Career & Technical Education
Curriculum Alignment with
Common Core ELA & Math Standards

Culinary I
CULINARY ARTS I

Course Description:
This advanced course allows students to increase competencies in a variety of food preparation techniques. Emphasis will be placed on food presentation, garnishing, menu planning and the skills necessary to prepare for a career in the culinary arts profession. Leadership development will be provided through the Family, Career and Community Leaders of America.

Grade Level: 11-12   Credits: 1.0 – 3.0

Technical Content / Process

Students will:

1. assess the impact of the hospitality industry on local and state economies.
2. analyze and revise an employability portfolio.
3. analyze the effect that career demands have on family life.
4. research the roles of individuals engaged in culinary services.
5. apply critical and creative thinking, logical reasoning and problem solving skills in the field.
6. demonstrate personal and interpersonal skills that enhance working relationships and obtaining jobs i.e. employability skills.
7. use accepted industry terminology and technical information.
8. practice grooming and dress requirements of the industry.
9. demonstrate knowledge of quality customer service.
10. demonstrate table setting and food presentation techniques.
11. use computer based menu systems to create menu layout and design.
12. outline steps in establishing an entrepreneurial business such as catering.
13. analyze cost and evaluate its relationship to profit.
14. explore entrepreneurial opportunities and develop a marketing plan.
15. demonstrate use of industry equipment, tools and supplies.
16. operate & maintain tools and equipment following safety procedures and OSHA requirements.
17. demonstrate skills in knife, tool and equipment handling.
18. demonstrate proper weighing and measuring techniques.
19. practice basic safety (first aid/CPR skills).
20. demonstrate food handling principles.
21. practice inventory procedures including first in/first out concept.
22. examine the applicability of convenience food items.
23. apply menu-planning principles to develop and modify menus.
24. demonstrate a variety of cooking methods (i.e. dry & moist).
25. prepare various meats, seafood and poultry.
26. prepare various stocks, soups, sauces and gravies.
27. prepare various fruits, vegetables, pasta, and breakfast foods.
28. prepare canapés, appetizers, hors d’oeuvres, and garde manger.
29. evaluate options when using seasonings and flavorings.
30. apply principles of food preparation to produce a variety of food products and beverages for quantity cooking for special events.
31. apply the fundamentals of baking to a variety of products.
32. prepare a variety of gourmet foods including international cuisine.
33. assess employment opportunities and preparation requirements.
34. demonstrate written, verbal and non-verbal communication skills.
35. apply time management skills.
36. utilize activities of the Family, Career and Community Leaders of America student organization as an integral component of course content and leadership development.
37. apply math, science, English/language arts, and communication skills within technical content.
38. practice and implement HACCP concepts.
39. opportunities provided for acquiring industry certifications (KOSSA, AAFCS Pre-PAC Assess, ServSafe, etc.)

Connections

- National Standards for Family and Consumer Sciences
- Partnership for 21st Century Skills
- Kentucky Core Academic Standards – Former PL/VS Program of Studies
- Common Core Standards for Mathematics and English/Language Arts
- Kentucky Occupational Skills Standards Assessment (KOSSA) Standards
National Standards

Technical Content

1. Students will assess the impact of the hospitality industry.
33. Students will assess employment opportunities and preparation requirements in the industry.
35. Students will apply time management skills.
36. Students will utilize activities of the Family, Career and Community Leaders of America student organization as an integral component of course content and leadership development.

National Standards

8.1.4- Analyze the effects of food production and services occupations on local, state, national, and global economies.

KY Core Academic Standards (Big Idea)

Cultures and Societies - Social Studies
Culture is the way of life shared by a group of people, including their ideas and traditions. Cultures reflect the values and beliefs of groups in different ways (e.g., art, music, literature, religion); however, there are universals (e.g., food, clothing, shelter, communication) connecting all cultures. Culture influences viewpoints, rules and institutions in a global society. Students should understand that people form cultural groups throughout the United States and the World, and that issues and challenges unite and divide them.

Communication/Technology - Vocational Studies
Special communication and technology skills are needed for success in schooling and in the workplace. Students will be able to express information and ideas using a variety of technologies in various ways.

Economics - Social Studies
Economics includes the study of production, distribution and consumption of goods and services. Students need to understand how their economic decisions affect them, others, the nation and the world. The purpose of economic education is to enable individuals to function effectively both in their own personal lives and as citizens and participants in an increasingly connected world economy. Students need to understand the benefits and costs of economic interaction and interdependence among people, societies, and governments.

English/Language Arts Common Core Standards

CC.11-12.W.1 Text Types and Purposes: Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.

Technical Literacy Standards

Reading / 11-12 / #7 - Integrate and evaluate multiple sources of information presented in diverse formats and media in order to address a question or solve a problem.
Reading / 11-12 / #10 – By the end of grade 12, read and comprehend science/technical texts in the grades 11-CCR text complexity band independently and proficiently.
Writing / 11-12 / #2 – Write informative / explanatory texts, including narration of historical events, scientific procedures / experiments, or technical processes.
Writing / 11-12 / #4 – Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose and audience.
Writing / 11-12 / #7 – Conduct short as well as more sustained research projects to answer a question or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.
Writing / 11-12 / #8 – Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of specific task, purpose and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following standard format for citation.
Writing / 11-12 / #10 – Write routinely over extended time frames and shorter time frames for a range of discipline-specific tasks, purposes, and audiences.
21st Century Skills and Knowledge

Global Awareness
Civic Literacy
Creativity and Innovation
Critical Thinking and Problem Solving
Collaboration
Communication
Information Literacy
Media Literacy
ICT (Information, Communications, and Technology) Literacy
Productivity and Accountability

KOSSA Standards

3002.AA.1 Utilize effective verbal and non-verbal communication skills
3002.AA.2 Participate in conversation, discussion, and group presentations
3002.AA.3 Communicate and follow directions/procedures
3002.AA.4 Communicate effectively with customers and co-workers
3002.AB.1 Locate and interpret written information
3002.AB.2 Read and interpret workplace documents
3002.AB.3 Identifies relevant details, facts, and specifications
3002.AB.4 Record information accurately and completely
3002.AB.5 Demonstrate competence in organizing, writing, and editing using correct vocabulary, spelling, grammar, and punctuation
3002.AB.6 Demonstrate the ability to write clearly and concisely using industry specific terminology
3002.AC.1 Utilize critical-thinking skills to determine best options/outcomes (e.g., analyze reliable/unreliable sources of information, use previous experiences, implement crisis management, develop contingency planning)
3002.AC.2 Utilize innovation and problem-solving skills to arrive at the best solution for current situation
3002.AC.3 Implement effective decision-making skills
3002.AG.1 Use technology appropriately to enhance professional presentations
3002.AG.2 Demonstrate effective and appropriate use of social media
3002.AG.3 Identify ways social media can be used as marketing, advertising, and data gathering tools

Learning Targets

Students will be able to examine the impact of technology throughout the history of Culinary Arts.
Students will be able to determine how chefs have impacted culinary arts techniques.
Students will be able to examine the impact of historical events (economy) on Culinary Arts
Technical Content

2. Students will create an employability portfolio.
3. Students will analyze the effect that career demands have on family life.
4. Students will research the roles of individuals engaged in culinary services.
5. Students will apply critical and creative thinking, logical reasoning and problem solving skills in the field.
6. Students will demonstrate personal and interpersonal skills that enhance working relationships and obtaining jobs i.e. employability skills.
7. Students will use accepted industry terminology and technical information.
8. Students will practice grooming and dress requirements of the industry.
9. Students will demonstrate knowledge of quality customer service.
10. Students will demonstrate table setting and food presentation techniques.
32. Students will prepare a variety of gourmet foods including international cuisine.
33. Students will assess employment opportunities and preparation requirements

National Standards

8.1.5- Create an employment portfolio for use with applying for internships and work-based learning opportunities.
8.1.1- Explain the roles, duties, and functions of individuals engaged in food production and services careers.
8.0- Integrate knowledge, skills, and practices required for careers in food production and services.
8.2.5- Practice good personal hygiene/health procedures, including dental health and weight management, and report symptoms of illness.
8.7.2- Demonstrate quality services that meet industry standards in the food service industry.
8.7.1- Analyze the role of quality service as a strategic component of exceptional performance.
8.5.12- Demonstrate professional plating, garnishing, and food presentation techniques.
8.1.2- Analyze opportunities for employment and entrepreneurial endeavors.
8.3.1- Operate tools and equipment following safety procedures and OSHA requirements.
8.3.2- Maintain tools and equipment following safety procedures and OSHA requirements.
8.6.2- Practice inventory procedures including first in/first out concept, date marking, and specific record keeping.
8.1.3- Summarize education and training requirements and opportunities for career paths in food production and services.

KY Core Academic Standards (Big Idea)

Career Awareness, Exploration, Planning - Vocational Studies
Career awareness, exploration and planning gives students the opportunity to discover the various career areas that exist and introduce them to the realities involved with the workplace. Many factors need to be considered when selecting a career path and preparing for employment. Career awareness, exploration and planning will enable students to recognize the value of education, learn how to plan for careers and integrate academic subjects.

Employability Skills - Vocational Studies
Employability skills will focus on student’s competencies with their work habits and academic/technical skills that will impact an individual’s success in school and workplace. School-to-work transition skills will help students develop interpersonal skills and positive work habits.
English/Language Arts Common Core Standards

CC.11-12.W.10 Range of Writing: Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.

CC.11-12.W.2.a Text Types and Purposes: Introduce a topic; organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.

Technical Literacy Standards

Reading / 11-12 / #1 – Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.

Reading / 11-12 / #2 – Determine central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.

Reading / 11-12 / #4 – Determine the meaning of symbols, key terms, and other domain-specific words/phrases as they are used in specific scientific and technical context.

Reading / 11-12 / #8 – Evaluate the hypothesis, data, analysis, and conclusions in a science or technical text.

Writing / 11-12 / #1 – Write arguments based on discipline-specific content.

Writing / 11-12 / #4 – Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose and audience.

Writing / 11-12 / #7 – Conduct short as well as more sustained research projects to answer a question or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.

Writing / 11-12 / #10 – Write routinely over extended time frames and shorter time frames for a range of discipline-specific tasks, purposes, and audiences.

Mathematics Common Core Standards

CC.9-12.S.IC.6 Evaluate reports based on data.*

21st Century Skills and Knowledge

Global Awareness
Financial, Economic, Business and Entrepreneurial Literacy
Creativity and Innovation
Communication
Collaboration
Information Literacy
Media Literacy
ICT (Information, Communications, and Technology) Literacy
Flexibility and Adaptability
Initiative and Self-Direction

KOSSA Standards

3002.AE.1 Locate, evaluate, and apply personal financial information
3002.AE.2 Identify the components of a budget and how one is created
3002.AE.3 Set personal financial goals and develop a plan for achieving them
3002.AE.4 Use financial services effectively
3002.AE.5 Demonstrate ability to meet financial obligations
3002.EA.1 Demonstrate enthusiasm and confidence about work and learning new tasks
3002.EA.2 Demonstrate consistent and punctual attendance
3002.EA.3 Demonstrate initiative in assuming tasks
3002.EA.4 Exhibit dependability in the workplace
3002.EA.5 Take and provide direction in the workplace
3002.EA.6 Accept responsibility for personal decisions and actions
3002.EB.1 Abide by workplace policies and procedures
3002.EB.2 Demonstrate honesty and reliability
3002.EB.4 Maintain confidentiality and integrity of sensitive company information
3002.EB.3 Demonstrate ethical characteristics and behaviors
3002.EB.5 Demonstrate loyalty to the company
3002.EC.1 Demonstrate appropriate dress and hygiene in the workplace
3002.EC.2 Use language and manners suitable for the workplace
3002.EC.3 Demonstrate polite and respectful behavior toward others
3002.EC.4 Demonstrate personal accountability in the workplace
3002.EC.5 Demonstrate pride in work
3002.ED.1 Plan and follow a work schedule
3002.ED.2 Work with minimal supervision
3002.ED.3 Work within budgetary constraints
3002.ED.4 Demonstrate ability to stay on task to produce high quality deliverables on time
3002.EE.1 Recognize diversity, discrimination, harassment, and equity
3002.EE.2 Work well with all customers and co-workers
3002.EE.3 Explain the benefits of diversity within the workplace
3002.EE.4 Explain the importance of respect for feelings, values, and beliefs of others
3002.EE.5 Identify strategies to bridge cultural/generational differences and use differing perspectives to increase overall quality of work
3002.EE.6 Illustrate techniques for eliminating gender bias and stereotyping in the workplace
3002.EE.7 Identify ways tasks can be structured to accommodate the diverse needs of workers
3002.EE.8 Recognize the challenges and advantages of a global workforce
3002.EF.1 Recognize the characteristics of a team environment and conventional workplace
3002.EF.2 Contribute to the success of the team
3002.EF.3 Demonstrate effective team skills and evaluate their importance in the workplace (e.g., setting goals, listening, following directions, questioning, dividing work)
3002.EG.1 Contribute new ideas
3002.EH.1 Identify conflict resolution skills to enhance productivity and improve workplace relationships
3002.EH.2 Implement conflict resolution strategies and problem-solving skills
3002.EH.3 Explain the use of documentation and its role as a component of conflict resolution
3002.EI.1 Recognize the importance of and demonstrate how to properly acknowledge customers/clients
3002.EI.2 Identify and address needs of customers/clients
3002.EI.3 Provide helpful, courteous, and knowledgeable service
3002.EI.4 Identify appropriate channels of communication with customers/clients (e.g., phone call, face-to-face, e-mail, website)
3002.EI.5 Identify techniques to seek and use customer/client feedback to improve company services
3002.EI.6 Recognize the relationship between customer/client satisfaction and company success
3002.EJ.1 Define profit and evaluate the cost of conducting business
3002.EJ.2 Identify "big picture" issues in conducting business
3002.EJ.3 Identify role in fulfilling the mission of the workplace
3002.EJ.4 Identify the rights of workers (e.g., adult and child labor laws and other equal employment opportunity laws)
3002.EJ.5 Recognize the chain of command, organizational flow chart system, and hierarchy of management within an organization
3002.EK.1 Recognize the importance of maintaining a job and pursuing a career
3002.EK.2 Define jobs associated with a specific career path or profession
3002.EK.3 Identify and seek various job opportunities (e.g., volunteerism, internships, co-op, part-time/full-time employment)
3002.EK.4 Prepare a resume, letter of application, and job application
3002.EK.5 Prepare for a job interview (e.g., research company, highlight personal strengths, prepare questions, set-up a mock interview, dress appropriately)
3002.EK.6 Participate in a job interview
3002.EK.7 Explain the proper procedure for leaving a job
3002.EL.1 Acquire current and emerging industry-related information
3002.EL.2 Demonstrate commitment to learning as a life-long process and recognize learning opportunities
3002.EL.4 Discuss the importance of flexible career planning and career self-management
3002.EL.5 Employ leadership skills to achieve workplace objectives (e.g., personal vision, adaptability, change, shared vision)
3002.EL.6 Recognize the importance of job performance evaluation and coaching as it relates to career advancement
3002.EL.7 Accept and provide constructive criticism
3002.EL.8 Describe the impact of the global economy on jobs and careers
3002.EM.1 Identify the value of new technologies and their impact on driving continuous change and the need for life-long learning
3002.EM.2 Research and identify emerging technologies for specific careers
3002.EM.3 Select appropriate technological resources to accomplish work
3002.EN.1 Assume responsibility for safety of self and others
3002.EN.2 Follow safety guidelines in the workplace
3002.AH.1 Select and use appropriate devices, services, and applications to complete workplace tasks
3002.AH.2 Demonstrate appropriate etiquette when using e-communications (e.g., cell phone, e-mail, personal digital assistants, online meetings, conference calls)
3002.OA.1 Determine the roles and functions of individuals engaged in food production and services careers
3002.OA.2 Explore opportunities for employment and entrepreneurial endeavors
3002.OA.3 Examine education/training requirements and opportunities for career paths in food production and services
3002.OA.4 Examine the impact of food production and services occupations on local, state, national, and global economies
3002.OF.1 Apply principles of purchasing and receiving in food service operations
3002.OF.10 Identify the application of statistical processes
3002.OF.11 Understand and apply advanced concepts of data analysis and distributions
3002.OF.12 Understand and apply advanced concepts of probability and statistics
3002.OF.13 Calculate and evaluate basic statistical routines
3002.OF.14 Maintain receipts and disbursement records
3002.OF.15 Maintain inventory records
3002.OF.16 Explain the effect of quality on profit
3002.OF.17 Identify the effects of continuous quality improvement
3002.OF.2 Practice inventory procedures including first in/first out concept, date markings, and record keeping
3002.OF.3 Apply accounting principles in planning and forecasting profit and loss
3002.OF.4 Examine the areas of legal liability within the food service industry
3002.OF.5 Verify human resource policies including rules, regulations, laws and hiring/compensation/overtime
3002.OF.6 Apply the procedures involved in staff planning, recruiting, interviewing, selecting, and scheduling of employees
3002.OF.7 Conduct staff orientation, regular training/education, and on-the-job training/retraining
3002.OF.8 Implement marketing plan for food service operations
3002.OF.9 Design internal/external disaster plan
3002.OG.1 Examine the role of service as a strategic component of performance
3002.OG.2 Demonstrate quality services, which exceed the expectations of customers
3002.OG.3 Examine the relationship between employees and customer satisfaction
3002.OG.4 Apply strategies for resolving complaints
3002.OG.5 Demonstrate sensitivity to diversity and individuals with special needs
3002.OH.1 Determine the roles and functions of individuals engaged in food science, dietetics, and nutrition careers
3002.OH.2 Explore opportunities for employment and entrepreneurial endeavors
3002.OH.3 Examine education and training requirements and opportunities for career paths in food science dietetics, and nutrition
3002.OH.4 Examine the impact of food science, dietetics, and nutrition occupations on local, state, national, and global economies
3002.OJ.5 Instruct individuals on nutrition for health maintenance and disease prevention
3002.OK.1 Utilize various factors that affect food preferences in the marketing of food
3002.OK.2 Utilize data in statistical analysis in making development and marketing decisions
EC009 Explain the effect of quality on profit.

Learning Targets

- Students will be able to prepare, analyze, and revise an employability portfolio
- Students will be able to analyze the current trends in Culinary Arts
- Students will be able to recognize industry terminology
- Students will be able to practice appropriate grooming and dress for industry standards
- Students will be able to identify laws related to workers’ rights and safety.
- Students will be able to analyze career opportunities available in Culinary Arts
- Students will be able to analyze the effect of career demands on family life
- Students will be able to identify the procedures in establishing a catering business
- Students will demonstrate quality customer service techniques.
- Students will be able to compare the variety of positions in the foodservice industry
- Students will be able to outline steps necessary in handling customer service issues
- Students will be able to demonstrate table setting.
- Students will be able to demonstrate food presentation techniques
- Students will be able to identify the roles of back of the house vs. front of the house operations
- Students will be able to identify the qualities of an effective management
- Students will be able to describe how management is structured in a foodservice organization

3002.OL.1 Build menus to customer/client preferences
3002.OL.2 Implement food preparation, production, and testing systems
3002.OL.3 Verify standards for food quality
3002.OL.4 Create standardized recipes
3002.OL.5 Manage amounts of food to meet the needs of customers/clients
3002.OL.6 Examine new products
3002.OL.7 Implement procedures that provide cost effective products
3002.OL.8 Establish par levels for the purchase of supplies based on an organization’s needs
3002.OL.9 Utilize Food Code Points of time, temperature, date markings, cross contamination, hand washing, and personal hygiene as criteria for safe food preparation
3002.OP.1 Determine conditions and practices that promote safe food handling
3002.OP.2 Appraise safety and sanitation practices throughout the food chain
3002.OP.3 Determine how changes in national and international food production and distribution systems impact the food supply
3002.OP.4 Appraise federal, state, and local inspection/labeling systems that protect the health of individuals and the public
3002.OP.5 Monitor foodborne illness as a health issue for individuals and families
3002.OP.6 Review public dialogue about food safety and sanitation

Learning Targets - Click here to view Sample Learner Activities

Students will be able to prepare, analyze, and revise an employability portfolio
Students will be able to analyze the current trends in Culinary Arts
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Students will be able to demonstrate food presentation techniques
Students will be able to identify the roles of back of the house vs. front of the house operations
Students will be able to identify the qualities of an effective management
Students will be able to describe how management is structured in a foodservice organization
8.3.1 - Operate tools and equipment following safety procedures and OSHA requirements.

8.3.2 - Maintain tools and equipment following safety procedures and OSHA requirements.

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

8.2.3 - Use knowledge of systems for documenting, investigating, reporting, and preventing food borne illness.

National Standards

8.3.1 - Operate tools and equipment following safety procedures and OSHA requirements.

8.3.2 - Maintain tools and equipment following safety procedures and OSHA requirements.

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

8.2.3 - Use knowledge of systems for documenting, investigating, reporting, and preventing food borne illness.

KY Core Academic Standards (Big Idea)

Safety (Health Education) - Practical Living
Accidents are a major cause of injury and death to children and adolescents. Unintentional injuries involving a motor vehicle, falls, drowning, fires, firearms and poisons can occur at home, school and work. Safe behavior protects a person from danger and lessens the effects of harmful situations.

Nutrition (Health Education) - Practical Living
Proper nutrition is critical to good health. To maintain a healthy weight, good dietary habits and physical activity are essential. Nutritious foods are necessary for growth, development and maintenance of healthy bodies.

Personal Wellness (Health Education) - Practical Living
Wellness is maximum well-being or total health. Personal wellness is a combination of physical, mental, emotional, spiritual and social well-being. It involves making behavioral choices and decisions each day that promote an individual’s physical well-being, the prevention of illnesses and diseases and the ability to remain, physically, mentally, spiritually, socially and emotionally healthy.

English/Language Arts Common Core Standards

CC.11-12.W.2.a Text Types and Purposes: Introduce a topic; organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.
**Technical Literacy Standards**

Reading / 11-12 / #2 – Determine central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.

Reading / 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.

Reading / 11-12 / #4 – Determine the meaning of symbols, key terms, and other domain-specific words/phrases as they are used in specific scientific and technical context.

Reading / 11-12 / #5 – Analyze how the text structures information or ideas into categories or hierarchies.

Reading / 11-12 / #7 - Integrate and evaluate multiple sources of information presented in diverse formats and media in order to address a question or solve a problem.

Reading / 11-12 / #8 – Evaluate the hypothesis, data, analysis, and conclusions in a science or technical text.

Reading / 11-12 / #9 – Synthesize information from a range of sources into a coherent understanding of a process, resolving conflicting information when possible.

Writing / 11-12 / #1 – Write arguments based on discipline-specific content.

Writing / 11-12 / #4 – Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose and audience.

Writing / 11-12 / #7 – Conduct short as well as more sustained research projects to answer a question or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.

Writing / 11-12 / #9 – Draw evidence from informational texts to support analysis, reflection, and research.

**Mathematics Common Core Standards**

CC.9-12.N.Q.1 Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays.

**21st Century Skills and Knowledge**

Global Awareness
Civic Literacy
Environmental Literacy
Creativity and Innovation
Critical Thinking and Problem Solving
Collaboration
Communication
Information Literacy
Media Literacy

**KOSSA Standards**

3002.OB.1 Determine pathogens found in food and their role in causing illness

3002.OB.10 Demonstrate waste disposal and recycling methods

3002.OB.11 Demonstrate ability to maintain necessary records to document time and temperature control, maintenance of equipment, and other elements of food preparation, storage, and presentation

3002.OB.2 Employ food service management safety/sanitation program procedures

3002.OB.3 Use knowledge of systems for documenting, investigating, and reporting food-borne illness

3002.OB.4 Use Hazard Analysis Critical Control Point (HACCP) principles and procedures to minimize the risks of food-borne illness

3002.OB.5 Practice good personal hygiene/health procedures and report symptoms of illness

3002.OB.6 Demonstrate proper receiving and storage of both raw and prepared foods

3002.OB.7 Demonstrate food handling and preparation techniques that prevent cross contamination between raw and ready-to-eat foods, between animal or fish sources, and other food products

3002.OB.8 Examine current types and proper uses of cleaning materials and sanitizers

3002.OB.9 Use Occupational Safety and Health Administration’s (OSHA) Right to Know Law and Material Safety Data Sheets (MSDS) and explain their requirements in handling hazardous materials

3002.ON.1 Assess the effect of nutrients on health, appearance, and peak performance

3002.ON.2 Research the relationship of nutrition and wellness to individual and family health throughout the life span

3002.ON.3 Assess the impact of food and diet fads, food addictions, and eating disorders on wellness

3002.ON.4 Appraise sources of food and nutrition information, including food labels, related to health and wellness

3002.OO.1 Apply various dietary guidelines in planning to meet nutrition and wellness needs
Examine appropriate nutrition and essential nutrients, according to the MyPlate (www.myplate.gov) guidelines.
Perform tasks in a laboratory setting, according to industry standards (HACCP, ServSafe, FIFO, AAFCS Pre-PAC assessments, etc.)
Practice basic safety techniques (first aid, CPR, etc.)
Demonstrate proper hand washing techniques.
Demonstrate safe food practices (CDC, cross-contamination, foodborne illness, FDA, OSHA, etc.)
Identify the three types of contaminants (biological, chemical, and physical).
Describe conditions affecting classes of microbial contaminants.
Recall the causes, prevention, and cost of foodborne illness.
Identify measures to keep customers safe of allergens.
Culinary Arts I

This advanced course allows students to increase competencies in a variety of food preparation techniques. Emphasis will be placed on food presentation, garnishing, menu planning and the industry standard skills necessary to prepare for a career in the culinary arts. Leadership development will be provided through the Family, Career and Community Leaders of America.

Prerequisites: Foods & Nutrition

Unit Title: The Professional Kitchen

Technical Content

7. Students will use accepted industry terminology and technical information.
11. Students will use computer based menu systems to create menu layout and design.
15. Students will demonstrate use of industry equipment, tools and supplies.
17. Students will demonstrate skills in knife, tool and equipment handling.
18. Students will demonstrate proper weighing and measuring techniques.
20. Students will demonstrate food handling principles.
23. Students will apply menu-planning principles to develop and modify menus.
33. Students will assess employment opportunities and preparation requirements.
34. Students will demonstrate written, verbal and non-verbal communication skills.

National Standards

8.0 - Integrate knowledge, skills, and practices required for careers in food production and services
8.4.1 - Use computer based menu systems to develop and modify menus
8.3.2 - Maintain tools and equipment following safety procedures and OSHA requirements.
8.5.1 - Demonstrate professional skills in safe handling of knives, tools, and equipment
8.6.2 - Practice inventory procedures including first in/first out concept, date marking, and specific record keeping.
8.4.2 - Apply menu-planning principles to develop and modify menus.

KY Core Academic Standards (Big Idea)

Employability Skills - Vocational Studies
Employability skills will focus on student's competencies with their work habits and academic/technical skills that will impact an individual's success in school and workplace. School-to-work transition skills will help students develop interpersonal skills and positive work habits.

Nutrition (Health Education) - Practical Living
Proper nutrition is critical to good health. To maintain a healthy weight, good dietary habits and physical activity are essential. Nutritious foods are necessary for growth, development and maintenance of healthy bodies.

Safety (Health Education) - Practical Living
Accidents are a major cause of injury and death to children and adolescents. Unintentional injuries involving a motor vehicle, falls, drowning, fires, firearms and poisons can occur at home, school and work. Safe behavior protects a person from danger and lessens the effects of harmful situations.

Technical Literacy Standards

Reading / 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.

Reading / 11-12 / #4 – Determine the meaning of symbols, key terms, and other domain-specific words/phrases as they are used in specific scientific and technical context.

Reading / 11-12 / #5 – Analyze how the text structures information or ideas into categories or hierarchies.

Writing / 11-12 / #2 – Write informative / explanatory texts, including narration of historical events, scientific procedures / experiments, or technical processes.

Writing / 11-12 / #9 – Draw evidence from informational texts to support analysis, reflection, and research.

Writing / 11-12 / #10 – Write routinely over extended time frames and shorter time frames for a range of discipline-specific tasks, purposes, and audiences.
21st Century Skills and Knowledge
Global Awareness
Health Literacy
Environmental Literacy
Creativity and Innovation
Critical Thinking and Problem Solving
Collaboration
Communication
Information Literacy
Media Literacy
Flexibility and Adaptability

KOSSA Standards

3002.OD.1 Use computer-based menu systems
3002.OD.2 Apply menu planning principles to develop and modify menus
3002.OD.3 Examine food equipment needed for menus
3002.OD.4 Do menu layout and design
3002.OD.5 Prepare requisitions for production requirements
3002.OD.6 Record performance of menu items
3002.OE.1 Demonstrate skills in knife, tool, and equipment handling
3002.OI.6 Categorize foods into exchange groups and plan menus, applying the exchange system to meet various nutrient needs
3002.OL.4 Create standardized recipes
3002.OK.2 Utilize data in statistical analysis in making development and marketing decisions
3002.OK.1 Utilize various factors that affect food preferences in the marketing of food
3002.OK.3 Prepare food for presentation and assessment
3002.OK.4 Maintain test kitchen/laboratory and related equipment and supplies
3002.OK.5 Implement procedures that affect quality product performance
3002.OK.6 Conduct sensory evaluations of food products
3002.OK.7 Conduct testing for safety of food products, utilizing available technology
3002.OQ.1 Determine how scientific and technical advances impact the nutrient content, availability, and safety of foods
3002.OQ.10 Describe and explain the energy conversion process
3002.OQ.11 Describe and explain heat conduction/convection, insulation requirements, radiant heating/temperature, and converts Fahrenheit to Centigrade and vice-versa
3002.OQ.12 Describe the immune system, the digestive system, selected diseases, and the cause of weight gain/loss
3002.OQ.2 Assess how the scientific and technical advances in food processing storage, product development, and distribution impact nutrition and wellness
3002.OQ.3 Determine the impact of technological advances on selection, preparation, and home storage of foods
3002.OQ.4 Assess the effects of food science and technology on meeting nutrition needs
3002.OQ.5 Know the environmental impact of materials (e.g., solid, liquid, gaseous)
3002.OQ.6 Understand the effect of chemicals on humans and plants
3002.OQ.7 Apply and use scientific methods to solve problems
3002.OQ.8 Convert measurement units from metric to English
3002.OQ.9 Describe and explain chemical reactions including inhibitor
3002.AD.1 Perform basic and higher level math operations (e.g., addition, subtraction, multiplication, division, decimals, fractions, units of conversion, averaging, percentage, proportion, ratios)
Learning Targets - [Click here to view Sample Learner Activities]
Model various work stations and work sections.
Utilize types of cooking lines.
Explain the role of mise en place (meez ahn plahs).
Identify the role of the menu.
Summarize the factors that influence a menu.
Describe the types of menus used by various foodservice establishments.
Utilize computer based menu systems to create menu layouts and designs.
Identify the parts of a knife.
Select appropriate knives for specific tasks.
Perform basic cutting techniques.
Describe the importance of knife safety and sanitation guidelines and storage.
Practice sanitary and cleaning procedures for smallwares and industry equipment, tools, and supplies.
Select smallwares for a specific task.
Select cookware based on its heat transfer rating and specific use.
Describe the parts of a standardized recipe.
Prepare a standardized recipe.
Technical Content

5. Students will apply critical and creative thinking, logical reasoning and problem solving skills in the field.
7. Students will use accepted industry terminology and technical information.
12. Students will outline steps in establishing an entrepreneurial business such as catering.
13. Students will analyze cost and evaluate its relationship to profit.
14. Students will explore entrepreneurial opportunities and develop a marketing plan.
18. Students will demonstrate proper weighing and measuring techniques.
20. Students will demonstrate food handling techniques.
22. Students will examine the applicability of convenience food items.
24. Students will demonstrate a variety of cooking methods (i.e. dry & moist).
25. Students will prepare various meats, seafood and poultry.
26. Students will prepare various stocks, soups, sauces and gravies.
27. Students will prepare various fruits, vegetables, pasta, and breakfast foods.
28. Students will prepare canapés, appetizers, hors d’oeuvres, and garde manger.
29. Students will evaluate options when using seasonings and flavorings.

National Standards

8.0 - Integrate knowledge, skills, and practices required for careers in food production and services.
8.1.2 - Analyze opportunities for employment and entrepreneurial endeavors.
8.4.7 - Apply principles of Measurement, Portion Control, Conversions, Food Cost Analysis and Control, Menu Terminology, and Menu Pricing to menu planning.
8.3.1 - Operate tools and equipment following safety procedures and OSHA requirements.
8.3.2 - Maintain tools and equipment following safety procedures and OSHA requirements.
8.5.1 - Demonstrate professional skills in safe handling of knives, tools, and equipment.
8.5.13 - Examine the applicability of convenience food items.
8.5.2 - Demonstrate professional skill for a variety of cooking methods (i.e. dry & moist).
8.5.5 - Prepare various meats, seafood, and poultry using safe handling and professional preparation techniques.
8.5.6 - Prepare various stocks, soups, and sauces using safe handling and professional preparation techniques.
8.5.7 - Prepare various fruits, vegetables, starches, legumes, dairy products, fats, and oils using safe handling and professional preparation techniques.
8.5.9 - Prepare sandwiches, canapés and appetizers using safe handling and professional preparation techniques.
8.5.11 - Prepare breakfast meats, eggs, cereals, and batter products using safe handling and professional preparation techniques.
8.5.12 - Demonstrate professional plating, garnishing, and food presentation techniques.
8.5.10 - Prepare breads, baked goods and desserts using safe handling and professional preparation techniques.
8.5.13 - Examine the applicability of convenience food items.
20. Students will demonstrate food handling principles.
22. Students will examine the applicability of convenience food items.
24. Students will demonstrate a variety of cooking methods (i.e. dry & moist).
25. Students will prepare various meats, seafood and poultry.
26. Students will prepare various stocks, soups, sauces and gravies.
27. Students will prepare various fruits, vegetables, pasta, and breakfast foods.
28. Students will prepare canapés, appetizers, hors d’oeuvres, and garde manger.
29. Students will evaluate options when using seasonings and flavorings.

KY Core Academic Standards (Big Idea)

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Employability skills will focus on student’s competencies with their work habits and academic/technical skills that will impact an individual’s success in school and workplace. School-to-work transition skills will help students develop interpersonal skills and positive work habits.
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Proper nutrition is critical to good health. To maintain a healthy weight, good dietary habits and physical activity are essential. Nutritious foods are necessary for growth, development and maintenance of healthy bodies.

**English/Language Arts Common Core Standards**

CC.11-12.W.8 Research to Build and Present Knowledge: Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation.

**Technical Literacy Standards**

Reading / 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.

Reading / 11-12 / #4 – Determine the meaning of symbols, key terms, and other domain-specific words/phrases as they are used in specific scientific and technical context.

Reading / 11-12 / #5 – Analyze how the text structures information or ideas into categories or hierarchies.

Reading / 11-12 / #6 – Analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved.

Reading / 11-12 / #8 – Evaluate the hypothesis, data, analysis, and conclusions in a science or technical text.

Writing / 11-12 / #2 – Write informative/explanatory texts, including narration of historical events, scientific procedures/experiments, or technical processes.

Writing / 11-12 / #7 – Conduct short as well as more sustained research projects to answer a question or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.

Writing / 11-12 / #9 – Draw evidence from informational texts to support analysis, reflection, and research.

Writing / 11-12 / #10 – Write routinely over extended time frames and shorter time frames for a range of discipline-specific tasks, purposes, and audiences.

**Mathematics Common Core Standards**

CC.9-12.N.Q.1 Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays.*

CC.9-12.S.MD.7 (+) Analyze decisions and strategies using probability concepts (e.g., product testing, medical testing, pulling a hockey goalie at the end of a game).*

**21st Century Skills and Knowledge**

Global Awareness
Financial, Economic, Business and Entrepreneurial Literacy
Health Literacy
Environmental Literacy
Creativity and Innovation
Critical Thinking and Problem Solving
Communication
Collaboration
Information Literacy
ICT (Information, Communications, and Technology) Literacy
KOSSA Standards

3002.OE.2 Demonstrate a variety of cooking methods: roasting, baking, broiling, smoking, grilling, sautéing, frying, deep frying, braising, stewing, poaching, steaming, woking, convection, microwaving, and other emerging technologies
3002.OE.5 Prepare various meats, seafood, and poultry
3002.OE.6 Prepare various stocks, soups, and sauces
3002.OE.7 Prepare various fruits, vegetables, starches, and farinaceous items
3002.OE.8 Prepare various salads, dressings, and spices
3002.OE.10 Prepare baked goods and desserts
3002.OE.11 Prepare breakfast meats, eggs, cereals, and batter products
3002.OE.12 Demonstrate food presentation techniques
3002.OE.13 Examine the applicability of convenience food items

Learning Targets - Click here to view Sample Learner Activities
Demonstrate a variety of cooking methods (dry, moist, etc.).
Describe the characteristics of the basic types of stocks, sauces, and gravies.
Explain how to prepare stocks, sauces, and gravies.
Prepare various stocks, sauces, and gravies.
Prepare, store, and handle various meats, poultry, and seafood.
Recognize the quality grades, classes, and market forms of meat, poultry, and seafood.
Label the internal structure and composition of meat, poultry, and seafood.
Compare and contrast the proper way to purchase meat, poultry, and seafood.
Apply the fundamentals of baking to a variety of products.
Prepare a variety of gourmet foods, including international cuisine.
Prepare fruits, vegetables, pasta, and breakfast foods.
Prepare canapés, appetizers, hor d’oeuvres, and garde manger.
Prepare a variety of beverages (hot/cold) for quantity for cooking or special events.
Compare and contrast seasonings and flavorings.
Apply principles of food preparation to produce a variety of food products and beverages for quantity for special events.
Examine the applicability of convenience food items.