Summit Public Schools Summit, New Jersey High School 9 - 12 / Foods and Nutrition 1

Length of Course: One Semester

Curriculum

Course Description: In this hands-on, one semester course, students learn the basics of food preparation and the importance of nutrition. The majority of class time will be spent in groups actively engaged with the planning, preparation and evaluation of various foods. Communication skills and critical thinking will be strengthened as students work toward common goals.

Students are challenged to begin exploration of their own food preferences and personal nutritional needs which will guide them in making healthy choices throughout their life.

Unit 1 Safety, Sanitation, and Recipe Skills

Standard 9.2

(Consumer, Family, and Life Skills) All students will demonstrate critical life skills in order to be functional members of society.

Big Ideas:

- Understanding the importance of safety procedures in the kitchen will help prevent injuries.
- Following practices that promote personal hygiene, sanitation and safe food handling will help prevent foodborne illness.
- Basic knowledge of culinary terminology, the ability to read a recipe, and the understanding of how to measure accurately are needed for successful food preparation.
- Learning basic food preparation skills is critical in becoming an independent adult.

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Essential Questions What provocative questions will foster inquiry, understanding, and transfer of learning?	Enduring Understandings What will students understand about the big ideas?	
 What could be a potential outcome of not following proper safety or sanitation in the kitchen? Why is it important to understand food preparation terms and techniques? Why is measuring and understanding abbreviations important when following a recipe? 	Not following safety and sanitation procedures in the kitchen may lead to physical harm and/or foodborne illness. It is critical to follow a recipe exactly, measure precisely, and practice proper culinary techniques in order to have the desired outcome.	

Areas of Focus: Proficiencies (Progress Indicators)

Examples, Outcomes, Assessments

Students will:

9.2.A.1

Apply communications and data analysis to the problem solving and decision making processes in a variety of life situations.

9.2.A.3

Apply the use of symbols, pictures, graphs, objects and other visual information to a selected project in academic and/or occupational settings.

9.2 B.2

Apply project planning and management skills in academic and/or occupational settings.

9.2.C.2

Communicate effectively in a variety of settings with a diverse group of people.

9.2.F.4

Practice the safe use of tools and equipment. 9.2 F.5

Implement safety procedures in the classroom and workplace, where appropriate.

Instructional Focus:

Discuss common kitchen accidents: analyze and create a list of preventative safety measures that will be used in class.

Students will view "What Not to Do in the Kitchen" (health and safety video). As they watch, they will keep a list of mistakes made. Class will engage in discussion as follow up.

To familiarize students with the location of equipment in the kitchen, they will participate in a search game.

Teacher will demonstrate complete kitchen procedures, which will emphasize proper hand washing (20 second rule), how to wash dishes, proper sanitation techniques, and overall kitchen organization and cleanliness.

Teacher will demonstrate proper wet and dry ingredient measuring techniques in the preparation of a recipe (which the students will prepare in their first lab experience).

Students will learn the difference between dry and liquid measuring cups and spoons by conducting measurement experiments.

- For example, students will pack flour into a measuring cup and compare against amount of flour when it is lightly spooned into a measuring cup by weighing it.
- Similar experiments will be done with packing and not packing brown sugar.
 Students will measure liquid in both liquid and dry cups and compare the results.
- Findings will be recorded in their data book.

Students will work in groups to research recipes on the internet and other sources.

Sample Assessments:

- Safety and Sanitation Test: Students are required to pass before working in the kitchen.
- Teacher observation and feedback on daily lab assignment work plans.
- Measuring skills evaluation: students will cut recipes in half and double recipes.
- Following directions assessment.

Projects/Post Assessment:

Students will be able to follow recipe directions, understand and use standard recipe abbreviations, and measure ingredients correctly to successfully prepare food.

Instructional Strategies

Interdisciplinary Connections:

- Math skills used in measuring, doubling, and cutting recipes in half.
- Math skills used in measuring accurately.
- Increased vocabulary: learning new culinary terminology

Technology Integration:

 Daily use of Chromebook and assignments through Google Classroom.

Media Literacy Integration

• Students will be using skills to evaluate recipes on the internet.

Global Perspectives

 With the vast variety of YouTube and other web materials, students are introduced to a global perspective regarding food safety, sanitation, and food preparation.

- Act as a responsible and contributing community member and employee.
- Attend to financial well-being.
- Consider the environmental, social, and economic impacts of decisions.
- Demonstrate creativity and innovation.
- Utilize critical thinking to make sense of problems and persevere in solving them.
- Model integrity, ethical leadership, and effective management.
- Plan education and career paths aligned to personal goals.
- Use technology to enhance productivity, increase collaboration, and communicate effectively.
- Work productively in teams while using cultural/ global competence.

Supports for English Language Learners		
Sensory Supports	Graphic Supports	Interactive Supports
Real life objects	Charts	In pairs or partners
Manipulatives	Graphic Organizers	In triands or small groups
Pictures	Tables	In a whole group
Illustrations, diagrams & drawings	Graphs	Using cooperative group
Magazines & Newspapers	Timelines	Structures
Physical activities	Number lines	Internet / Software support
Videos & Film		In the home

	language
Broadcasts	With mentors
Models & Figures	

Intervention Strategies		
Accommodations	Interventions	Modifications
Allow for verbal responses	Multi-sensory techniques	Modified tasks/expectation s
Repeat/confirm directions	Increase task structure (e.g. directions, checks for understanding, feedback	Differentiated materials
Permit response provided via computer or electronic device	Increase opportunities to engage in active academic responding	Individualized assessment tools based on student need
Audio Books	Utilize pre reading strategies and activities previews, anticipatory guides, and semantic mapping	Modified assessment grading

Recommended Texts:

Teacher Resources:

Text: Food for Today, McGrawHill Education, 2016 What Not to Do in the Kitchen by Jamie Oliver

Unit 2 Baking: Ingredient Function, Methods, and Equipment

Standard 9.2

Consumer, Family, and Life Skills) All students will demonstrate critical life skills in order to be functional members of society.

Big Ideas

- Knowing the function of common baking ingredients is essential when evaluating products.
- Understanding the methods used for each sub category in baking helps to ensure a positive outcome.
- The selection, preparation, and correct use of equipment also helps ensure good results.
- Working in groups cooperatively is essential in school, career, and home.
- Time management is an important skill needed when preparing baked goods.

Essential Questions What provocative questions will foster inquiry, understanding, and transfer of learning?	Enduring Understandings What will students understand about the big ideas?
What are the basic ingredients used in baking and what are their functions? Why does the method of mixing make a difference? Why is the correct type of pan and the preparation of the pan important? What is the importance of preheating the oven? Why and when is convection bake used? Why is it important to follow a work plan when working in small groups?	 All baked products are made from just a few basic ingredients which all serve a specific purpose. The different products result from differences in amounts of ingredients, the order in which ingredients are combined, how they are mixed, and how they are baked. Baking pans can affect the results of baked products. If too large or too small, the product will not bake properly. Baking pans must be properly prepared so that product can easily be removed from the pans. Preheating will ensure that the baked product will bake at the correct temperature. Students will learn that there are advantages and disadvantages to both conventional and convection bake. Division of labor, time management, and communication among group members will help contribute to the success of the group.

Areas of Focus: Proficiencies (Progress Indicators)

Examples, Outcomes, Assessments

9.2.A.1

Apply communications and data analysis to the problem solving and decision making processes in a variety of life situations.

9.2.B.2

Apply project planning and management skills in academic and/or occupational settings.

9.2.C.2

Communicate effectively in a variety of settings with a diverse group of people.

9.2.F.4

Practice the safe use of tools and equipment.

Instructional Focus:

- Students will participate in the preparation of a wide variety of baked goods. Recipes will range in difficulty from easy to more advanced.
- Students will learn the various methods of mixing for each mini unit.
- Baking ingredients will be explored and students will learn the functions of each.
- Students will compare and contrast recipes using different types of leavening agents.
- Gluten free baking, as well as other dietary concerns in baking will be introduced.
- Recipes that use healthy substitutions for ingredients such as fat and sugar will be included.

Mini-units will consist of the following:

- Quick breads (muffin method and biscuit method)
- Yeast breads (rapid rise and active dry comparisons)
- Cookies (6 categories: bar, drop, refrigerator, rolled, molded, pressed)
- Cakes (shortened and foam)
- Pies (pastry crust and graham cracker crust, baked and unbaked pies)

Small groups will consist of the following jobs which rotate daily: chef, sous chef, manager, and assistant manager.

Role assignments will ensure that overall goals are met.

Time management within groups is critical for success of recipe, serving food, and cleanup.

Sample Assessments:

Teacher evaluation of baked goods.

- Students will complete product evaluation sheets in google classroom. Daily activity questions will be posted.
- Multiple-choice quiz given for each mini-unit.

Projects/Post Assessment:

Students will evaluate recipes for baked goods, select recipes using given criteria, and prepare recipes following directions. Evaluation will be based on appearance of baked product, taste, time management, and following directions

Instructional Strategies

Interdisciplinary Connections:

- Mathematics measuring ingredients, doubling and reducing recipe yields
- Science The chemical reactions of various ingredients when baking
- English Baking vocabulary
- History The history behind various baking techniques

Technology Integration:

- Gather, research and evaluate information (recipes, nutrition, ingredient, etc.) from a variety of sources
- interact and collaborate with peers to solve problems and share information
- Summarize problems using a variety of media

Media Literacy Integration:

Recipe comparison and evaluation techniques

Global Perspectives:

 Students will create baked goods representative of many ethnic regions.

- Act as a responsible and contributing community member and employee.
- Attend to financial well-being.
- Consider the environmental, social, and economic impacts of decisions.
- Demonstrate creativity and innovation.
- Utilize critical thinking to make sense of problems and persevere in solving them.
- Model integrity, ethical leadership, and effective management.
- Plan education and career paths aligned to personal goals.
- Use technology to enhance productivity, increase collaboration, and communicate effectively.
- Work productively in teams while using cultural/ global competence.

Supports for English Language Learners		
Sensory Supports	Graphic Supports	Interactive Supports
Real life objects	Charts	In pairs or partners
Manipulatives	Graphic Organizers	In triands or small groups
Pictures	Tables	In a whole group
Illustrations, diagrams & drawings	Graphs	Using cooperative group

Magazines & Newspapers	Timelines	Structures
Physical activities	Number lines	Internet / Software support
Videos & Film		In the home language
Broadcasts		With mentors
Models & Figures		

Supports for English Language Learners		
Sensory Supports	Graphic Supports	Interactive Supports
Real life objects	Charts	In pairs or partners
Manipulatives	Graphic Organizers	In triands or small groups
Pictures	Tables	In a whole group
Illustrations, diagrams & drawings	Graphs	Using cooperative group
Magazines & Newspapers	Timelines	Structures
Physical activities	Number lines	Internet / Software support
Videos & Film		In the home language

Broadcasts	With mentors
Models & Figures	

Intervention Strategies		
Accommodati ons	Interventions	Modifications
Allow for verbal responses	Multi-sensory techniques	Modified tasks/expectations
Repeat/confir m directions	Increase task structure (e.g. directions, checks for understanding, feedback	Differentiated materials
Permit response provided via computer or electronic device	Increase opportunities to engage in active academic responding	Individualized assessment tools based on student need
Audio Books	Utilize pre reading strategies and activities previews, anticipatory guides, and semantic mapping	Modified assessment grading

Teacher/Student Resources:

Text: Food for Today, McGrawHill Education, 2016

America's Test Kitchen Series
Cake Decorating by Wilton

Unit 3 Basic Cooking Techniques

Standard 9.2

(Consumer, Family, and Life Skills) All students will demonstrate critical life skills in order to be functional members of society.

Big Ideas:

- Identification and understanding the various methods of stovetop cooking is essential to success.
- Knowing the proper tools, equipment, and temperatures, when cooking, helps ensure a positive outcome.

Essential Questions What provocative questions will foster inquiry, understanding, and transfer of learning?	Enduring Understandings What will students understand about the big ideas?
Why is it important to know when and how to use the various cooking methods? Why is it important to use the correct equipment? What are the most important tools in the preparation of many stovetop meals? How are they used? How will critical knife skills be essential in one's culinary training? What will happen if the correct timing and temperature is not taken into consideration?	Students will understand: Techniques used in cooking each have their own advantages and purpose. Understanding the difference between boiling, simmering, frying, stir frying, poaching, roasting, baking, grilling, and broiling will help prepare the student for success in all areas of food preparation. Using the incorrect pan can result in overflows, burning food, and cooking too quickly or too slowly. The correct tools and equipment are essential for safety. Incorrect or unsafe knife usage may result in personal injury or less than ideal food preparation. Timing and temperature are important factors in cooking so that food is not under or overcooked and best results are achieved.
Areas of Focus: Proficiencies (Progress Indicators)	Examples, Outcomes, Assessments
Students will: 9.2.A.1	Instructional Focus:

Apply communications and data analysis to the problem solving and decision making processes in a variety of life situations.

9.2.A.3

Apply the use of symbols, pictures, graphs, objects, and other visual information to a selected project in academic and/or occupational settings.

9.2.C.2

Communicate effectively in a variety of settings with a diverse group of people.

9.2.B.2

Apply project planning and management skills in academic and/or occupational settings.

9.2.F.4

Practice the safe use of tools and equipment.

- Students will be engaged in group recipe preparation.
- Selection of ingredients, preparation of ingredients, and storage (if applicable) of ingredients will be part of each mini-unit.
- Mini-units will consist of the following:
 - Grains (pasta, rice, quinoa, oats)
 - Dairy (milk, yogurt, cheese, creams)
 - Eggs and Breakfast Foods
 - How to cook a variety of styles of eggs
 - Pancakes, waffles, baked donuts
 - Breakfast proteins such as bacon, ham, beans
 - Fruits and Vegetables
 - Vegetarian dishes
- Demonstration of safe knife skills and selection of the correct knife for each purpose.
- Small groups will consist of the following jobs which rotate daily: chef, sous chef, manager, and assistant manager.

Role assignments will ensure that overall goals are met.

Time management within groups is critical for success of recipe, serving food, and cleanup.

Sample Assessments:

- Teacher evaluation of prepared foods.
- End of class Google Classroom assessment.
- Multiple-choice quiz given for each miniunit.
- Individual accountability and positive interdependence will be assessed daily.

Projects/Post Assessment:

Students will evaluate recipes for stove-top recipe, select recipes using given criteria, and prepare recipes following directions. Evaluation will be based on appearance of baked product, taste, time management, and following written directions.

Instructional Strategies

Interdisciplinary Connections

- Mathematics measuring ingredients, doubling and reducing recipe yields
- Science The chemical reactions of various ingredients when cooking.
- English Food preparation vocabulary
- History The history behind various foods and cooking methods.

Technology Integration

- Gather, research and evaluate information (recipes, nutrition, ingredient, etc.) from a variety of sources
- interact and collaborate with peers to solve problems and share information
- Summarize problems using a variety of media

Media Literacy Integration

- Evaluate sources for recipes
- Evaluate product ingredients
- Compare /contrast ingredients in snack foods that are made following a recipe vs purchasing already made

Global Perspectives

- Investigate cultural differences in cooking methods
- Discuss family recipes and customs
- Invite students to share traditional family recipes
- Students will prepare foods representative of many ethnic regions.

- Act as a responsible and contributing community member and employee.
- Attend to financial well-being.
- Consider the environmental, social, and economic impacts of decisions.
- Demonstrate creativity and innovation.
- Utilize critical thinking to make sense of problems and persevere in solving them.
- Model integrity, ethical leadership, and effective management.
- Plan education and career paths aligned to personal goals.
- Use technology to enhance productivity, increase collaboration, and communicate effectively.
- Work productively in teams while using cultural/ global competence.

Supports for English Language Learners		
Sensory Supports	Graphic Supports	Interactive Supports
Real life objects	Charts	In pairs or partners
Manipulatives	Graphic Organizers	In triands or small groups
Pictures	Tables	In a whole group
Illustrations, diagrams & drawings	Graphs	Using cooperative group

Magazines & Newspapers	Timelines	Structures
Physical activities	Number lines	Internet / Software support
Videos & Film		In the home language
Broadcasts		With mentors
Models & Figures		

Intervention Strategies			
Accommodati ons	Interventions	Modifications	
Allow for verbal responses	Multi-sensory techniques	Modified tasks/expectations	
Repeat/confir m directions	Increase task structure (e.g. directions, checks for understanding, feedback	Differentiated materials	
Permit response provided via computer or electronic device	Increase opportunities to engage in active academic responding	Individualized assessment tools based on student need	
Audio Books	Utilize pre reading strategies and activities previews,	Modified assessment grading	

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Teacher Resources:

https://www.youtube.com/watch?v=Xx7sxWI9FNI (how to cook perfect rice)
How to Make Giada's Grilled Vegetable Medley | Food Network
https://www.youtube.com/watch?v=xL3dQHepQxo (Huevos Rancheros)

Unit 4 Nutrition Basics

All students will demonstrate critical life skills in order to be functional members of society.

Big Ideas:

- Making healthy food choices will benefit both physical and emotional health throughout the life cycle.
- An understanding of basic nutrition will help guide making healthy food choices.

Essential Questions What provocative questions will foster inquiry, understanding, and transfer of learning?	Enduring Understandings What will students understand about the big ideas?
What are the six major nutrients and what are their basic functions? What is an RDA? What is a calorie and why is it important to understand how our bodies use calories? What factors determine the number of calories	Students will understand that: Nutrients give energy, are essential for growth, maintenance, and repair of the body, and keep the different systems in the body working smoothly and effectively.
needed each day? What are the dietary guidelines for Americans? What are the food groups and why is learning about the recommended number of servings	RDA's aid in calculating how much of each nutrient is needed daily and are used in nutrition labeling.
important in planning a healthy diet? Why is it important to begin making healthy food choices when you are a teen?	A calorie is a measure of the energy content of food and the number of calories needed daily

depends on age, desired weight, level of activity, and gender.

Dietary guidelines are designed to help all Americans eat a healthier diet and are updated every 5 years.

Food groups are categorized by the major nutrients they contain. Using myplate.gov helps to insure a good balance of these needed nutrients.

Making healthy food choices during the teen years is important for development of mind and body.

Choosing a lifestyle that incorporates healthy food choices will help to prevent obesity, diabetes, lack of energy, and other health related concerns as one grows older.

Areas of Focus: Proficiencies (Progress Indicators)

Students will:

9.2.A.1

Apply communications and data analysis to the problem solving and decision making processes in a variety of life situations.

9.2.A.3

Apply the use of symbols, pictures, graphs, objects, and other visual information to a selected project in academic and/or occupational settings

9.2.E.5

Use comparative shopping techniques for the acquisition of goods and services.

Examples, Outcomes, Assessments

Instructional Focus:

Students will be introduced to the basic nutrients and food groups.

Choose my Plate activities:

Videos

Personal food requirements for teens Games and Quizzes

Nutrient Advertisement Assignment ...each student will select a nutrient and create a google slide advertisement geared to a teenager.

Food diary for 5 days with assessment.

Food habits log with assessment.

Comparison food shopping assignment.

Sample Assessments: Comparison of food diary to recommended requirements

Quiz on the 6 basic nutrients and functions and food groups.

Projects/Post Assessment:

Personal reflection on how making healthy food choices influences personal health, physical fitness, growth, and emotional well being.

Instructional Strategies

Interdisciplinary Connections

- Health- making healthy food choices is important for overall health
- Science- nutrients and functions
- Math- calculating caloric and nutritional needs

Technology Integration

 Use of a variety of technology tools such as Choose My Plate, fitness trackers, and nutritional analysis apps.

Media Literacy Integration

Compare and contrast diets

Global Perspectives

World hunger awareness

- Act as a responsible and contributing community member and employee.
- Attend to financial well-being.
- Consider the environmental, social, and economic impacts of decisions.
- Demonstrate creativity and innovation.
- Utilize critical thinking to make sense of problems and persevere in solving them.

- Model integrity, ethical leadership, and effective management.
- Plan education and career paths aligned to personal goals.
- Use technology to enhance productivity, increase collaboration, and communicate effectively.
- Work productively in teams while using cultural/ global competence.

Supports for English Language Learners				
Sensory Supports	Graphic Supports	Interactive Supports		
Real life objects	Charts	In pairs or partners		
Manipulatives	Graphic Organizers	In triands or small groups		
Pictures	Tables	In a whole group		
Illustrations, diagrams & drawings	Graphs	Using cooperative group		
Magazines & Newspapers	Timelines	Structures		
Physical activities	Number lines	Internet / Software support		
Videos & Film		In the home language		
Broadcasts		With mentors		
Models & Figures				

Intervention Strategies			
Accommodations	Interventions	Modifications	
Allow for verbal	Multi-sensory	Modified	

responses	techniques	tasks/expectation s
Repeat/confirm directions	Increase task structure (e.g. directions, checks for understanding, feedback	Differentiated materials
Permit response provided via computer or electronic device	Increase opportunities to engage in active academic responding	Individualized assessment tools based on student need
Audio Books	Utilize pre reading strategies and activities previews, anticipatory guides, and semantic mapping	Modified assessment grading

Recommended Texts:

Text: Food for Today, McGrawHill Education, 2016

<u>Teacher Resources</u>:

www.dietaryguidelines.gov

 $\underline{https://www.choosemyplate.gov/}$

Text Sources for all:

Food Science and You, Kay Mehas and Sharon Rodgers

Nasco's Puzzle Power, Carol Schmelzel

Curricular Addendum

Career-Ready Practices

CRP1: Act as a responsible and contributing citizen and employee.

CRP2: Apply appropriate academic and technical skills

CRP3: Attend to personal health and financial

Interdisciplinary Connections

- Close Reading of works of art, music lyrics, videos, and advertisements
- Use <u>Standards for Mathematical Practice</u> and <u>Cross-Cutting Concepts</u> in science to support debate/inquiry across thinking processes

well-being.

CRP4: Communicate clearly and effectively and with reason.

CRP5: Consider the environmental, social and economic impacts of decisions.

CRP6: Demonstrate creativity and innovation.

CRP7: Employ valid and reliable research strategies.

CRP8: Utilize critical thinking to make sense of problems and persevere in solving them.

CRP9: Model integrity, ethical leadership and effective management.

CRP10: Plan education and career paths aligned to personal goals.

CRP11:. Use technology to enhance productivity. **CRP12**: Work productively in teams while using cultural global competence.

Instructional Strategies: Supports for English Language Learners:

Sensory Supports	Graphic Supports	Interactive Supports	
Real-life objects (realia)	Charts	In pairs or partners	
Manipulatives	Graphic organizers	In triads or small groups	
Pictures & photographs	Tables	In a whole group	
Illustrations, diagrams, & drawings	Graphs	Using cooperative group	
Magazines & newspapers	Timelines	structures	
Physical activities	Number lines	With the Internet (websites) or	
Videos & films		software programs	
Broadcasts		In the home language	
Models & figures		With mentors	

from https://wida.wisc.edu

Technology Integration

Ongoing:

- Listen to books on CDs, Playaways, videos, or podcasts if available.
- Use document camera or overhead projector for shared reading of texts.

Other:

- Use Microsoft Word, Inspiration, or SmartBoard Notebook software to write the words from their word sorts.
- Use available technology to create concept maps of unit learning.

Media Literacy Integration

 Use multiple forms of print media (including books, illustrations/photographs/artwork, video clips, commercials, podcasts, audiobooks, Playaways, newspapers, magazines) to practice reading and comprehension skills.

Global Perspectives

• The Global Learning Resource Library

Differentiation Strategies:

Accommodations	Interventions	Modifications
Allow for verbal responses	Multi-sensory techniques	Modified tasks/ expectations
Repeat/confirm directions	Increase task structure (e.g., directions, checks for understanding, feedback)	Differentiated materials
Permit response provided via computer or electronic device	Increase opportunities to engage in active academic responding (e.g., writing, reading aloud, answering questions in class)	Individualized assessment tools based on student need
Audio Books	Utilize prereading strategies and activities: previews, anticipatory guides,	Modified assessment grading

	and semantic mapping	