



PATHWAY: Early Childhood Education

COURSE: Health, Safety & Nutrition

UNIT: 4 – Fire Safety



INTRODUCTION

Annotation:

Fire safety is a major consideration when planning to open or work in a child care center. According to a report from the Consumer Product Safety Commission, about 31,000 children, 4 years old and younger were treated in U. S. hospital emergency rooms for injuries at child care settings in 2005. CPSC reports 56 children died in child care settings from 1990 to 1997. Approximately one third of the 31,000 children were injured in fire related emergencies.

Did you know that?

- You only have three minutes to escape a burning building?
- More people die from smoke inhalation than from fire itself?
- Fire creates so much smoke that a room turns pitch black in minutes?
- The toxic fumes created by a fire can kill you within a few breathes?
- Heat production by a fire can exceed temperatures of more than 1000 degrees F, yet temperatures of more than 150 degrees F can cause your body to shut down?

Grade(s):

X	9 th
X	10 th
X	11 th
X	12 th

Time: 5 hours

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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.



FOCUS STANDARDS

GPS Focus Standards:

EDU- HSN 3 – Students will provide a safe environment for children.

- a. Research and demonstrate an understanding of standard safety rules and practices in an early childhood care and education setting.

The following Fire Safety Certification standard is difficult to obtain. CPR and First Aid can be obtained through the Red Cross, American Heart Association, your Health Sciences instructors, school nurse or often the PE instructor can provide the instruction. Some ECE teachers have the 1st Aid/CPR certification to teach the class and therefore certify their students. The Fire Safety certification is costly and difficult to obtain for students. This unit only provides the instruction, not the actual certification.

- b. Obtain CPR, First Aid, and Fire Safety certification.

GPS Academic Standards:

- **SCSh2.** Students will use standard safety practices for all classroom laboratory and field investigations.
- **SCSh3.** Students will identify and investigate problems scientifically.

National / Local Standards / Industry / ISTE:

NFACS4.4: Demonstrate a safe and healthy learning environment with children.



UNDERSTANDINGS & GOALS

Enduring Understandings:

- Students will be able to describe how to use fire extinguishers.
- Students will be able to design an evacuation plan for early childhood education care and educational centers.

Essential Questions:

- What can staff do to promote fire safety in an early childhood setting?
- Why is it important for early childhood staff to teach children fire safety?
- What can children do to protect themselves from fire?
- Why is it important to know the different classes of fire?
- How can using the wrong type of extinguisher on a fire complicate the emergency?

Knowledge from this Unit:

- Students will be able to discuss fire safety procedures for early childhood care and educational centers.
- Students will be able to describe the types of fires and appropriate fire extinguishers for each type of fire.
- Students will be able to describe how to use fire extinguishers.
- Students will be able to design an evacuation plan for early childhood education care and educational centers.



ASSESSMENT(S)

Assessment Method Type: Select one or more of the following. Please consider the type(s) of differentiated instruction you will be using in the classroom.

- ☒ Pre-test
- ☐ Objective assessment - multiple-choice, true- false, etc.
 - ☐ Quizzes/Tests
 - ☐ Unit test
- ☒ Group project
- ☐ Individual project
- ☐ Self-assessment - May include practice quizzes, games, simulations, checklists, etc.
 - ☐ 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 judges
 - ☐ 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
- ☒ Dialogue and Discussion
 - ☐ Student/teacher conferences
 - ☒ Partner and small group discussions
 - ☒ 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: Fire Extinguisher Pre-Test and Fire Extinguisher Post-Test


CPR/First Aid Training

Assessment(s) Description/Directions: Self explanatory directions.

Pre Test Answer Key

1. T 6. C
2. F 7. B
3. F 8. C
4. T 9. C
5. F 10. D

Post Test Answer Key

1. Oxygen  Heat
Fuel

2. a. Class A
b. Class B
c. Class C
d. Class D

3. 3

4. A

5. A, B and C

6. B and C

7. Pass

Aim

Squeeze

Sweep

8. Burning or the fuel

9. a. If you don't have fire extinguisher

b. Might inhale toxic smoke

c. Your instincts tell you not to

10. 1. Assist any one in immediate danger to
safety

2. Call 911

3. Use extinguisher at beginning of fire

4. Evacuate if spreading fast

5. Always position yourself with an exit
or means of escape at your back.

Attachments for Assessment(s):



LEARNING EXPERIENCES

Instructional planning: Include lessons, activities and other learning experiences in this section with a brief description of the activities to ensure student acquisition of the knowledge and skills addressed in the standards. Complete the sequence of instruction for each lesson/task in the unit.

Sequence of Instruction

1. Identify the Standards. Standards should be posted in the classroom for each lesson.
2. Review Essential Questions.
3. Lessons

LESSON ONE: STANDARD FIRE SAFETY RULES FOR EARLY CHILDHOOD PROGRAMS

Essential Questions:

1. What can staff do to promote fire safety in an early childhood setting?
2. Why is it important for early childhood staff to teach children fire safety?

Prevention is the key to fire safety. Being prepared is vital to the saving of lives in a fire. When working in an early childhood program, children and staff must be aware of fire safety rule and procedures. In this lesson we will talk about what staff and children need to know and be aware of in relation to fire safety and prevention. See Fire Safety Handout attached.

ACTIVITY ONE: Speaker: Invite a fireman from a local fire department to speak to the class about the importance of fire safety in early childhood care and educational settings. If you cannot find a speaker, show the video “Fire Safety”. This can be borrowed from most local fire departments.

LESSON TWO: Fire Safety Regulations

Essential Questions:

Why is it important for early childhood staff to teach children fire safety?
What can children do to protect themselves from fire?

Workings in groups of 3-4, have students research fire safety regulations using the web resources listed. Have students prepare a presentation on their findings. This can be a PowerPoint, a demonstration, a brochure, poster or a speech. They must provide one handout for the class. Use rubrics for grading.

LESSON THREE: Fire Safety Checklist and Fire Safety for Young Children

Essential Questions:

Why is it important for early childhood staff to teach children fire safety?
What can children do to protect themselves from fire?

PART ONE: Working in the same small groups and using the information from Activity Two, have students design a Fire Safety Checklist for a day care or early childhood program. Have them take their checklist to the lab and check it against the checklist. Discuss findings in class. Have them make suggestions on the checklist for corrections or problems they found.

PART TWO: Working in small groups, have students design a Fire Safety Lesson for four-year-olds. This should include an activity other than a coloring picture. Students should cover the STOP, DROP and ROLL procedure. If you have time, have them present their lessons to the children in the lab or they can video their lesson and show to the children at a later date. Use the attached rubric to help grade their performance.

LESSON FOUR: Fire Extinguishers

Essential Questions:

1. Why is it important to know the different classes of fire?
2. How can using the wrong type of extinguisher on a fire complicate the emergency?

1) Take the Fire Extinguisher Pre-Test.

2) Watch the Fire Extinguisher PowerPoint. It can also be downloaded from the following web site:

<http://www.ehs.okstate.edu/modules/index.htm>

This is a training PowerPoint on the types of extinguisher and their use.

3) Take the Post-Test.

LESSON FIVE: Fire Drills and Evacuation Procedures

Essential Question:

1. What can children do to protect themselves from fire?

Most state licensing rules regulations require fire drills. Most recommend that drills be scheduled on a regular basis, such as once a month. Centers should vary the time of day for the drills so that staff and children know what to do during any part of the day.

Part I:

In small groups of 3-4, have students design an evacuation plan for your on-site lab or off-site lab. Once they have designed a plan, show students a copy of the official evacuation plans. Discuss the differences

and who designed the official evacuation plans for the center. Several websites are listed as a resource for the teacher and the students.

Part II:

Allow students to participate in a fire drill with children in the on or off-site lab.

Attachments for Learning Experiences:

- Fire Safety Notes
- Fire Extinguisher Post Test
- Fire Extinguisher Pre Test
- Fire Extinguisher Training PowerPoint
- Lesson Plan and Reflection Rubrics

Notes & Reflections:

The local fire department can be a big help on this unit. They will provide speakers and some have videos on fire safety that they will loan you.



CULMINATING PERFORMANCE TASK (Optional)

Culminating Unit Performance Task Title:

Fire Extinguisher Pre/Post Test and Rubrics for each activity.

Culminating Unit Performance Task Description/Directions/Differentiated Instruction:

Included in explanation of each lesson.

Attachments for Culminating Performance Task:

- Fire Safety Pretest
- Fire Safety Post Test
- Lesson Plan Reflection and Rubric



UNIT RESOURCES

Web Resources:

<http://childcare.about.com/od/childsafet1/tp/firesafetytips.htm>

<http://childcare.about.com/od/childsafet1/a/firesafety.htm>

<http://www.ownadaycare.com/georgia.htm>

<http://www.georgiachildcare.org/docs/Notice%20of%20Public%20Hearing%20and%20Proposed%20Amendments%206-16->

[2008.pdfhttp://www.seattle.gov/fire/pubEd/preschool/newsletter/SmartKids_SafeKids_Fall2004.pdf](http://www.seattle.gov/fire/pubEd/preschool/newsletter/SmartKids_SafeKids_Fall2004.pdf)

<http://www.stanthefireman.com/schools.php>

http://www.ucsfchildcarehealth.org/pdfs/Checklists/UCSF_Checklist_rev2.0802.pdf

<http://firesafetyresources.nimcoinc.com/?cartid=5444141>

http://www.bullexsafety.com/8b/fire_safety_trailer.aspx

- Fire Extinguishers:

<http://www.hanford.gov/fire/safety/extingrs.htm>

<http://www.fire-extinguisher101.com/>

- Fire extinguisher training video:

http://ehs.okstate.edu/MODULES/exting/Fire_Extinguisher_Training.ppt#258,2,The Fire Triangle

- Georgia Insurance and Safety Fire Commissioner: John Oxedine:

<http://www.inscomm.state.ga.us/>

<http://www.centerpigeonfire.org/firesafetytips-daycarecenters.htm>

- Georgia Daycare Licensing Rules and Regulations

<http://dec.al.ga.gov/CCS/CCSMain.aspx>

- Sample Evacuation Procedures

<http://www.chtc.org/dl/handouts/20061114/20061114-2.pdf>

<http://www.bbc.org.uk/ohss/main.asppage5158.htm>

<http://www.uwm.edu/Dept/EHSRM/FIRE/firedrills.html>

<http://www.co.snohomish.wa.us/documents/Agenciehttp://childcare.sc.gov/main/docs/Emergency%20Plan%20Guidelines.pdf>

[Emergency_Management/Factsheets/CC_Center_Disaster_Plan_021003.pdf](http://www.childcare.sc.gov/main/docs/Emergency_Management/Factsheets/CC_Center_Disaster_Plan_021003.pdf)

<http://www.ofm.gov.on.ca/english/Publications/Guidelines/2004-01.asp>

Attachment(s):

- Pre and Post Tests
- Handout #1 Fire Safety (This can be copied for students or used on the overhead for a lecture).
- Lesson Plan Rubric for Lesson 3 Part Two

Materials & Equipment:

- Textbook, computers
- “Health, Safety & Nutrition for the Young Child” Resource CD (includes basic PowerPoint for each chapter and test-bank) – <http://www.earlychilded.delmar.cengage.com/>
- Videos:
“Fire Safety and Children”: This video was provided by our local fire department.

What 21st Century Technology was used in this unit?

<input checked="" type="checkbox"/>	Slide Show Software	<input type="checkbox"/>	Graphing Software	<input type="checkbox"/>	Audio File(s)
<input type="checkbox"/>	Interactive Whiteboard	<input type="checkbox"/>	Calculator	<input type="checkbox"/>	Graphic Organizer
<input type="checkbox"/>	Student Response System	<input type="checkbox"/>	Desktop Publishing	<input type="checkbox"/>	Image File(s)
<input type="checkbox"/>	Web Design Software	<input type="checkbox"/>	Blog	<input checked="" type="checkbox"/>	Video
<input type="checkbox"/>	Animation Software	<input type="checkbox"/>	Wiki	<input type="checkbox"/>	Electronic Game or Puzzle Maker