

Culinary Arts Blueprint

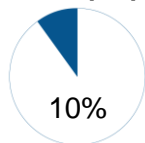
This Blueprint contains the subject matter content for the Career Essentials - Assessment.

Note: To fully prepare for the [Culinary Arts](#) SkillsUSA Championships contest, refer to the current year's SkillsUSA Championships Technical Standard, now included with your SkillsUSA Professional Membership. If you need help in accessing this benefit, contact the SkillsUSA Customer Care Team at 844-875-4557 or customercare@skillsusa.org

Standards and Competencies

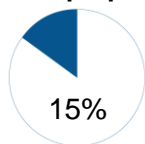
Competencies are weighted throughout the assessment. The percent shown is the weight of the competency. There are 50 questions per assessment.

Demonstrate knowledge of the 7 principles of Hazard Analysis Critical Control Points (HACCP) in a food preparation setting



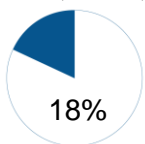
- Identify potential hazards (conduct hazard analysis).
- Identify and use Critical Control Points (CCP).
- Demonstrate knowledge of minimum or maximum critical limits
- Adhere to established monitoring procedures.
- Identify and follow corrective actions; verify completion of corrective actions.
- Assist in completion of monitoring charts, reports, and logs. Keep current with changes in established procedures for recordkeeping and documentation.

Demonstrate knowledge of basic safety and sanitation policies, procedures, and practices in a food preparation setting



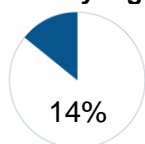
- Wash hands according to proper procedures
- Ensure that tools and equipment are used and transported safely.
- Demonstrate proper care and storage of food and equipment.
- Ensure that temperature of food and storage containers is within guidelines
- Follow proper procedures to clean and sanitize equipment and tools after every use
- Store tools, equipment, and cleaning supplies properly.
- Check that personal attire meets safety standards (i.e., covered hair); maintain personal hygiene and compliance with dress code
- Ensure that spills and other safety problems are addressed immediately
- Ensure that material safety data sheets are reviewed and used properly

Hold, store, and prepare food at proper temperature



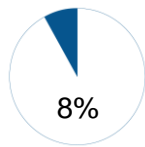
- Show that food products are labeled, dated, and rotated in a timely manner
- Utilize thermometer correctly, showing that it is calibrated. Use thermometer to verify proper temperature requirements.
- Demonstrate that temperatures are checked and logged regularly
- Verify that potentially hazardous foods have reached safe temperatures.
- Ensure that food is stored at proper temperature.
- Ensure that food is prepared at proper temperature.
- Verify that holding time and temperatures comply with standard policies

Demonstrate understanding of recipe terms and procedures and follow recipes properly. Identify ingredients.



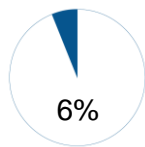
- Identify appropriate equipment, utilizing the correct tool for the task.
- Utilize serving and holding tools correctly.
- Demonstrate use of proper weights and measurements.
- Verify that recipe is followed consistently and flavor profile requirements are met.
- Identify that cooking and serving times are consistent with recipes.

Demonstrate the traits of a good employee.



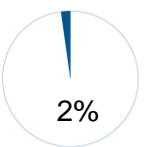
- Follow appropriate chain of command.
- Exhibit and model appropriate standard of behavior when in the presence of customers.
- Demonstrate understanding of the principles underlying guest service.
- Verify that work area is visually scanned on a regular basis for safety and security problems.
- Report and document incidents in a timely manner.
- Review company safety and security policies frequently.

Demonstrate math skills to determine appropriate proportions and ratios for preparing recipes.



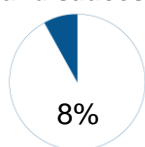
- Calculate the conversion of a recipe from a larger quantity to a smaller and vice versa.
- Determine the cost of a recipe based on basic cost of food (including as purchased price and edible portion control).
- Calculate conversions of measurements.

Demonstrate basic knowledge of human nutrition.



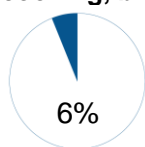
- Understand the food pyramid.
- Identify appropriate substitutions based on nutritional needs of different populations.

Demonstrate knowledge of proper ingredients and procedures for preparing basic soups, stocks, and sauces.



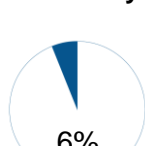
- Differentiate between the main types of stocks: identification, preparation, and usage (white stock, brown stock, fish stock, field stock, chicken stock)
- Differentiate between the main types of sauces: identification, preparation, and usage (espagnol/brown sauce, bechamel sauce, veloute sauce, egg-based sauces)
- Differentiate between the main types of soups: identification, preparation, and usage (clear soup (consommé), cream soup, veloutes, purees)
- Differentiate between the main types of thickening agents: identification, preparation and usage (roux, arrowroot (which gives you a clearer sauce), corn starch, liaison, slurry)
- Differentiate between the types of roux: white, blonde, brown
- Demonstrate proper technique and usage of a reduction.

Demonstrate an understanding of moist heat methods, including steaming and submersion cooking, braising, and stewing.



- Steaming
- Braising and Stewing
- Poaching
- Simmering

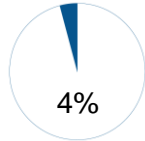
Demonstrate an understanding of dry heat methods, including sautéing, pan-frying, deep-frying, and stir-frying.



- Sautéing and stir-frying
- Deep-frying
- Roasting
- Pan-frying

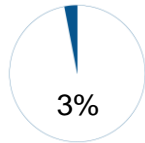
- Smoking and curing

Demonstrate basic knife skills and usage.



- Basic Knife Cuts
- Importance of Uniform Cuts
- Identification of Knives and their Uses

Demonstrate ability to assess plate presentation and evaluate visual appeal and flavor profile. (proper understanding of proper method of flavor testing).



- Demonstrate understanding of good presentation, based on appearance, aroma, flavor, texture, and plate balance.
- Demonstrate understanding of proper method of flavor testing (consistency in flavor profile).

Committee Identified Academic Skills

The SkillsUSA national technical committee has identified that the following academic skills are embedded in the culinary arts training program and assessment:

Math Skills

- Use fractions to solve practical problems
- Use proportions and ratios to solve practical problems
- Simplify numerical expressions
- Use scientific notation
- Solve practical problems involving percents
- Solve single variable algebraic expressions
- Solve problems using proportions, formulas and functions

Science Skills

- Use knowledge of cell theory
- Use knowledge of patterns of cellular organization (cells, tissues, organs, systems)
- Describe basic needs of organisms
- Classify living organisms
- Use knowledge of carbon, water and nitrogen cycles
- Describe and recognize elements, compounds, mixtures, acids, bases and salts
- Describe and recognize solids, liquids and gases
- Describe characteristics of types of matter based on physical and chemical properties
- Use knowledge of physical properties (shape, density, solubility, odor, melting point, boiling point and color)
- Use knowledge of chemical properties (acidity, basicity, combustibility and reactivity)

Language Arts Skills

- Provide information in conversations and in group discussions
- Provide information in oral presentations
- Demonstrate use of verbal communication skills, such as word choice, pitch, feeling, tone and voice
- Demonstrate use of nonverbal communication skills, such as eye contact, posture and gestures using interviewing techniques to gain information
- Demonstrate comprehension of a variety of informational texts
- Use test structures to aid comprehension
- Understand source, viewpoint and purpose of texts
- Organize and synthesize information of use in written and oral presentations

- Demonstrate knowledge of appropriate reference materials
- Use print, electronic databases and online resources to access information in books and articles
- Demonstrate narrative writing
- Demonstrate expository writing
- Demonstrate information writing
- Edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure and paragraphing

Connections to National Standards

State-level academic curriculum specialists identified the following connections to national academic standards.

Math Standards

- Numbers and operations
- Algebra
- Geometry
- Measurement
- Problem solving
- Communication
- Connections
- Representation

Source: NCTM Principles and Standards for School Mathematics. To view high school standards, visit: <http://www.nctm.org/standards/content.aspx?id=16909>.

Science Standards

- Understands the structure and function of cells and organisms
- Understands relationships among organisms and their physical environment
- Understands biological evolution and the diversity of life
- Understands the structure and properties of matter
- Understands the sources and properties of energy
- Understands the nature of scientific inquiry

Source: McREL compendium of national science standards. To view and search the compendium, visit: www.mcrel.org/standards-benchmarks/.

Language Arts Standards

- Students apply a wide range of strategies to comprehend, interpret, evaluate and appreciate texts. They draw on their prior experience, their interactions with other readers and writers, their knowledge of word meaning and of other texts, their word identification strategies, and their understanding of textual features (e.g., sound-letter correspondence, sentence structure, context, graphics)
- Students adjust their use of spoken, written and visual language (e.g., conventions, style, vocabulary) to communicate effectively with a variety of audiences and for different purposes
- Students employ a wide range of strategies as they write and use different writing process elements appropriately to communicate with different audiences for a variety of purposes
- Students use a variety of technological and information resources (e.g., libraries, databases, computer networks, video) to gather and synthesize information and to create and communicate knowledge
- Students use spoken, written and visual language to accomplish their own purposes (e.g., for learning, enjoyment, persuasion and the exchange of information)

Source: IRA/NCTE Standards for the English Language Arts. To view the standards, visit: www.readwritethink.org/standards/index.html.