



# Multiple Category Scope and Sequence: Scope and Sequence Report For Course Standards and Objectives, Content, Skills, Vocabulary

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	Unit	Course Standards and Objectives	Content	Skills	Vocabulary
District Basic <u>Food &amp; Nutrition I</u> (20.0108) <u>(District)</u> 2014-2015 <u>Collaboration</u>	<u>Safety and Sanitation</u> (Week 1, 2 Weeks) 	UT: CTE: Family and Consumer Sciences, UT: Grades 9-12, Food and Nutrition I 2011 STANDARD 2 Students will consistently demonstrate kitchen safety procedures and sanitation techniques. <ul style="list-style-type: none"> <li>▪ Objective 1: Apply established safety rules and guidelines to maintain a safe working environment.               <ul style="list-style-type: none"> <li>▪ a. Identify safety practices for using electric appliances.</li> <li>▪ b. Explain how to extinguish a grease fire.</li> <li>▪ c. Demonstrate proper storage of cleaning supplies.</li> <li>▪ d. Explain prevention of: burns, cuts, fires, falls, electrical safety, and lifting techniques.</li> </ul> </li> <li>▪ Objective 2: Identify proper first-aid procedures for cuts, burns and electrical shock.               <ul style="list-style-type: none"> <li>▪ a. Identify ways to prevent poisoning and chemical contamination.</li> <li>▪ b. Identify basic first-aid for cuts and burns.</li> <li>▪ c. Identify proper first-aid procedures for electrical shock.</li> </ul> </li> <li>▪ Objective 3: Identify and apply sanitation rules and guidelines.               <ul style="list-style-type: none"> <li>▪ a. Identify proper hand washing and dishwashing techniques.</li> <li>▪ b. Discuss disinfecting of work surfaces.</li> <li>▪ c. Discuss appropriate use of gloves.</li> <li>▪ d. Identify appropriate clothing and hair coverings.</li> </ul> </li> <li>▪ Objective 4: Identify methods that prevent food-borne illnesses and contamination.               <ul style="list-style-type: none"> <li>▪ a. Define the characteristics of a food-borne illness.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▪ Safety rules and guidelines to maintain a safe working environment.</li> <li>▪ Proper first-aid procedures for cuts, burns and electrical shock.</li> <li>▪ Sanitation rules and guidelines.</li> <li>▪ Methods that prevent food-borne illnesses and contamination.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Identify safety practices for using electric appliances.</li> <li>▪ Explain how to extinguish a grease fire.</li> <li>▪ Demonstrate proper storage of cleaning supplies.</li> <li>▪ Explain prevention of: burns, cuts, fires, falls, electrical safety, and lifting techniques.</li> <li>▪ Identify ways to prevent poisoning and chemical contamination.</li> <li>▪ Identify basic first-aid for cuts and burns.</li> <li>▪ Identify proper first-aid procedures for electrical shock.</li> <li>▪ Identify proper hand washing and dishwashing techniques.</li> <li>▪ Discuss disinfecting of work surfaces.</li> <li>▪ Discuss appropriate use of gloves.</li> <li>▪ Identify appropriate clothing and hair coverings.</li> <li>▪ Define the characteristics of a food-borne illness.</li> <li>▪ Identify types of food-borne illness and their symptoms.</li> <li>▪ Explain prevention techniques including cross contamination.</li> <li>▪ Identify proper temperatures for heating, reheating, and</li> </ul>	<ul style="list-style-type: none"> <li>▪ Safety</li> <li>▪ First-aid</li> <li>▪ Sanitation</li> <li>▪ Disinfect</li> <li>▪ Food-borne Illness</li> <li>▪ Contamination</li> <li>▪ Botulism</li> <li>▪ E-coli</li> <li>▪ Hepatitis A</li> <li>▪ Salmonella</li> <li>▪ Staphylococci</li> <li>▪ Cross contamination</li> <li>▪ Danger Zone</li> <li>▪ Thaw</li> </ul>

- b. Identify types of food-borne illness and their symptoms: • Botulism • E-coli • Hepatitis • Salmonella • Staphylococci
  - c. Explain prevention techniques including cross contamination.
  - d. Identify proper temperatures: • Danger Zone: 41-135 degrees • Heating, reheating and serving foods: 165 degrees • Cold storage of foods: 40 degrees or below • Internal food temperatures: - Ground meats (pork, beef, veal, lamb) : 160 degrees - Seafood, beef, veal, lamb: at least 145 degrees - All poultry (whole or ground): 165 degrees - Pork: 160 degrees
  - e. Explain how to correctly thaw foods.
- serving foods.
  - Explain how to correctly thaw foods.

### Equipment /

### Management

(Week 3, 3 Weeks)



UT: CTE: Family and Consumer Sciences,  
UT: Grades 9-12, Food and Nutrition I 2011  
STANDARD 1 Students will apply the skills of  
kitchen equipment and management.

- Objective 1: Identify types, use and care of selected kitchen equipment.
  - a. Identify various types of kitchen equipment.
  - b. Select appropriate equipment for specific product preparation.
  - c. Demonstrate the proper use and care of equipment.
  - d. Employ standard safety procedures when using equipment.
  - Objective 2: Explain the basic principles of cooking in a microwave.
  - a. Identify that microwaves are attracted to fat, sugar, and water molecules.
  - b. Identify how microwaves cook food.
  - c. Identify appropriate cooking containers.
  - d. Discuss basic principles of microwave cooking: • Cooking time • Standing time • Ways to increase even cooking • Appropriate foods and limitations
- Use and proper care for various types of kitchen equipment.
  - Basic information about use and care of microwaves.
  - Abbreviations, equivalents, doubling and dividing recipes.
  - Follow instructions to prepare a recipe.
- Identify various types of kitchen equipment.
  - Select appropriate equipment for specific product preparation.
  - Demonstrate the proper use and care of equipment.
  - Demonstrate basic knife skills, including safety and proper handling.
  - Employ standard safety procedures when using equipment.
  - Identify that microwaves are attracted to fat, sugar, and water molecules.
  - Identify how microwaves cook food.
  - Identify appropriate cooking containers.
  - Discuss basic principles of microwave cooking.
  - Discuss prevention of burns and exploding or splattering of food.
  - Identify abbreviations.
  - Compute equivalents.
- microwaves
  - molecules
  - standing time
  - exploding/splattering
  - abbreviations
  - equivalents
  - doubling/halving
  - chop
  - cream
  - cut in
  - dice
  - dredge
  - flour
  - fold
  - grate
  - knead
  - mince
  - peel
  - saute
  - simmer
  - steam
  - whip

- e. Discuss prevention of burns and exploding or splattering of food.
- Objective 3: Identify appropriate abbreviations, food-measurement terminology, techniques, equivalents, and calculate recipe-size adjustments and demonstrate proper measuring techniques.
  - a. Identify abbreviations.
  - b. Compute equivalents.
  - c. Identify measuring techniques and utensils.
  - d. Double and cut recipe size in half.
- Objective 4: Explain basic food-preparation terminology.
  - a. Define cooking terms: chop, cream, cut in, dice, dredge, flour, fold in, grate, knead, mince, peel, sauté, simmer, steam and whip.

- Identify measuring techniques and utensils.
- Double and cut recipe size in half.
- Analyze, prepare and complete a recipe.
- Define cooking terms.

[Dietary Guidelines /](#)

[MyPlate](#)  (Week 6, 2 Weeks) 

UT: CTE: Family and Consumer Sciences, UT: Grades 9-12, Food and Nutrition I 2011 STANDARD 3 Students will explore the current Dietary Guidelines and ChooseMyPlate.gov.

- Objective 1: Identify the six Dietary Guidelines and the key recommendations for each. The guidelines are listed below:
  - a. Eat nutrient dense foods.
  - b. Balance calories to manage weight.
  - c. Reduce sodium, fats and added sugars, refined grains and alcohol.
  - d. Increase vegetables, fruits, whole grains, milk, seafood and use oils in place of solid fats.
  - e. Build healthy eating patterns that meet nutritional needs over time at an appropriate calorie level.
  - f. Include physical exercise as part of healthy eating patterns. (Dietary Guidelines are revised every 5 years; Pending revision in 2015.)
- Objective 2: Demonstrate knowledge of MyPlate. (See ChooseMyPlate.gov.)
  - a. Identify the characteristics of MyPlate: • Grains Group • Protein

- Six Dietary Guidelines and key recommendations for each.
- MyPlate characteristics.
- Knowledge of Healthy Eating Patterns.

- Eat nutrient dense foods.
- Balance calories to manage weight.
- Reduce sodium, fats and added sugars, refined grains and alcohol.
- Increase vegetables, fruits, whole grains, milk, seafood and use oils in place of solid fats.
- Build healthy eating patterns that meet nutritional needs over time at an appropriate calorie level.
- Include physical exercise as part of healthy eating patterns.
- Identify the characteristics of MyPlate.
- Explain how all food groups are important to good health.
- Identify the characteristics of

- ChooseMyPlate
- Dietary Guidelines
- calorie
- portions
- oversized
- whole grains
- refined grains
- sodium
- empty calories
- nutrient dense
- added sugars
- solid fats
- eating patterns
- nutritional needs
- physical exercise

Group • Vegetable Group • Fruit Group • Dairy Group

- Objective 3: Demonstrate knowledge of healthy eating patterns. (See ChooseMyPlate.gov)
- a. Explain how all food groups are important to good health.
- b. Identify the characteristics of healthy eating patterns: (These are the "Ten Tips to a Great Plate" from ChooseMyPlate.gov.) • Balance calories: - Enjoy your food, but eat less. - Avoid oversized portions. • Foods to increase: - Make half your plate fruits and vegetables. - Switch to fat-free or low-fat (1%) milk. - Make at least half your grains whole grains. • Foods to reduce: - Compare sodium in foods like soup, bread, and frozen meals and choose the foods with lower numbers. - Drink water instead of sugary drinks.
- c. Explain empty calories.
- d. Explain how people have different caloric needs depending on age, gender and activity level.

healthy eating patterns.

- Explain empty calories.
- Explain how people have different caloric needs depending on age, gender and activity level.
- Evaluate and analyze a personal dietary intake for one or more days according to the dietary guidelines and MyPlate.

## Carbohydrates



(Week 8, 3

Weeks)

UT: CTE: Family and Consumer Sciences, UT: Grades 9-12, Food and Nutrition I 2011 STANDARD 4 Students will identify the sources and function of carbohydrates and fiber and apply appropriate food preparation techniques.

- Objective 1: Identify carbohydrates, their sources and functions and the importance of whole grains in the body.
- a. Define simple and complex carbohydrates.
- b. Identify functions, food sources and caloric content of simple and complex carbohydrates.
- c. Describe how carbohydrates are broken down, or metabolized, during the digestion process.
- Objective 2: Identify fiber, its sources and functions.
- a. Identify the functions and food sources of fiber.
- b. Identify cellulose/non-digestible

- Carbohydrates, their sources and functions and the importance of whole grains in the body.
- Fiber, its sources and functions.
- Food selection and preparation guidelines related to quick breads, rice, grains and pasta.

- Define simple and complex carbohydrates.
- Identify functions, food sources and caloric content of simple and complex carbohydrates.
- Describe how carbohydrates are broken down, or metabolized, during the digestion process.
- Identify the functions and food sources of fiber.
- Identify cellulose/non-digestible fiber.
- Discuss the importance of liquids in the role of bowel function.
- Discuss why the National Cancer

- Simple Carbohydrates (sugars)
- Complex Carbohydrates (starches)
- Energy
- Whole grains
- Endosperm
- Germ
- Bran
- Fiber
- Cellulose (nondigestible fiber)
- Diverticulosis
- Colon and Rectal Cancer
- Legumes
- Constipation

- fiber.
- c. Discuss the importance of liquids in the role of bowel function.
- d. Discuss why the National Cancer Institute recommends 20-35 grams of daily fiber.
- e. Identify foods high in natural fiber and how to increase the bulk in low-fiber foods.
- Objective 3: Apply food selection and preparation guidelines related to quick breads, rice, grains and pasta.
- a. Identify examples of quick breads: muffins, pancakes, waffles, biscuits, cornbread and nut/fruit bread.
- b. Identify basic mixing techniques for quick breads.
- c. Identify the role of each ingredient contained in quick breads: flour, liquid, leavening agents, fat, salt and sugar.
- d. Identify types of rice (brown, instant, long grain and short grain), and cooking methods for rice.
- e. Identify cooking methods for pasta.

- Institute recommends 20-35 grams of daily fiber.
- Identify foods high in natural fiber and how to increase the bulk in low-fiber foods.
- Identify examples of quick breads: muffins, pancakes, waffles, biscuits, cornbread and nut/fruit bread.
- Identify basic mixing techniques for quick breads.
- Identify the role of each ingredient contained in quick breads.
- Identify types of rice (brown, instant, long grain and short grain), and cooking methods for rice.
- Identify cooking methods for pasta.

**Vitamin, Minerals, Fruits and Vegetables**

 (Week 11, 3 Weeks) 

UT: CTE: Family and Consumer Sciences, UT: Grades 9-12, Food and Nutrition I 2011 STANDARD 6 Students will identify the sources, function of vitamins, minerals and water and apply appropriate food preparation techniques

- Objective 1: Identify vitamins, their food sources, functions and deficiencies in the body.
- a. Identify the body processes that are regulated by vitamins: nerves, muscles and skin all require vitamins to function properly.
- b. Discuss the importance of folate (folacin/folic acid) in preventing neural tube birth disorders.
- c. Identify water soluble vitamins: • Vitamin C • B-Vitamins: thiamin, riboflavin, niacin, folate
- e. Identify fat soluble vitamins: • A, D, E, and K.

- Vitamins, their food sources, functions and deficiencies in the body.
- Minerals, their sources, functions and deficiencies in the body.
- Functions of water in the body.
- Food selection and preparation guidelines related to fruits and vegetables.

- Identify the body processes that are regulated by vitamins: nerves, muscles and skin all require vitamins to function properly.
- Discuss the importance of folate (folacin/folic acid) in preventing neural tube birth disorders.
- Identify water soluble vitamins.
- Identify fat soluble vitamins.
- Discuss macro minerals, electrolytes and trace minerals.
- Identify the problems associated with calcium and iron deficiencies.

- vitamins
- minerals
- deficiencies
- folate / folacin / folic acid
- neural tube birth disorders
- water soluble
- fat soluble
- macro minerals
- electrolytes
- trace minerals
- osteoporosis
- anemia
- dehydration
- essential nutrients
- fiber
- bake
- stir-fry
- oxidation

- Objective 2: Identify minerals, their sources, functions and deficiencies in the body.
  - a. Discuss macro minerals, electrolytes and trace minerals.
  - b. Identify the problems associated with calcium and iron deficiencies.
- Objective 3: Identify the functions of water in the body.
  - a. Identify the functions of water:
    - Carries water soluble vitamins.
    - Carries waste through the body.
    - Regulates body temperature.
    - Prevents dehydration.
  - b. Discuss why water is the most important of all the essential nutrients.
  - c. Identify symptoms of dehydration and how to prevent it based on current daily recommendations.
- Objective 4: Apply food selection and preparation guidelines related to fruits and vegetables.
  - a. Identify the nutrients provided by fruits and vegetables.
  - b. Identify how to preserve nutrients in the storage process of fruits and vegetables.
  - c. Identify preparation methods to preserve the most nutrients for vegetables and/or fruits:
    - Microwave
    - Bake
    - Steam
    - Stir fry
    - Simmer
    - Sauté
  - d. Identify how to select fresh fruits and vegetables.
  - e. Discuss how to prevent oxidation of fresh fruits.
- Identify the functions of water.
- Discuss why water is the most important of all the essential nutrients.
- Identify symptoms of dehydration and how to prevent it based on current daily recommendations.
- Identify the nutrients provided by fruits and vegetables.
- Identify how to preserve nutrients in the storage process of fruits and vegetables.
- Identify preparation methods to preserve the most nutrients for vegetables and/or fruits.
- Identify how to select fresh fruits and vegetables.
- Discuss how to prevent oxidation of fresh fruits.

## **Protein / Fats**



(Week 14, 4 Weeks)

UT: CTE: Family and Consumer Sciences, UT: Grades 9-12, Food and Nutrition I 2011 STANDARD 5 Students will identify the sources and functions of proteins and fats and apply appropriate food preparation techniques.

- Objective 1: Identify proteins (complete and incomplete), their sources and functions in the body.
  - a. Identify the function of protein in the body and its caloric content.
- Proteins (complete, incomplete and complementary), their sources and functions in the body.
- Food selection and preparation guidelines related to egg products.
- Food selections and preparation guidelines related to

- Identify the function of protein in the body and its caloric content.
- Define amino acids, complete and incomplete proteins.
- Identify examples of complete proteins and incomplete proteins.
- Identify functions of eggs.
- Identify egg cooking
  - proteins
  - complete proteins
  - incomplete proteins
  - complementary proteins
  - amino acids
  - binder
  - coating
  - emulsifier
  - leavening agent
  - thickener
  - hard cooked egg
  - soft cooked egg

- b. Define amino acids, complete and incomplete proteins.
- c. Identify examples of complete proteins and incomplete proteins.
- Objective 2: Apply food selection and preparation guidelines related to egg products.
  - a. Identify functions of eggs: binder, thickener, coating, leavening agent and emulsifier.
  - b. Identify egg cooking temperatures and techniques/methods: hard cooked, soft cooked, scrambled, fried, and poached.
  - c. Identify appropriate storage of eggs.
- Objective 3: Apply food selections and preparation guidelines related to milk and milk products.
  - a. Identify serving sizes and amounts for milk and dairy products.
  - b. Define pasteurization, homogenization and fortified milk.
  - c. Identify methods of lowering fat in recipes by using lower fat content milk or milk products.
- Objective 4: Identify fats, their sources, functions and related health concerns.
  - a. Identify the functions of fats:
    - Carrier for vitamins A, D, E, and K.
    - Reserve supply of energy.
    - Adds flavor in food.
    - Satisfies hunger.
    - Protects internal organs from shock and injury.
    - Insulates the body from shock and temperature changes.
    - Promotes healthy skin.
    - Satisfies hunger and helps you feel full longer.
  - b. Explain the role of cholesterol, including HDL and LDL factors.
  - c. Identify the differences between saturated, monounsaturated, polyunsaturated fats and trans-fatty acids. Discuss the effect of each type of fat on HDL and LDL levels.
  - d. Identify caloric content and methods of lowering fat content of prepared foods.

- milk and milk products.
- Fats, their sources, functions and related health concerns.

- temperatures and techniques/methods.
- Identify appropriate storage of eggs.
- Identify serving sizes and amounts for milk and dairy products.
- Define pasteurization, homogenization and fortified milk.
- Identify methods of lowering fat in recipes by using lower fat content milk or milk products.
- Identify the functions of fats.
- Explain the role of cholesterol, including HDL and LDL factors.
- Identify the differences between saturated, monounsaturated, polyunsaturated fats and trans-fatty acids. Discuss the effect of each type of fat on HDL and LDL levels.
- Identify caloric content and methods of lowering fat content of prepared foods.

- poached egg
- pasteurization
- homogenization
- fortified
- cholesterol
- HDL
- LDL
- saturated fats
- monounsaturated fats
- polyunsaturated fats
- trans-fatty acids

## Review / Testing



(Week 18, 2

Weeks) 

- Safety and sanitation rules to keep people and food safety.
- Use and proper care for various types of kitchen equipment including microwaves.
- Abbreviations, equivalents, doubling, dividing and following instructions to prepare a recipe.
- Six Dietary Guidelines and key recommendations for each.
- MyPlate characteristics and knowledge of Healthy Eating Patterns.
- Carbohydrates, their sources and functions and the importance of whole grains in the body.
- Fiber, its sources and functions.
- Functions of water in the body.
- Food selection and preparation guidelines related to Quick Breads, rice, grains and pasta.
- Vitamins, their food sources, functions and deficiencies in the body.
- Minerals, their sources, functions and deficiencies in the body.
- Food selection and preparation guidelines related to fruits and vegetables.
- Proteins (complete,
- Demonstrate and apply content while completing the Food and Nutrition 1 State Competency Test.
- List contained in each unit: Safety and Sanitation, Equipment and Management, Dietary Guidelines and MyPlate, Carbohydrates, Vitamins, Minerals, Fruits and Vegetables, Protein and Fats.

incomplete and complementary), their sources and functions in the body.

- Food selection and preparation guidelines related to egg products.
- Food selections and preparation guidelines related to milk and milk products.
- Fats, their sources, functions and related health concerns.

