



West Windsor-Plainsboro Regional School District
Culinary Arts Grades 9-12

Unit 1 - Introduction

Content Area: Family and Consumer Science

Course & Grade Level: Culinary Arts, Grades 9-12

Summary and Rationale

Culinary Arts is a yearlong course designed for students with limited experience in food preparation. Throughout the year, students will apply fundamental culinary techniques through hands on lab experiences and other classroom activities. Students will apply cooking methods, ingredient selection and nutritional information in the context of selected food dishes. A variety of cooking techniques and ingredients will be explored and used for preparation in units such as, baked goods, fruits, vegetables, proteins, dairy, and healthful food options, as well as dishes created in friendly class competitions. The course will also include safety and sanitation techniques, taste testing, food demonstrations, and guest speakers.

Recommended Pacing

4 days

NEW JERSEY CORE CURRICULUM CONTENT STANDARDS FOR Career Education and Consumer, Family, and Life Skills

9.2.12 A. Critical Thinking

1. Apply communications and data analysis to the problem-solving and decision making processes in a variety of life situations
2. Describe and apply constructive responses to criticism.

9.2.12 C. Interpersonal Communication

1. Model interpersonal and effective conflict resolution skills.
2. Communicate effectively in a variety of settings with a diverse group of people.

2014 New Jersey Core Curriculum Content Standards - Technology

8.1 Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.

8.1.8.C.1 Collaborate to develop and publish work that provides perspectives on a global problem for discussions with learners from other countries.

8.1.12.C.1 Develop an innovative solution to a real world problem or issue in collaboration with peers and experts, and present ideas for feedback through social media or in an online community.

Interdisciplinary Connections

Health and PE

2.5.12.B.3 Analyze factors that influence intrinsic and extrinsic motivation and employ techniques to enhance individual and team effectiveness.

21st Century Life and Careers

9.3.12.M5.4 Coordinate work TEAMS when producing products to enhance production process and performance.

Career Development

2.A.12.CA1.CA1.4 Learn how to interact and work cooperatively in TEAMS

2.A.12.CA2.CA2.1 Acquire employability skills such as working on a TEAM, problem-solving and organizational skills

2.C.12.CC2.CC2.3 Learn to work cooperatively with others as a TEAM member

Mathematics

F.BF.01.A Determine an explicit expression, a recursive process, or STEPS for calculation from a context.

SOCIAL STUDIES

6.1.12.D.14.f Determine the influence of multicultural beliefs, products and practices in shaping contemporary American culture.

SCIENCE

HS-PS1-5. Apply scientific principles and evidence to provide an explanation about the effects of changing the temperature or concentration of the reacting particles on the rate at which a reaction occurs.

Career Ready Practices

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

CRP4. Communicate clearly and effectively and with reason.

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

Competencies for 21st Century Learners

X	Collaborative Team Member	X	Effective Communicator
X	Globally Aware, Active, & Responsible Student/Citizen	X	Information Literate Researcher
X	Innovative & Practical Problem Solver	X	Self-Directed Learner

Instructional Focus

Unit Enduring Understandings:

- We need and can learn a great deal from each other if we take the time to listen and work together respectfully and cooperatively.
- The preparation of food involves the real life application of skills learned in math, science and social studies classrooms.
- Expectations and rules are important and need to be followed.

Unit Essential Questions:

- What can we learn from each other and our varying cultural backgrounds?
- How are other disciplines connected to the study of culinary arts?
- How can we contribute to the organization and successful function of the foods room?

Skills and objectives:

- Students will be able to:
 - Follow class expectations/rules.
 - Explore implications and consequences of behavior.
 - Maintain an organized notebook.

- Assimilate and access the application of interdisciplinary skills as they relate to the World Cuisine classroom.
- Students will know:
 - Course content and grading system.
 - Class expectations.
 - Homework requirements and procedures.
 - Course and teacher expectations.
 - Connection of foods and cooking to other interdisciplinary areas.

Content - Unit of Study

- Course Outline
- Expectations
- Grading
- Organization of Class Materials
- Team Work
- Organization of Kitchens

Supplemental Unit Resources

- Various teacher generated Handouts
 - Course Syllabus
 - Classroom procedures and grading
 - Ice breaker activity

Unit 2 -Safety, Sanitation and Lab Procedures

Content Area: Family and Consumer Science

Course & Grade Level: Culinary Arts, Grades 9-12

Summary and Rationale

Culinary Arts is a yearlong course designed for students with limited experience in food preparation. Throughout the year, students will apply fundamental culinary techniques through hands on lab experiences and other classroom activities. Students will apply cooking methods, ingredient selection and nutritional information in the context of selected food dishes. A variety of cooking techniques and ingredients will be explored and used for preparation in units such as, baked goods, fruits, vegetables, proteins, dairy, and healthful food options, as well as dishes created in friendly class competitions. The course will also include safety and sanitation techniques, taste testing, food demonstrations, and guest speakers.

In this unit, students will recognize and demonstrate professional safety and sanitation practices according to industry standards. Students will discover the ability to identify ways to prevent cross contamination and time- temperature abuse. Students will understand how to provide a safe environment and how to prevent accidents and injuries.

Recommended Pacing

6 days

National Standards for Family and Consumer Sciences Education

8.2 Demonstrate food safety and sanitation procedures.

8.2.1 Identify characteristics of major foodborne pathogens, their role in causing illness, foods involved in outbreaks, and methods of prevention.

8.2.5 Practice standard personal hygiene and wellness procedures.

8.2.6 Demonstrate proper purchasing, receiving, storage, and handling of both raw and prepared foods.

8.2.7 Demonstrate safe food handling and preparation techniques that prevent cross contamination from potentially hazardous foods and food groups.

8.3 Demonstrate industry standards in selecting, using, and maintaining food production and food service equipment.

8.3.3 Demonstrate procedures for cleaning and sanitizing equipment, serving dishes, glassware, and utensils to meet industry standards and OSHA requirements.

8.3.6 Demonstrate procedures for safe and secure storage of equipment and tools.

8.6 Demonstrate implementation of food service management and leadership functions.

8.6.2 Practice inventory procedures including first in/first out concept, date marking, and specific record keeping.

9.2 Apply risk management procedures to food safety, food testing, and sanitation.

9.2.1 Analyze factors that contribute to food borne illness.

9.2.2 Analyze factors that contribute to food borne illness.

9.2.5 Demonstrate practices and procedures that assure personal and workplace health and hygiene.

9.2.6 Demonstrate practices and procedures that assure personal and workplace health and hygiene.

9.5 Demonstrate use of science and technology advancements in food product development and marketing.

9.5.4 Maintain test kitchen/ laboratory and related equipment and supplies.

9.5.5 Implement procedures that affect quality product performance and sustainability.

9.5.7 Conduct testing for safety of food products, utilizing available technology.

9.6 Demonstrate food science, dietetics, and nutrition management principles and practices.

9.6.9 Utilize Food Code Points of time, temperature, date markings, cross contamination, hand washing, and personal hygiene as criteria for safe food preparation.

14.4 Evaluate factors that affect food safety from production through consumption.

14.4.1 Analyze conditions and practices that promote safe food handling.

14.4.2 Analyze safety and sanitation practices.

14.4.5 Analyze foodborne illness factors, including causes, potentially hazardous foods, and methods of prevention.

14.4.6 Analyze current consumer information about food safety and sanitation.

2014 New Jersey Core Curriculum Content Standards - Technology

8.1 Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.

8.1.8.C.1 Collaborate to develop and publish work that provides perspectives on a global problem for discussions with learners from other countries.

8.1.12.C.1 Develop an innovative solution to a real world problem or issue in collaboration with peers and experts, and present ideas for feedback through social media or in an online community.

Interdisciplinary Connections

HEALTH & PE

2.1.4.C.1 Explain how most diseases and health conditions are preventable.

2.1.4.C.2 Justify how the use of universal precautions, sanitation and waste disposal, proper food handling and storage, and environmental controls prevent diseases and health conditions.

21st Century Life and Careers

9.3.12.M5.4 Coordinate work TEAMS when producing products to enhance production process and performance.

Career Development

2.A.12.CA1.CA1.4 Learn how to interact and work cooperatively in TEAMS
 2.A.12.CA2.CA2.1 Acquire employability skills such as working on a TEAM, problem-solving and organizational skills
 2.C.12.CC2.CC2.3 Learn to work cooperatively with others as a TEAM member

Mathematics

F.BF.01.A Determine an explicit expression, a recursive process, or STEPS for calculation from a context.

ENG LANG ARTS

RST.9-10.3 Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks, attending to special cases or exceptions defined in the text.

Career Ready Practices

CRP1. Act as a responsible and contributing citizen and employee.
 CRP3. Attend to personal health and financial well-being.
 CRP4. Communicate clearly and effectively and with reason.
 CRP5. Consider the environmental, social and economic impacts of decisions.

Competencies for 21st Century Learners

X	Collaborative Team Member	X	Effective Communicator
X	Globally Aware, Active, & Responsible Student/Citizen	X	Information Literate Researcher
X	Innovative & Practical Problem Solver	X	Self-Directed Learner

Instructional Focus

Unit Enduring Understandings:

- Chefs are responsible for maintaining a germ-free environment to ensure a healthy kitchen and dining environment.
- A well-organized workspace leads to better productivity, consistent performance, and a reliable final product.
- Knowledge of efficient and accurate preparation skills will allow chefs to create a product that is appealing both visually and to the palate.

Unit Essential Questions:

- What is the importance of setting high standards for safety and cleanliness in the kitchen lab?
- In what ways can time management be improved upon when preparing a meal or recipe?
- How do preparation skills impact the quality of the end product?

Skills and objectives:

- Students will know:
 - How to properly clean workstation area.
 - The various food borne illnesses that occur in the kitchen environment, and methods of prevention to avoid contamination.
 - The correct temperatures for serving and storing food.
 - How to handle minor kitchen accidents.
 - How to set up and maintain a clean and efficient workstation to allow for a better food preparation process.
- Students will be able to:

- Identify and employ safety and sanitary processes and food safety principals.
- Engage in proper cleaning of the kitchen environment in order to deter cross contamination during the food preparation process.
- Understand the proper cooking temperatures that ensure food is served in a safe manner.
- Demonstrate responsibility for kitchen workstations by creating and maintaining a clean and efficient work area.

Content - Unit of Study

- Food contaminants
 - Identification
 - Prevention
 - Related diseases
- Food storage
 - Temperature
 - Time
- Kitchen accidents
 - Prevention
 - Basic first aide
- Kitchen Workstations
 - Setup
 - Efficiency

Supplemental Unit Resources

- Guide to Good Food (2012)-Chapter 6
- Safety and Sanitation DVD
- www.fightbac.org
- Kitchen Safety and Sanitation Review Packet
- Charts and Posters of Accident/Hazards, washing hands, safety rules and danger zone temperatures.

Unit 3 - Equivalents, Abbreviations, and Measuring

Content Area: Family and Consumer Science

Course & Grade Level: Culinary Arts, Grades 9-12

Summary and Rationale

Culinary Arts is a yearlong course designed for students with limited experience in food preparation. Throughout the year, students will apply fundamental culinary techniques through hands on lab experiences and other classroom activities. Students will apply cooking methods, ingredient selection and nutritional information in the context of selected food dishes. A variety of cooking techniques and ingredients will be explored and used for preparation in units such as, baked goods, fruits, vegetables, proteins, dairy, and healthful food options, as well as dishes created in friendly class competitions. The course will also include safety and sanitation techniques, taste testing, food demonstrations, and guest speakers.

In this unit, students will be able to perform basic math calculations using numbers/fractions. Students will convert recipes to yield smaller and larger quantities based on operational needs. Students will demonstrate measuring and portioning using the appropriate tools.

Recommended Pacing

6 days

National Standards for Family and Consumer Sciences Education

8.3 Demonstrate industry standards in selecting, using, and maintaining food production and food service equipment.

8.3.6 Demonstrate industry standards in selecting, using, and maintaining food production and food service equipment.

8.4 Demonstrate menu planning principles and techniques based on standardized recipes to meet customer needs.

8.4.7 Apply principles of measurement, portion control, conversions, food cost analysis and control, menu terminology, and menu pricing to menu planning.

8.5 Demonstrate professional food preparation methods and techniques for all menu categories to produce a variety of food products that meet customer needs.

8.5.1 Demonstrate professional skills, in safe handling of knives, tools, and equipment.

8.5.2 Demonstrate professional skills for a variety of cooking methods including roasting, broiling, smoking, grilling, sautéing, pan frying, deep frying, braising, stewing, poaching, steaming, and baking using professional equipment and current technologies.

8.5.3 Demonstrate knowledge of portion control and proper scaling and measurement techniques

8.5.12 Demonstrate professional plating, garnishing, and food presentation techniques.

2014 New Jersey Core Curriculum Content Standards - Technology

8.1 Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.

8.1.8.C.1 Collaborate to develop and publish work that provides perspectives on a global problem for discussions with learners from other countries.

8.1.12.C.1 Develop an innovative solution to a real world problem or issue in collaboration with peers and experts, and present ideas for feedback through social media or in an online community.

Interdisciplinary Connections

Language Arts

09-10.RST.03 Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks, attending to special cases or exceptions defined in the text.

11-12.RST.03 Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.

World Languages

7.1.IH.A.06 Analyze and critique readings from culturally authentic materials.

Mathematics

F.BF.01.A Determine an explicit expression, a recursive process, or STEPS for calculation from a context.

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 well-being.

CRP4. Communicate clearly and effectively and with reason.

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

Competencies for 21st Century Learners

X	Collaborative Team Member	X	Effective Communicator
X	Globally Aware, Active, & Responsible Student/Citizen	X	Information Literate Researcher
X	Innovative & Practical Problem Solver	X	Self-Directed Learner

Instructional Focus

Unit Enduring Understandings:

- You need to have a good foundation in the “Basics” to be successful in food preparation.
- Certain tools and equipment are needed for specific tasks.
- Understanding the parts of the recipe aids in the successful preparation of the recipe.
- Accurate measurements are necessary for successfully preparing recipes.
- Knowing food preparation terms will aid in the successful preparation of the recipe.
- Understanding the importance of using a work plan in the successful completion of a lab experience.

Unit Essential Questions:

- What are the preparation techniques and standards for various food items?
- Why is it important to use the correct tool for the task at hand?
- How do you read, interpret, and produce a recipe?
- How will understanding equivalents, abbreviations, and action words help when preparing a recipe?
- Why are the correct measuring techniques important for a successful product?
- What is the lab procedure for classroom lab/kitchen?
- What are the roles of the group members in the lab?

Skills and objectives:

- Students will know:
 - How to choose the correct piece of equipment to facilitate meal preparation more efficiently.
 - How to efficiently plan and use time in the kitchen and work cooperatively with others.
 - Skills that are necessary to prepare foods include math, reading, measuring, cutting, mixing, problem solving and time management.
 - The name, uses, and safety precautions of various kitchen tools and equipment.
 - How to read a recipe and adjust the yield as needed.
 - Standard units of measure and equivalents used in recipe preparations.
 - Proper measuring techniques for basic ingredients.
- Students will be able to:
 - Identify and explain the uses of basic kitchen tools and equipment.
 - Describe how to organize a kitchen for efficiency.
 - Identify the parts of a recipe and read and follow directions.
 - Demonstrate proper measuring methods of dry, solid, and liquid ingredients.
 - Describe management skills for working efficiently in the kitchen.
 - Identify abbreviations and define cooking terms that can be found in recipes.
 - Work in groups effectively and respectfully.
 - Demonstrate problem solving skills as they apply to situations that arise in the foods laboratory.

Content - Unit of Study

- Equipment
 - Identification
 - Ethnic specific tools of the trade
- Measuring •
 - Review of measuring techniques and equipment
- Terminology
- Preparation Skills and procedures
- Reading and following a Recipe

Supplemental Unit Resources

- Guide to Good Food (2012), Chapters 8, 9 and 12
- Worksheets and Activity sheets for review packet
- Teacher demonstrations
- Various measuring labs

Unit 4 - Knife Skills

Content Area: Family and Consumer Science

Course & Grade Level: Culinary Arts, Grades 9-12

Summary and Rationale

Culinary Arts is a yearlong course designed for students with limited experience in food preparation. Throughout the year, students will apply fundamental culinary techniques through hands on lab experiences and other classroom activities. Students will apply cooking methods, ingredient selection and nutritional information in the context of selected food dishes. A variety of cooking techniques and ingredients will be explored and used for preparation in units such as, baked goods, fruits, vegetables, proteins, dairy, and healthful food options, as well as dishes created in friendly class competitions. The course will also include safety and sanitation techniques, taste testing, food demonstrations, and guest speakers.

In this unit, students will discover how to select and care for knives properly. Students will understand the varying uses of knives. Students will learn how to cut foods into a variety of classic culinary shapes.

Recommended Pacing

4 days

National Standards for Family and Consumer Sciences Education

5.5 Demonstrate a work environment that provides safety and security.

5.5.3 Demonstrate safe procedures in the use, care & storage of equipment.

8.2 Demonstrate food safety and sanitation procedures.

8.2.2 Employ food service management safety/sanitation program procedures, including CPR & first aid.

8.2.5 Practice standard personal hygiene & wellness procedures.

8.2.7 Demonstrate safe food handling & preparation techniques that prevent cross contamination from potentially hazardous foods & food groups.

8.3 Demonstrate industry standards in selecting, using, and maintaining food production and food service equipment.

8.3.3 Demonstrate procedures for cleaning & sanitizing equipment, serving dishes, glassware & utensils to meet industry standards & OSHA requirements.

8.3.5 Demonstrate procedures for safe & secure storage of equipment & tools.

8.3.6 Identify a variety of types of equipment for food processing, cooking, holding, storing & serving.

8.5 Demonstrate professional food preparation methods and techniques for all menu categories to produce a variety of food products that meet customer needs.			
8.5.1 Demonstrate professional skills in the safe handling of knives, tools, and equipment.			
9.5 Demonstrate use of science and technology advancements in food product development and marketing.			
9.5.4 Maintain test kitchen/laboratory & related equipment & supplies.			
14.4 Evaluate factors that affect food safety from production through consumption.			
14.4.1 Analyze conditions & practices that promote safe food handling.			
14.4.2 Analyze safety & sanitation practices.			
2014 New Jersey Core Curriculum Content Standards - Technology			
8.1 Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.			
8.1.8.C.1 Collaborate to develop and publish work that provides perspectives on a global problem for discussions with learners from other countries.			
8.1.12.C.1 Develop an innovative solution to a real world problem or issue in collaboration with peers and experts, and present ideas for feedback through social media or in an online community.			
Interdisciplinary Connections			
HEALTH & PE			
2.1.4.C.2 Justify how the use of universal precautions, sanitation and waste disposal, proper food handling and storage, and environmental controls prevent diseases and health conditions.			
ENG LANG ARTS			
RST.9-10.3 Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks, attending to special cases or exceptions defined in the text.			
RST.11-12.3 Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.			
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 well-being.			
CRP4. Communicate clearly and effectively and with reason.			
CRP5. Consider the environmental, social and economic impacts of decisions.			
Competencies for 21st Century Learners			
X	Collaborative Team Member	X	Effective Communicator

X	Globally Aware, Active, & Responsible Student/Citizen	X	Information Literate Researcher
X	Innovative & Practical Problem Solver	X	Self-Directed Learner

Instructional Focus

Unit Enduring Understandings:

- Kitchen safety practices will keep individuals safe at home, school & work.

Unit Essential Questions:

- How may food preparation skills help us manage time while creating an end product that is appealing visually and to the palate?

Skills and objectives:

- Students will know:
 - How to choose the correct piece of equipment to facilitate meal preparation more efficiently.
 - Skills that are necessary to prepare foods include math, reading, measuring, cutting, mixing, problem solving and time management.
- Students will be able to:
 - Navigate the kitchen and apply all safety procedures in lab.
 - Discuss the importance of kitchen safety, food safety and sanitation.
 - Demonstrate proper techniques using various types of knives.

Content - Unit of Study

- Main topics to be covered:
 - Basic Knife Skills: Discover the correct ways to hold and guide a knife.
 - Precision Cuts: Learn both basic and advanced cuts used every day in the professional kitchen.
 - Mis en Place: Gain the knowledge needed to set up your workplace properly to become more efficient and effective in the kitchen.
- Other topics may include:
 - The Parts of a Knife
 - Types of Knives
 - Knife Grips and Fulcrum Placement

Supplemental Unit Resources

- Guide to Good Food (2012), Chapters 8, 9 and 12
- Worksheets and Activity sheets for review packet
- Teacher demonstrations
- Various cutting labs to work on specific knife cuts

Unit 5 - Baking

Content Area: Family and Consumer Science

Course & Grade Level: Culinary Arts, Grades 9-12

Summary and Rationale

Culinary Arts is a yearlong course designed for students with limited experience in food preparation. Throughout the year, students will apply fundamental culinary techniques through hands on lab experiences and other classroom activities. Students will apply cooking methods, ingredient selection and nutritional information in the context of selected food dishes. A variety of cooking techniques and ingredients will be explored and used for preparation in units such as, baked goods, fruits, vegetables, proteins, dairy, and healthful food options, as well as dishes created in friendly class competitions. The course will also include safety and sanitation techniques, taste testing, food demonstrations, and guest speakers.

In this unit, students will explore the broad category of breads, pies, cookies and cakes. Students will differentiate between quick breads and yeast breads and give examples. Students will be able to prepare different types of pies, cookies and cake batters. Students will identify the functions of icings and determine which are best suited for different baked goods.

Recommended Pacing

46 days

National Standards for Family and Consumer Sciences Education

4.3 Demonstrate integration of curriculum and instruction to meet developmental needs and interests of children, youth and adults, considering gender, ethnicity, geographical, cultural, and global influences.

4.3.4 Demonstrate a variety of teaching methods to meet individual needs of learners.

8.1 Analyze career paths within the food production and food services industries.

8.1.1 Explain the roles, duties & functions of individuals engaged in food production & services careers.

8.5 Demonstrate professional food preparation methods and techniques for all menu categories to produce a variety of food products that meet customer needs.

8.5.2 Demonstrate professional skills for a variety of cooking methods including roasting, broiling, smoking, grilling, sautéing, pan frying, deep frying, braising, stewing, poaching, steaming, and baking using professional equipment and current technologies.

8.5.3 Demonstrate knowledge of portion control & proper scaling & measurement techniques.

8.5.10 Prepare breads, baked goods & desserts using safe handling & professional preparation techniques.

8.7 Demonstrate the concept of internal and external customer service.

8.7.5 Demonstrate sensitivity to diversity & special needs.

9.5 Demonstrate use of science and technology advancements in food product development and marketing.

9.5.6 Conduct sensory evaluation of food products.

9.7 Demonstrate principles of food biology and chemistry.

9.7.7 Analyze the impact of food presentation methods & techniques on nutrient value, safety & sanitation & consumer appeal of food & products.

13.3 Demonstrate communication skills that contribute to positive relationships.

13.3.2 Demonstrate verbal & nonverbal behaviors & attitudes that contribute to effective communication.

13.5 Demonstrate teamwork and leadership skills in the family, workplace, and community.

13.5.3 Demonstrate strategies that utilize the strengths & minimize the limitations of team members.

13.5.4 Demonstrate techniques that develop team & community spirit.

13.5.5 Demonstrate ways to organize & delegate responsibilities.

2014 New Jersey Core Curriculum Content Standards - Technology

8.1 Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.

8.1.8.C.1 Collaborate to develop and publish work that provides perspectives on a global problem for discussions with learners from other countries.

8.1.12.C.1 Develop an innovative solution to a real world problem or issue in collaboration with peers and experts, and present ideas for feedback through social media or in an online community.

Interdisciplinary Connections

HEALTH & PE

2.5.12.B.3 Analyze factors that influence intrinsic and extrinsic motivation and employ techniques to enhance individual and team effectiveness.

ENG LANG ARTS

RST.9-10.3 Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks, attending to special cases or exceptions defined in the text.

RST.11-12.3 Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.

MATH

G-MG Modeling with Geometry A. Apply geometric concepts in modeling situations.

SOCIAL STUDIES

6.1.12.D.14.f Determine the influence of multicultural beliefs, products and practices in shaping contemporary American culture.

SCIENCE

HS-PS3-4 Plan & conduct an investigation to provide evidence that the transfer of thermal energy when two components of different temperatures are combined within a closed system results in a more uniform energy distribution among the components in the system.

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 well-being.
CRP4. Communicate clearly and effectively and with reason.
CRP5. Consider the environmental, social and economic impacts of decisions.

Competencies for 21st Century Learners

X	Collaborative Team Member	X	Effective Communicator
X	Globally Aware, Active, & Responsible Student/Citizen	X	Information Literate Researcher
X	Innovative & Practical Problem Solver	X	Self-Directed Learner

Instructional Focus

Unit Enduring Understandings:

- Each ingredient has a specific purpose.
- Leavening agents produce chemical changes in a baked product that results in a physical change.
- Different mixing methods effect product results.
- Ingredient changes can increase the nutritional profile of a baked product.
- Breads and all their variations have evolved throughout cultures in history.
- Mastering baked goods such as breads and cookies require a thorough understanding of science coupled with much practice of technique.
- Baked goods can fit into a healthy eating plan.

Unit Essential Questions:

- What is the function of each ingredient in a baked product?
- What are the different mixing methods?
- What are the different types of leavening agents in baked products?
- How can you increase the nutritional value of a baked product?
- What are ways you enhance a baked product?
- How do the choice of ingredients, ratios and procedures affect the outcome and quality of breads?
- How are breads classified?
- How are cookies classified?
- What factors must be considered when preparing, cooking and storing baked goods?

Skills and objectives:

- The Students will know:
 - The functions of ingredients in a baked product.
 - The development of gluten is determined by the type of mixing methods used.
 - The different types, varieties and main nutrients of baked products.
 - How to increase the nutritional value of baked products.
- The Students should be able to:

- Demonstrate the different mixing methods.
- Identify the main nutrients in a baked good and how to increase their nutritional value.
- Examine how the leavening agents work in the laboratory.
- Apply all principles of safety and sanitation in the lab when preparing baked goods.
- Identify ingredients and explain the methods used in a variety of quick and yeast breads.
- Produce a variety of cakes, pies, cookies, quick and yeast breads using proper techniques.
- Evaluate characteristics of baked products to determine quality.
- Identify types of cookies and examples of each.

Content - Unit of Study

- Topics may Include:
 - Quick Breads
 - Yeast Breads
 - Cakes
 - Pies
 - Cookies
- Each topic may explore:
 - Function of Ingredients
 - Types
 - Preparation
 - Baking & storing techniques

Supplemental Unit Resources

- Guide to Good Food (2012)-Textbook
- Baking DVD
- www.youtube.com
- Teacher demonstrations
- Instructor compiled educational reference materials, worksheets and recipes.
- Fully equipped kitchens, pantry and groceries.

Unit 6 - USDA Food Groups

Content Area: Family and Consumer Science

Course & Grade Level: Culinary Arts, Grades 9-12

Summary and Rationale

Culinary Arts is a yearlong course designed for students with limited experience in food preparation. Throughout the year, students will apply fundamental culinary techniques through hands on lab experiences and other classroom activities. Students will apply cooking methods, ingredient selection and nutritional information in the context of selected food dishes. A variety of cooking techniques and ingredients will be explored and used for preparation in units such as, baked goods, fruits, vegetables, proteins, dairy, and healthful food options, as well as dishes created in friendly class competitions. The course will also include safety and sanitation techniques, taste testing, food demonstrations, and guest speakers.

In this unit, students will learn about the broad categories of fruits, vegetables, grains, eggs, dairy, meat and poultry. Students will examine each food group and how they contribute to health and wellness. Students will outline basic techniques for cooking and preparing food from all food groups. Students will have an opportunity to make examples of food items from all food groups.

Recommended Pacing

49 days

National Standards for Family and Consumer Sciences Education

2.1 Demonstrate management of individual and family resources such as food, clothing, shelter, health care, recreation, transportation, time, and human capital.

2.1.1 Apply time management, organizational, and process skills to prioritize tasks and achieve goals.

2.1.3 Analyze decisions about providing safe and nutritious food for individuals and families.

2.5 Analyze relationships between the economic system and consumer actions in a global context.

2.5.2 Analyze individual & family roles in the economic system.

2.5.3 Analyze economic effects of laws and regulations that pertain to consumers & providers of services.

4.4 Analyze relationships between the economic system and consumer actions in a global context.

4.4.4 Plan safe & healthy meals & snacks that meet USDA standards.

6.1 Analyze the effects of family as a system on individuals and society

6.1.3 Analyze global influences on today's families.

6.1.6 Analyze the effects on individuals & families of change & transitions over the life span.

8.5 Demonstrate professional food preparation methods and techniques for all menu categories to produce a variety of food products that meet customer needs.

8.5.2 Demonstrate professional skill for a variety of cooking methods including roasting, broiling, smoking, grilling, sautéing, pan frying, deep frying, braising, stewing, poaching, steaming & baking using professional equipment & current technologies.

8.5.4 Apply the fundamentals of time, temperature & cooking methods to cooking, cooling, reheating & holding a variety of foods.

8.5.7 Prepare various fruits, vegetables, starches, legumes, dairy products, fats & oils using safe handling & professional preparation techniques.

8.5.8 Prepare various salads, dressings, marinades & spices using safe handling & professional preparation techniques.

8.5.9 Prepare sandwiches, canapes & appetizers using safe handling & professional preparation techniques.

8.5.11 Prepare breakfast meats, eggs, cereals & batter products using safe handling & professional preparation techniques.

8.5.14 Demonstrate cooking methods that increase nutritional value, lower calorie & fat content & utilize herbs & spices to enhance flavor.

9.5 Demonstrate use of science and technology advancements in food product development and marketing.

9.5.7 Conduct testing for safety of food products, utilizing available technology.

13.3 Demonstrate communication skills that contribute to positive relationships.

13.3.3 Demonstrate effective listening & feedback techniques.

13.3.4 Analyze strategies to overcome communication barriers in family, community & work settings.

13.5 Demonstrate teamwork and leadership skills in the family, workplace, and community.

13.5.1 Create an environment that encourages & respects the ideas, perspectives & contributions of all group members.

13.5.2 Demonstrate strategies to motivate, encourage & build trust in group members.

13.5.7 Demonstrate processes for cooperating, compromising & collaborating.

2014 New Jersey Core Curriculum Content Standards - Technology

8.1 Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.

8.1.8.C.1 Collaborate to develop and publish work that provides perspectives on a global problem for discussions with learners from other countries.

8.1.12.C.1 Develop an innovative solution to a real world problem or issue in collaboration with peers and experts, and present ideas for feedback through social media or in an online community.

Interdisciplinary Connections

ENG LANG ARTS

RST.9-10.4 Determine the meaning of symbols, key terms & other domain-specific words & phrases as they are used in a specific scientific or technical context relevant to grades 9-10 texts & topics.

RH.9-10.5 Analyze how a text uses structure to emphasize key points or advance an explanation or analysis.

NJSLSA.R4 Interpret words & phrases as they are used in a text, including determining technical, connotative & figurative meanings & analyze how specific word choices shape meaning or tone.

SCIENCE

HS-LS1-5 Use a model to illustrate the role of cellular division and differentiation in producing & maintaining complex organisms.

HS-LS1-6 Construct & revise an explanation based on evidence for how carbon, hydrogen & oxygen from sugar molecules may combine with other elements to form amino acids &/or other large carbon-based molecules.

HS-LS1-7 Use a model to illustrate that cellular respiration is a chemical process whereby the bonds of food molecules & oxygen molecules are broken & the bonds in new compounds are formed resulting in a net transfer of energy.

HS-PS1-5. Apply scientific principles and evidence to provide an explanation about the effects of changing the temperature or concentration of the reacting particles on the rate at which a reaction occurs.

WORLD LANGUAGE

7.1.NM.A.1 Recognize familiar spoken or written words & phrases contained in culturally authentic materials using electronic information & other sources related to targeted themes.

7.1.NM.A.3 Recognize a few common gestures & cultural practices associated with the target culture(s).

7.1.NM.B.5 Exchange information using words, phrases, and short sentences practiced in class on familiar topics or on topics.

Mathematics

F.BF.01.A Determine an explicit expression, a recursive process, or STEPS for calculation from a context.

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 well-being.

CRP4. Communicate clearly and effectively and with reason.

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

Competencies for 21st Century Learners

X	Collaborative Team Member	X	Effective Communicator
X	Globally Aware, Active, & Responsible Student/Citizen	X	Information Literate Researcher
X	Innovative & Practical Problem Solver	X	Self-Directed Learner

Instructional Focus

Unit Enduring Understandings:

- Different parts of the grain kernel have different nutritional value.
- Processing can affect the nutrient value of a grain.
- Nutrition is important to keep in mind when choosing grain products.
- There are a variety of cooking methods used in the preparation of grains.
- Fruits and vegetables are the edible part of a plant.
- Fruits and vegetables add color, flavor and nutrients to a balanced diet.
- Fruits and vegetables in season are highest in nutritional value, quality and economic value.
- Eggs are a convenient and inexpensive source of complete protein.
- Eggs have a multitude of uses in the food preparation process, both as a main ingredient and as a supplementary addition to recipes.
- Dairy products and their substitutions can be purchased in a variety of forms.
- Cooking with dairy products takes time and patience to achieve optimal results
- Meat, Poultry and eggs are sources of protein for the body.
- Meats and poultry are classified according to age.
- There are several different cooking methods used for meats and poultry.
- Special handling and sanitation techniques are needed in the handling of meats and poultry to avoid food borne illnesses.

Unit Essential Questions:

- What are the parts of the grain and what nutrients do they provide?
- What happens to a grain once it has been processed?
- What nutrients do different grains provide?
- How are grains used in food preparation?
- How does cooking affect grain products?
- How do you identify ripe fruits and vegetables?
- How do cooking techniques affect the texture, flavor, color and nutritional value of fruits & vegetables?
- How can eggs contribute nutritionally to a variety of different diet parameters?
- How do you identify, select, store and use dairy products?
- What nutritional components are found in dairy products?
- What nutrients are provided by meats, poultry and other proteins?
- How are meats, poultry and other proteins identified, selected, used and stored?
- What are the different ways to prepare meats, poultry and other proteins?
- Why are proper cooking techniques important when preparing different cuts of meat?
- Why is the temperature of cooking meats, poultry and eggs important?

Skills and objectives:

- The students will know:
 - The parts of the grain, the nutrients they provide, and how to prepare a variety of grains.
 - How to identify ripe fruits and vegetables and use the proper cooking techniques.
 - The parts and functions of an egg, cooking and storage methods and nutritional value.
 - The nutritional components of dairy products and how to identify, select, store and use dairy products in various recipes.
 - The nutritional value of meats, poultry and other proteins and how they are identified, selected, used and stored.
 - The proper cooking techniques and temperature when working with various cuts of meat, poultry, eggs.

- The Students should be able to:
 - Identify grain products, their uses, and explain how to select and store grains.
 - Explain the value of grains in the diet.
 - Describe and demonstrate methods for preparing, cooking and serving grains.
 - Identify classifications and available forms of fruits and vegetables.
 - Relate specific characteristics of fruits and vegetables to ideal storage conditions.
 - Describe different methods and techniques used when cooking fruits and vegetables.
 - Identify the parts and functions of an egg.
 - Apply principles of safety and sanitation to egg cookery.
 - Demonstrate various cooking techniques of eggs.
 - Define what dairy products are and cite examples.
 - Explain how dairy products are produced.
 - Identify the nutrients found in dairy products.
 - Explain the nutritional role of meats and protein in the diet.
 - Describe and demonstrate methods for preparing and cooking meat.

Content - Unit of Study

- Topics may include:
 - Grains
 - Fruit and Vegetables
 - Eggs
 - Dairy
 - Protein
- Within each topic, students will look at:
 - Identification
 - Classification
 - Purchase and storage
 - Nutrients
 - Production process
 - Cooking properties and preparation
 - Substitutions
 - Nutritive Value
 - Dietary concerns

Supplemental Unit Resources

- Guide to Good Food (2012)-Textbook
- Various cooking DVDs
- www.youtube.com
- Teacher demonstrations
- Instructor compiled educational reference materials, worksheets and recipes.
- Fully equipped kitchens, pantry and groceries.

Unit 7 - Nutrition & Wellness

Content Area: Family and Consumer Science

Course & Grade Level: Culinary Arts, Grades 9-12

Summary and Rationale

Culinary Arts is a yearlong course designed for students with limited experience in food preparation. Throughout the year, students will apply fundamental culinary techniques through hands on lab experiences and other classroom activities. Students will apply cooking methods, ingredient selection and nutritional information in the context of selected food dishes. A variety of cooking techniques and ingredients will be explored and used for preparation in units such as, baked goods, fruits, vegetables, proteins, dairy, and healthful food options, as well as dishes created in friendly class competitions. The course will also include safety and sanitation techniques, taste testing, food demonstrations, and guest speakers.

During this unit, students will explore the nutritional value of the different food groups and how food is a vital part of a healthy lifestyle.

Recommended Pacing

10 days

National Standards for Family and Consumer Sciences Education

7.4 Analyze the impact of conditions that could influence the well-being of individuals and families.

7.4.1 Investigate health, wellness & safety issues of individual & families with a variety of conditions that could influence their well-being.

7.4.3 Analyze personal, social, emotional, economic, vocational, educational & recreational issues of individuals & family conditions that influence their well-being.

9.3 Evaluate nutrition principles, food plans, preparation techniques and specialized dietary plans.

9.3.1 Analyze nutrient requirements across the life span addressing the diversity of people, culture & religions.

9.3.2 Analyze nutritional data.

9.3.3 Apply principles of food production to maximize nutrient retention in menus.

9.3.6 Critique the selection of foods to promote a healthy lifestyle.

9.3.7 Plan menus, applying the exchange system to meet various nutrient needs.

9.4 Apply basic concepts of nutrition and nutrition therapy in a variety of settings, considering social, geographical, cultural, and global influences.

9.4.1 Analyze nutritional needs of individuals.

9.4.4 Construct a modified diet based on nutritional needs & health conditions.
9.4.5 Design instruction on nutrition to promote wellness & disease prevention.
14.1 Analyze factors that influence nutrition and wellness practices across the life span.
14.1.3 Investigate the governmental, economic & technological influences on food choices & practices.
14.1.4 Analyze the effects of global, regional & local events & conditions on food choices & practices.
14.1.5 Analyze legislation & regulations related to nutrition & wellness.
14.2 Examine the nutritional needs of individuals and families in relation to health and wellness across the life span
14.2.1 Evaluate the effect of nutrition on health, wellness & performance.
14.2.2 Analyze the relationship of nutrition & wellness & performance.
14.2.3 Analyze the effects of food & diet fads, food addictions & eating disorders on wellness.
14.2.4 Analyze sources of food & nutrition information, including food labels, related to health & wellness.
14.3 Demonstrate ability to acquire, handle, and use foods to meet nutrition and wellness needs of individuals and families across the life span.
14.3.1 Apply current dietary guidelines in planning to meet nutrition & wellness needs.
14.3.2 Design strategies that address the health & nutritional recommendation for individuals & families, including those with special needs.
14.3.3 Demonstrate ability to select, store, prepare & serve nutritious, aesthetically pleasing food & food product.
14.3.4 Evaluate policies & practices that impact food security, sustainability, food integrity & nutrition & wellness of individuals & family.
2014 New Jersey Core Curriculum Content Standards - Technology
8.1 Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.
8.1.8.C.1 Collaborate to develop and publish work that provides perspectives on a global problem for discussions with learners from other countries.
8.1.12.C.1 Develop an innovative solution to a real world problem or issue in collaboration with peers and experts, and present ideas for feedback through social media or in an online community.
Interdisciplinary Connections
HEALTH & PE
2.1.12.A.1 Analyze the role of personal responsibility in maintaining & enhancing personal, family, community & global wellness.

- 2.1.2.B.1 Explain why some foods are healthier to eat than others.
- 2.1.2.B.2 Explain how foods on MyPlate differ in nutritional content and value.
- 2.1.2.B.3 Summarize information about food found on product labels.
- 2.1.4.B.1 Explain how healthy eating provides energy, helps to maintain a healthy weight, lowers risk of disease, and keeps body systems functioning effectively.
- 2.1.4.B.2 Differentiate between healthy and unhealthy eating practices.
- 2.1.4.B.3 Create a healthy meal based on nutritional content, value, calories, and cost.
- 2.1.4.B.4 Interpret food product labels based on nutritional content.
- 2.1.6.B.1 Determine factors that influence food choices and eating patterns.
- 2.1.6.B.2 Summarize the benefits and risks associated with nutritional choices, based on eating patterns.
- 2.1.6.B.3 Create a daily balanced nutritional meal plan based on nutritional content, value, calories, and cost.
- 2.1.6.B.4 Compare and contrast nutritional information on similar food products in order to make informed choices.
- 2.1.8.B.1 Analyze how culture, health status, age, and eating environment influence personal eating patterns and recommend ways to provide nutritional balance.
- 2.1.8.B.2 Identify and defend healthy ways for adolescents to lose, gain, or maintain weight.
- 2.1.8.B.4 Analyze the nutritional values of new products and supplements.
- 2.2.12.A.3 Analyze the impact of technology on interpersonal communication in supporting wellness and a healthy lifestyle.
- 2.2.12.B.2 Evaluate the impact of individual and family needs on the development of a personal wellness plan and address identified barriers.

ENG LANG ARTS

- RST.9-10.4 Determine the meaning of symbols, key terms & other domain-specific words & phrases as they are used in a specific scientific or technical context relevant to grades 9-10 texts & topics.
- RH.9-10.5 Analyze how a text uses structure to emphasize key points or advance an explanation or analysis.
- NJSLSA.R4 Interpret words & phrases as they are used in a text, including determining technical, connotative & figurative meanings & analyze how specific word choices shape meaning or tone.

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 well-being.
- CRP4. Communicate clearly and effectively and with reason.
- CRP5. Consider the environmental, social and economic impacts of decisions.

Competencies for 21st Century Learners

X	Collaborative Team Member	X	Effective Communicator
X	Globally Aware, Active, & Responsible Student/Citizen	X	Information Literate Researcher
X	Innovative & Practical Problem Solver	X	Self-Directed Learner

Instructional Focus

Unit Enduring Understandings:

- Nutrition & wellness practices determine the well-being of individuals, families & communities.
- Developing & maintaining wellness requires ongoing evaluation of local, regional & global factors impacting health.
- A healthy diet consists of the five food groups.
- The Dietary Guidelines are designed to help Americans make healthy food choices.
- A personal eating plan can be based on calorie consumption.
- Age, gender, and physical activity determines caloric intake.

Unit Essential Questions:

- How do our decisions relating to food impact our families, communities & the world around us?
- How does an understanding of food & essential health concepts impact one's state of wellness now & in the future?
- What are the Dietary Guidelines?
- How does age, gender, and physical activity influence the recommended caloric consumption.

Skills and objectives:

- The students will know:
 - The five food groups.
 - How to develop a personal eating plan.
 - Calorie consumption is based on age, gender, and physical activity level.
 - The portions of food consumed must be compared to recommended servings.
 - How the Dietary Guidelines promote good health for Americans.
- The Students should be able to:
 - Sketch and explain My Plate.
 - Identify USDA recognized food groups and appropriate Recommended Daily Allowances.
 - Interpret and explain information on food labels.
 - Identify different eating disorders including signs, symptoms & treatments.

Content - Unit of Study

Topics may include:

- USDA - My Plate, Food Groups, Portion & Serving Sizes
- Food Labels
- Eating Disorders

Supplemental Unit Resources

- Guide to Good Food (2012)-Textbook
- Various nutrition DVDs
- www.youtube.com
- USDA website
- Teacher demonstrations
- Instructor compiled educational reference materials, worksheets and recipes.
- Fully equipped kitchens, pantry and groceries.

Unit 8 - Competition of Culinary Knowledge

Content Area: Family and Consumer Science

Course & Grade Level: Culinary Arts, Grades 9-12

Summary and Rationale

Culinary Arts is a yearlong course designed for students with limited experience in food preparation. Throughout the year, students will apply fundamental culinary techniques through hands on lab experiences and other classroom activities. Students will apply cooking methods, ingredient selection and nutritional information in the context of selected food dishes. A variety of cooking techniques and ingredients will be explored and used for preparation in units such as, baked goods, fruits, vegetables, proteins, dairy, and healthful food options, as well as dishes created in friendly class competitions. The course will also include safety and sanitation techniques, taste testing, food demonstrations, and guest speakers.

During this unit, students will demonstrate their knowledge of culinary arts through different avenues including cooking competitions that require the skills they learned throughout the year.

Recommended Pacing

10 days

National Standards for Family and Consumer Sciences Education

2.1 Demonstrate management of individual and family resources such as food, clothing, shelter, health care, recreation, transportation, time, and human capital.

2.1.1 Apply time management, organizational, and process skills to prioritize tasks and achieve goals.

2.1.3 Analyze decisions about providing safe and nutritious food for individuals and families.

8.2 Demonstrate food safety and sanitation procedures.

8.2.5 Practice standard personal hygiene and wellness procedures.

8.3 Demonstrate industry standards in selecting, using, and maintaining food production and food service equipment.

8.3.6 Demonstrate industry standards in selecting, using, and maintaining food production and food service equipment.

8.5 Demonstrate professional food preparation methods and techniques for all menu categories to produce a variety of food products that meet customer needs.

8.5.1 Demonstrate professional skills, in safe handling of knives, tools, and equipment.

8.5.2 Demonstrate professional skills for a variety of cooking methods including roasting, broiling, smoking, grilling, sautéing, pan frying, deep frying, braising, stewing, poaching, steaming, and baking using professional equipment and current technologies.

8.5.3 Demonstrate knowledge of portion control and proper scaling and measurement techniques

8.5.4 Apply the fundamentals of time, temperature & cooking methods to cooking, cooling, reheating & holding a variety of foods.

8.5.7 Prepare various fruits, vegetables, starches, legumes, dairy products, fats & oils using safe handling & professional preparation techniques.

8.5.8 Prepare various salads, dressings, marinades & spices using safe handling & professional preparation techniques.

8.5.9 Prepare sandwiches, canapes & appetizers using safe handling & professional preparation techniques.

8.5.11 Prepare breakfast meats, eggs, cereals & batter products using safe handling & professional preparation techniques.

8.5.12 Demonstrate professional plating, garnishing, and food presentation techniques.

13.3 Demonstrate communication skills that contribute to positive relationships.

13.3.2 Demonstrate verbal & nonverbal behaviors & attitudes that contribute to effective communication.

13.5 Demonstrate teamwork and leadership skills in the family, workplace, and community.

13.5.5 Demonstrate ways to organize & delegate responsibilities.

2014 New Jersey Core Curriculum Content Standards - Technology

8.1 Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.

8.1.8.C.1 Collaborate to develop and publish work that provides perspectives on a global problem for discussions with learners from other countries.

8.1.12.C.1 Develop an innovative solution to a real world problem or issue in collaboration with peers and experts, and present ideas for feedback through social media or in an online community.

Interdisciplinary Connections

Health and PE

2.5.12.B.3 Analyze factors that influence intrinsic and extrinsic motivation and employ techniques to enhance individual and team effectiveness.

21st Century Life and Careers

9.3.12.M5.4 Coordinate work TEAMS when producing products to enhance production process and performance.

Career Development

2.A.12.CA1.CA1.4 Learn how to interact and work cooperatively in TEAMS

2.A.12.CA2.CA2.1 Acquire employability skills such as working on a TEAM, problem-solving and organizational skills

2.C.12.CC2.CC2.3 Learn to work cooperatively with others as a TEAM member

WORLD LANGUAGE

7.1.NM.A.1 Recognize familiar spoken or written words & phrases contained in culturally authentic materials using electronic information & other sources related to targeted themes.

7.1.NM.A.3 Recognize a few common gestures & cultural practices associated with the target culture(s).

7.1.NM.B.5 Exchange information using words, phrases, and short sentences practiced in class on familiar topics or on topics.

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 well-being.
 CRP4. Communicate clearly and effectively and with reason.
 CRP5. Consider the environmental, social and economic impacts of decisions.

Competencies for 21st Century Learners

X	Collaborative Team Member	X	Effective Communicator
X	Globally Aware, Active, & Responsible Student/Citizen	X	Information Literate Researcher
X	Innovative & Practical Problem Solver	X	Self-Directed Learner

Instructional Focus

Unit Enduring Understandings:

- The preparation of food involves the real life application of skills learned in math, science and social studies classrooms.
- You need to have a good foundation in the “Basics” to be successful in food preparation.

Unit Essential Questions:

- How are other disciplines connected to the study of culinary arts?
- How will the study and understanding of all previous units be put into application?

Skills and objectives:

- Student will know:
 - How to set up and maintain a clean and efficient workstation to allow for a better food preparation process.
 - How to work within the time constraints of a competition
 - The various food borne illnesses that occur in the kitchen environment, and methods of prevention to avoid contamination, including the correct temperatures for serving food.
 - How to choose the correct piece of equipment to facilitate meal preparation more efficiently.
 - Skills that are necessary to prepare foods include math, reading, measuring, cutting, mixing, problem solving and time management.
- Students will be able to:
 - Work independent of adult help and collaborate with peers to plan and prepare a meal.
 - Combine understanding and mastery of the tools, techniques, and concepts covered throughout the year.
 - Reflect on their personal level of mastery of the skills and techniques taught in the kitchen classroom and on their own strengths and areas for improvement.
 - Discuss the purpose of decoration and presentation when plating.
 - Discuss culinary competitions and explain how to prepare for a culinary competition.
 - Demonstrate professional knife skills as used in the professional kitchen.
 - Demonstrate professional understanding of food safety and sanitation.
 - Demonstrate professional level proficiency in the planning and preparation of a meal.

Content - Unit of Study

- Student will have to work with their team to plan and prepare a spontaneous meal without adult help.

- Demonstrate an overall understanding of kitchen standards for tools, techniques, and concepts.
- Apply their knowledge of skills and techniques and assess their contributions to the team including their strengths and areas for improvement.

Supplemental Unit Resources

- Food Network website
 - Teacher demonstrations
 - Instructor compiled educational reference materials, worksheets and recipes.
 - Fully equipped kitchens, pantry and groceries.
-