

Food and Nutrition II

Revised 8-2014

Levels: Grades 9-12

Units of Credit: 0.50

CIP Code: 20.0118

Core Code: 34-01-00-00-160

Prerequisite: Foods and Nutrition I

Skill Test: #343

COURSE DESCRIPTION

This course is designed to focus on principles of food preparation, sports nutrition, consumerism, and career options in the food industry. The study and application of nutrition, sanitation, food sciences and technology in this course provides students with laboratory-based experiences that will strengthen their comprehension of concepts and standards outlined in Science, Technology, Engineering and Math (STEM) education. FCCLA may be an integral part of this course.

CORE STANDARDS, OBJECTIVES, AND INDICATORS

STANDARD 1

Students will review and apply the skills of kitchen management, safety and sanitation.

Objective 1: Identify food safety and sanitation rules and guidelines to maintain a safe working environment.

- a. Review types of food borne illnesses and methods of prevention.
 - Salmonella, E-coli, Botulism, Hepatitis A, Campylobacter, Staphylococcus
 - Cross-contamination
 - Proper thawing and storage of food
 - Danger zone (41-135 degrees)
 - Internal meat temperatures (145-165 degrees)
 - Reheat internal food temperature – 165 degrees
 - Cooling Foods – (from 135 to 70 degrees within 2 hours and then 70 to 41degrees within 4 hours)
- b. FIFO – First in First out is a method of storage rotation for home and restaurants
- c. Identify and demonstrate the importance of personal hygiene
 - Hand washing and hand care
 - Hair covering or tied back
 - Uniform – apron/chefs jacket/lab coat
 - Discuss use of gloves – use/change (Ready to eat food, handling of protein)
- d. Demonstrate disinfection of work surfaces
 - Clean means to remove visible soil and food particles
 - Sanitize means to use moist heat or chemical agents to reduce pathogens
- e. Apply established safety rules and guidelines to maintain a safe working environment.
 - Basic first aid (prevention and treatment of cuts, burns, slips, and falls)
 - Fire prevention and safety

Objective 2: Review and apply culinary terms and abbreviations, equivalents, recipe yields, and proper measuring techniques with correct equipment.

- a. Mise en place
- b. 3 tsp = 1 Tbsp
- c. All tablespoon equivalents to 1 cup
- d. $\frac{3}{4}$ cup = $\frac{1}{2}$ cup + $\frac{1}{4}$ cup
- e. Cups/pints/quarts to gallons

Objective 3: Select and explain the appropriate use and care of small appliances and equipment for specific product preparation and culinary applications.

- a. Food processor
- b. Immersion blender
- c. Internal temp thermometers/calibration
- d. Scale

PERFORMANCE OBJECTIVE 1

Consistently demonstrate appropriate food safety and sanitation procedures.

PERFORMANCE OBJECTIVE 2

Consistently demonstrate proper mise en place and clean up.

PERFORMANCE OBJECTIVE 3

Adjust a 4 serving recipe to yield 2, 8 and 16.

STANDARD 2

Demonstrate food preparation techniques and nutrition of yeast breads.

Objective 1: Identify and prepare yeast breads.

- a. Lean Dough, Enriched Dough
- b. Mixing Methods: Straight dough, Modified straight-dough, Sponge method

Objective 2: Identify and discuss the different types of flours used in bread making: all-purpose flour, unbleached flour, bread flour, and whole wheat flour.

Objective 3: Identify ingredients in yeast breads and their functions.

- a. Flour
- b. Yeast
- c. Liquid
- d. Salt
- e. Sugar
- f. Fat
- g. Eggs

Objective 4: Identify the food science principles of yeast breads.

- a. Fermentation
- b. Kneading
- c. Proofing
- d. Shaping
- e. Baking/oven spring

Objective 5: Review the nutrients found in breads and incorporate guidelines from MyPlate.

PERFORMANCE OBJECTIVE 4

Actively participate in the preparation of yeast bread product using a scale.

STANDARD 3

Apply budgeting and consumerism skills to manage food costs.

Objective 1: Students will practice consumerism and budgeting skills related to food.

- a. Establish and apply a budget as it relates to food.
- b. Apply shopping strategies
 - Create a categorized shopping list
 - Take calculator
 - Don't shop when hungry or tired
 - Shop alone
- c. Identify shopping guidelines and advertising strategies
 - Loss leaders
 - Coupons/rebates
 - Impulse buys
 - Layout of store/shelf placement
 - Package dating
 - Calculate unit pricing/cost per serving
 - Interpret package information
- d. Discuss name brands versus store brands

e. Compare and contrast the use of convenience foods in relation to nutrition, use of time and money.

Objective 2: Read and interpret food labels as it applies to nutritional value.

a. Identify the components of a food label

- Nutrition facts
- Ingredients are listed from the largest to the smallest amount by weight
- % Daily Value
- Serving size

b. Food label terms

- Low in
- Reduced, less, light
- Good source of
- Organic and natural
- High source of
- 100% Juice vs. drink, punch, juice cocktail, fruit flavored drink etc.

STANDARD 4

Demonstrate food preparation techniques and nutrition of meats, poultry and seafood.

Objective 1: Identify and apply proper internal temperatures of meat, poultry and seafood according to the food industry standards.

a. Whole meats (seafood, pork, beef, veal, lamb) – 145 degrees

b. Ground meats (pork, beef, veal, lamb) – 155 degrees

c. Poultry (whole or ground) – 165 degrees

Objective 2: Identify and discuss different types of meats.

a. Meat (pork, beef, veal, lamb)

b. Poultry (white meat vs. dark meat)

c. Seafood

Objective 3: Identify appropriate meat cooking methods: dry vs. moist

a. Moist heat cooking for less tender cuts (Braising, Stewing, Slow-cooking)

b. Dry heat cooking for tender cuts (Broil, Grill, Roast, Sauté)

c. Trimming excess fat

Objective 4: Discuss inspection and grading of meat and poultry.

Objective 5: Review the nutrients found in meats and incorporate guidelines from MyPlate.

PERFORMANCE OBJECTIVE 5

Actively participate in the preparation of meat, poultry, or seafood and use a thermometer to confirm the product has been heated to the proper internal temperature.

STANDARD 5

Apply proper procedures for knives and knife cuts.

Objective 1: Identify types, use and care of knives.

a. Cutting board -- designation of use, stabilization and sanitation

b. Types of knives (Chef's Knife, Paring Knife, Serrated Knife)

c. Sanitation and storage of knives

Objective 2: Identify and demonstrate different knife cuts

a. Batonnet

b. Julienne

c. Brunoise

d. Dice

e. Chiffonade

f. Diagonal

PERFORMANCE OBJECTIVE 6

Set up a knife work station correctly and demonstrate 4 of the 6 knife cuts.

STANDARD 6

Students will demonstrate food preparation techniques and nutrition of salads.

Objective 1: Identify and perform salad preparation skills.

a. Identify classifications of salad dressings – mayonnaise based and vinaigrette

Objective 2: Identify structure and arrangement and service of a salad.

a. Freshness

b. Color

c. Texture

d. Ingredients should be well drained, cut into convenient eating size, prepared right before serving, dressing procedures.

e. Serving

Objective 3: Demonstrate knife skills and cutting techniques in salad making.

Objective 4: Identify the nutrients found in salads and incorporate guidelines from MyPlate.

a. Carbohydrates (fiber) – pasta, potatoes

b. Fats - dressings

c. Protein – meats, cheese, eggs

d. Minerals – fruits and vegetables (fiber)

e. Vitamins – fruits and vegetables (fiber)

f. Water- fruits and vegetables

Objective 5: Identify types of salads—appetizer, accompaniment, main dish, and dessert.

Objective 6: Identify categories of salads by the main ingredient --pasta, gelatin, protein, vegetable, & fruit.

PERFORMANCE OBJECTIVE 7

Actively participate in the preparation of a salad.

STANDARD 7

Students will explore health concerns incorporating guidelines from MyPlate and current dietary guidelines throughout the life span.

Objective 1: Identify the changing nutritional needs across the life span.

a. Child (12 months to 11yrs)

b. Adolescence (12 to 20)

c. Adult (21 to 60)

d. Elderly (60+)

e. Use MyPlate and current dietary guidelines to assess nutritional needs based on age, gender and activity level.

Objective 2: Identify sports nutrition guidelines for athletes and/or an active lifestyle.

a. Training

b. Pre-event/exercise

c. Hydration

d. During an event/exercise

e. Recovery

Objective 3: Classify common food and nutrition related health concerns.

a. Diabetes: Type I child/juvenile, Type II adult onset

b. Heart disease

c. Anemia

d. Colon cancer

e. Osteoporosis

f. Obesity

PERFORMANCE OBJECTIVE 8

Actively participate in the preparation of a food product consumed before, during, or after a sporting event/exercise.

STANDARD 8

Students will demonstrate food preparation and nutrition of soups and sauces.

Objective 1: Identify the five Mother sauces used in standard home and restaurant cooking.

- a. Bechamel (white sauce)
- b. Veloute
- c. Espagnole
- d. Tomato
- e. Hollandaise

Objective 2: Identify and prepare the two basic types of soup (cream and stock).

- a. Cream based soup.
 - Apply and prepare a bechamel based sauce (white sauce – a mother sauce)
 - Explain the thickening agent for a bechamel sauce is a roux
- b. Stock based soup
 - Discuss how to prepare a stock using a liquid from cooking meat, poultry, fish and vegetables using a mirepoix.

Objective 3: Identify and apply proper storage of soups.

Objective 4: Demonstrate knife skills and cutting techniques in soup making.

Objective 5: Identify how soups incorporate nutritional guidelines from MyPlate.

PERFORMANCE OBJECTIVE 9

Actively participate in the preparation of a mother sauce. Incorporate a mother sauce into a cream soup.

STANDARD 9

Identify and apply the elements of meal planning, meal management, and meal service.

Objective 1: Incorporate the current Dietary Guidelines and MyPlate when planning nutritionally balanced meals.

Objective 2: Plan, prepare and evaluate aesthetically pleasing meals.

- a. Color
- b. Texture
- c. Flavor
- d. Temperature
- e. Size and shape
- f. Food presentation (plating)

Objective 3: Discuss the factors that influence food costs/budget when meal planning.

Objective 4: Create a work plan (see FCCLA STAR Culinary Arts event)

Objective 5: Identify and demonstrate proper table setting and etiquette.

- a. Recognize the steps and elements necessary to present a place setting.
- b. Identify and demonstrate correct dining etiquette – tipping, napkin and flatware placement, cell phone use, and table manners.

PERFORMANCE OBJECTIVE 10

Plan, prepare and evaluate one meal using meal planning elements.

STANDARD 10**Demonstrate food preparation techniques and nutrition of pies/tarts.****Objective 1:** Identify and prepare pies/tarts (pie shell, single, double).**Objective 2:** Identify main ingredients and their functions.

- a. Flour
- b. Fat
- c. Salt
- d. Water

Objective 3: Identify basic types of pie/tart fillings and their proper storage.

- a. Cream/custard pies--refrigerate
- b. Savory pies--refrigerate
- c. Fruit pies

Objective 4: Review the nutrients found in pies/tarts and incorporate guidelines from MyPlate.**PERFORMANCE OBJECTIVE 11**

Actively participate in the preparation of a pie or tart.

STANDARD 11**Students will discuss career options and employment skills required in the food service industry.****Objective 1:** Identify various career opportunities and educational requirements.

- a. Identify various careers involved in culinary/food service.

PERFORMANCE OBJECTIVE 12Research a career in the food service industry using multiple sources (personal interview, internet, utahfutures.org, www.bls.org, periodicals) and present your findings. (Standard 11)