Career, Technical, & Agricultural Education

### EDUCATION

**PATHWAY:** Early Childhood Education

COURSE: Health, Safety & Nutrition

**UNIT 11: Food Safety** 



## **INTRODUCTION**

#### **Annotation:**

In this lesson students will identify the proper techniques for food safety, sanitation, and storage. Students will research various food-borne illnesses, their causes, symptoms and treatments, also well as research and review various guidelines from other states and institutions. Students will create their own guidelines (using Georgia's) for a day care center.

#### Grade(s):

 $9^{th}$ 10<sup>th</sup> 11<sup>th</sup> 12<sup>th</sup>

Time: 10 – 90 minute blocks

**Author:** Megan Ford

**Academic Reviewer:** Sharon Bickford

**Special Education Reviewer:** Holly Spivey

#### 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.

h. Describe the procedure for safe food preparation and storage to prevent food borne illness.

#### **GPS Academic Standards:**

- SCSh2. Students will use standard safety practices for all classroom laboratory and field investigations.
- ELA11W3. The student uses research and technology to support writing.

#### National / Local Standards / Industry / ISTE:

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



### **UNDERSTANDINGS & GOALS**

#### **Enduring Understandings:**

- Students will identify proper food preparation techniques.
- Students will identify proper food storage techniques.
- Students will identify proper sanitation techniques.
- Students will identify various food-borne illnesses and their causes.
- Students will identify prevention methods for food-borne illnesses.
- Students will review and research various food-borne illnesses.
- Students will identify safe food preparation and storage guidelines for day care centers.
- Students will review and research safe food preparation and storage guidelines for day care centers.

#### **Essential Questions:**

- Why is it important for Day Care providers to know and demonstrate knowledge of proper sanitation, food preparation and storage techniques?
- Why are there state guidelines for food safety, sanitation and storage for day care centers?
- Who makes and enforces these guidelines?
- What is most important for teachers and child care workers to understand regarding food safety and food borne illnesses?
- Why are there certain procedures for washing hands, dishes, tables, etc.?

#### **Knowledge from this Unit:**

- Students will gain an understanding of how to properly prepare and store foods.
- Students will research various food-borne illnesses that are harmful to others.
- Students will also discuss the differences in regulations on food safety and sanitation from state to state.

#### **Skills from this Unit:**

- Students will gain communication skills through their presentations as well as discussing the articles.
- Students will acquire knowledge for using various sources of information for research.
- Students will develop time management through preparing their presentations and guidelines.
- Students will develop higher order thinking skills.



### 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 Pre-test
	Objective assessment - multiple-choice, true- false, etc.
	Quizzes/Tests
	_x_ Unit test
	Group project
Χ	Individual project
Χ	Self-assessment - May include practice quizzes, games, simulations, checklists, etc.
	_X_ Self-check rubrics
	Self-check during writing/planning process
	_X_ 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
V	Peer editing and/or critiquing
X	Dialogue and Discussion
	_x_ Student/teacher conferences
	_x_ Partner and small group discussions
	_x_ Whole group discussions Interaction with/feedback from community members/speakers and business partners
Х	
^	Constructed Responses
	_X_ Chart good reading/writing/listening/speaking habits X_Application of skills to real-life situations/scenarios
	Post-test
	r 031-1631

#### Assessment(s) Title:

- Food-borne Illness Assignment
- Food-borne Illness Rubric

- Guidelines Activity and Rubric
- Unit Test: will need to be made by teacher according to questions students give in PowerPoint
  presentations pertaining to their food-borne illness. (Use your own discretion). You will need to include
  questions from the Food Safety PowerPoint and the articles read in class.

#### Assessment(s) Description/Directions:

#### Food-borne Illness Assignment and Rubrics

The assignment allows us to see what the student has learned through research. The rubric allows students to check behind themselves to make sure they are on track and have information/materials that they need to succeed.

#### **Guidelines Activity and Rubric**

The assignment allows us to see what the student has learned about food safety and sanitation guidelines and how they differ. The rubric allows students to check behind themselves to make sure they are on track and have information/materials that they need to succeed.

#### **Unit Test**

This will need to be made by teacher according to questions students give in PowerPoint presentations pertaining to their food-borne illness. (Use your own discretion). You will need to include questions from the Food Safety PowerPoint and the articles read in class.

#### **Attachments for Assessment(s):**

- Food-borne Illness Assignment & Guidelines
- Food-borne Illness Rubric



### 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.** Identify and review the unit vocabulary.

Food-borne illness	critical control point	sanitized
food-born illness outbreak	disinfected	viruses
pasteurized	bacteria	parasites

irradiation	food infections	food intoxications
HACCP – Hazard Analysis Critica	l Control Point	

**4.** Reserve time in the computer lab or media center to complete the needed research for student projects in lesson 3.

#### Lesson 1

**EQ** - Why are there certain procedures for washing hands, dishes, tables, etc.?

- 1. Have students read "Reducing the Risk of Food-borne Illness in Children" from UGA FACS Extension. Discuss the statistics that were found.
- 2. Have students read the article from the US Food and Drug Administration called "In Day-Care Centers, Cleanliness Is a Must". Discuss the article and ask questions. (Do you follow these procedures at home? How does improper sanitation affect families? etc.)
- **3.** Students will summarize the articles in their daily journals or as daily assignments as the end of class wrap up. Use this information to start the next lesson.

#### Lesson 2

**EQ** - Why is it important for Day Care providers to know and demonstrate knowledge of proper sanitation, food preparation and storage techniques?

1. Show and discuss the PowerPoint #1 on how to store food properly and what can happen if it's not properly stored. Give handout (9 steps ....) outlining procedure for handling/preparing food.

#### Lesson 3

**EQ** – What is most important for teachers and child care workers to understand regarding food safety and food borne illnesses?

- 1. Show PowerPoint called "Food Safety" by Megan Ford.
- **2.** Use the *Food borne illness Assignment and Guidelines* sheet to assign each student a foodborne illness to research.
- **3.** They will create a PowerPoint following the guidelines. Each student will teach the class about that specific food-borne illness.
- **4.** Pass out the assignment sheets and rubrics. Students will use the rubrics as a checklist to make sure they have what they need.

- 5. If the technology is available in your school, have the students use a Smart Board or Promethean board for their presentations. Otherwise students will present their PowerPoint presentation in a traditional manner. Have the students complete the rubric to evaluate themselves after their presentation.
- 6. Students will turn in their rubrics. When you finish grading everyone's project compare your rubric with each student's and discuss with them their strengths and weaknesses as well as why the two of you may agree/disagree on the grading. You can do this while students are working on their next assignment.

#### Lesson 4

- **EQ** Why are there state guidelines for food safety, sanitation and storage for day care centers? Who makes and enforces these guidelines?
  - 1. Share Safe Food Preparation and Storage Guidelines with students from Georgia, North Carolina and Eugene's Parent-Child Preschool.
  - 2. Discuss the differences from state to state and from school to school regarding guidelines. Institutions must follow state guidelines but additional guidelines may be added by the specific institution.
  - 3. Using the attached web links as a starting point, students will research 2 other state, school and day care center's guidelines. Have them make a list of their own guidelines using those researched to help guide. They will need to create a Guidelines sheet using the Guidelines Rubric.
  - **4.** Wrap up this lesson with a **unit test** consisting of questions from the two Food Safety PowerPoint's and the questions from the student PowerPoint presentations.

#### Attachments for Learning Experiences: Please list.

- Article "Reducing the Risk of Food-borne Illness in Children 2003"
- Article "In Day Care Centers, Cleanliness Is A Must"
- PowerPoint "Food Safety"
- Food-borne Illness Assignment
- Food-borne Illness Rubric
- Georgia Licensing Standards for Day Care Centers
- North Carolina Sanitation of Child Care Centers
- Eugene's Parent Child Preschool Safe Food Preparation and Storage Guidelines
- PowerPoint #1-Food Safety

- http://extension.usu.edu/fsne/files/uploads/lessons/Food%20Safety/Food%20Safety%20LESSON%20SCRI
   PT%20Color%2010.06.pdf
- <a href="http://www.plasticsinfo.org/s">http://www.plasticsinfo.org/s</a> plasticsinfo/sec level4 alt.asp?CID=577&DID=2310

#### **Notes & Reflections:**

The length of the research projects will depend on when you can obtain your computer labs, etc. It may also depend of the socio-economic status of your school. Some students may have access to computers at home, etc. while others do not. This will need to be taken into consideration when assigning the projects.



### **CULMINATING PERFORMANCE TASK**

#### **Culminating Unit Performance Task Title:**

Food-borne Illness PowerPoint Instructions and Rubric Guidelines Activity and Rubric

#### **Culminating Unit Performance Task Description/Directions/Differentiated Instruction:**

Food-borne Illness Assignment and Rubrics

The assignment allows us to see what the student has learned through research. The rubric allows students to check behind themselves to make sure they are on track and have information/materials that they need to succeed.

**Guidelines Activity and Rubric** 

The assignment allows us to see what the student has learned about food safety and sanitation guidelines and how they differ. The rubric allows students to check behind themselves to make sure they are on track and have information/materials that they need to succeed.

#### **Attachments for Culminating Performance Task:**

Food-borne Illness PowerPoint Instructions and Rubric Guidelines Activity and Rubric



### **UNIT RESOURCES**

#### Web Resources:

- Center for Disease Control
  - o http://www.cdc.gov/
- Reducing the Risk of Food-borne Illness in Children 2003
  - o <a href="http://www.fcs.uga.edu/newfacs/ext/impacts/2007/Foodborne%20Illness%20in%20Children%2">http://www.fcs.uga.edu/newfacs/ext/impacts/2007/Foodborne%20Illness%20in%20Children%2</a>
    02007 fnl.pdf
- In Day-Care Centers, Cleanliness Is a Must
  - http://www.cfsan.fda.gov/~dms/wh-dcare.html
- Georgia Licensing Standards for Day Care Centers Food Services and Nutrition
  - o <a href="http://daycare.com/georgia/state14.html">http://daycare.com/georgia/state14.html</a>
- North Carolina Sanitation of Child Care Centers
  - o http://www.deh.enr.state.nc.us/ehs/Rules/t15a-18a.28.pdf
- Eugene's Parent Child Preschool Safe Food Preparation and Storage Guidelines
  - o <a href="http://eugenepreschool.org/parent-handbook/safe-food-preparation-and-storage-guidelines">http://eugenepreschool.org/parent-handbook/safe-food-preparation-and-storage-guidelines</a>
- Fight BAC! CDC
  - o <a href="http://www.fightbac.org/index.php">http://www.fightbac.org/index.php</a>
- http://www.plasticsinfo.org
- <a href="http://www.co.guilford.nc.us">http://www.co.guilford.nc.us</a>
- http://www.plasticsinfo.org/s plasticsinfo/sec level4 alt.asp?CID=577&DID=2310

#### Attachment(s):

- Article "Reducing the Risk of Food-borne Illness in Children 2003"
- Article "In Day Care Centers, Cleanliness Is A Must"
- PowerPoint "Food Safety"
- PowerPoint #1 Food Safety
- Food-borne Illness PowerPoint Instructions and Rubric
- Georgia Licensing Standards for Day Care Centers
- North Carolina Sanitation of Child Care Centers
- Eugene's Parent Child Preschool Safe Food Preparation and Storage Guidelines

#### **Materials & Equipment:**

- Computers
- Smart Board (of screen and projector)
- PowerPoint "Food Safety" (may be purchased from Learning Zone Express)

Х	Slide Show S	Software		Graphing Software		Audio File(s)
X				Calculator		Graphic Organizer
	Student Res	ponse System		Desktop Publishing	Х	Image File(s)
	Web Design			Blog		Video
	Animation S			Wiki		Electronic Game or Puzzle Maker
	Email		Х	Website		
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