building codes are constantly being revised and vary by area. It is important to be aware of the codes as they often affect the design of the structure.

Invite a builder or a building inspector to the class to discuss local building codes. Students enjoy learning from an expert.

Lesson 1

Discussion

1. Ask students if they ever worry about their safety in a building or home.

- 2. Distribute Unit 4 PRE LEARNING.doc and have students complete the activity.
- 3.Place students in pairs and have them create a power point using the vocabulary words to explain what building codes are and why they are important. Specify a limited number of slides.
- 4. Have students present their power points to the class.

Lesson 2

Discussion

1. Ask students who write building codes.

2. Ask students to work in teacher-assigned groups or pairs to create a Building Codes brochure that highlights Uniform Building Code (UBC), Basic National Building Code (BNBC) and Standard Building Code (SBC). 3. Have students use their textbook, resource materials and the internet to do their research.

Attachments for Learning Experiences: Unit 4 PRE LEARNING

Notes & Reflections:



Culminating Unit Performance Task Title:

Culminating Unit Performance Task Description/Directions/Differentiated Instruction:

Attachments for Culminating Performance Task:



Web Resources:

http://www.delmarlearning.com/companions/content/1401867154/links/chapter7.asp

Attachment(s):

Materials & Equipment:

What 21st Century Technology was used in this unit:

x Slide Show Software

Email

Silue Silow Soltw

Interactive Whiteboard

Web Design Software

Animation Software

Student Response System

Calculator

Desktop Publishing

Graphing Software

Blog

Wiki

х

Website

Audio File(s)

Graphic Organizer

Image File(s)

Video

Electronic Game or Puzzle Maker

Georgia CTAE Resource Network Unit Plan Resource