

# *Course of Study*

## *Culinary Technology*

**Warren County Career Center**

**3525 North State Route 48  
Lebanon, Ohio 45036**

**Adopted 06-28-07**

*This document is for the use of the staff at Warren County Career Center.  
Credit is given the designer of the template, Upper Valley JVS, Piqua, Ohio.*

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# *Acknowledgements*

## **Culinary Technology Warren County Career Center**

We would like to take this opportunity to express our gratitude to the following people for their guidance and support in the preparation of this course of study:

Warren County Career Center Administrative Team  
Warren County Educational Service Center  
Dinner by Design – The Shoppes of Grandin II, Maineville OH  
Elaine Staley, Xenia OH  
Dorita Hodges, Larosa's  
George Stengl, Stengl's Catering

***Warren County Career Center  
Resolution Of School Board Approval***

WHEREAS, representatives of the Culinary Technology Advisory Committee of the Warren County Career Center have reviewed the Culinary Technology Course of Study; and

WHEREAS, this Course of Study is based upon Integrating Technical and Academic Competencies adopted by the State of Ohio for the Culinary Technology program; and

WHEREAS, the Culinary Technology faculty and the Culinary Technology Advisory Committee have reviewed and added competencies as needed to address local labor market needs and trends in the industry;

NOW, THEREFORE, BE IT RESOLVED, in accordance with the Superintendent's recommendation, that the Warren County Career Center adopt the Culinary Technology Course of Study.

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District Superintendent

Date

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President, Board of Education

Date

## *Statement of Recommendation*

The Culinary Technology Advisory Committee at Warren County Career Center has reviewed this course of study and recommends it for use as the foundation for instruction in the Culinary Technology class.

The developers of this course of study have considered local labor market needs and the school's ability to offer specialized programs. The competencies have been reviewed and accepted as being congruent with our school's vision, mission, and strategic goals. When appropriate, additional competencies related to the program area have been incorporated into this course of study.

Achievement of technical competencies, utilizing proper attitudes, and demonstrating appropriate values are critical for successful employment and for furthering educational opportunities within a student's chosen field. We believe that this course of study adequately and correctly focuses upon student development.

This course of study is recommended on: 06-28-07

## ***Warren County Career Center Vision Statement***

WCCC is the valued partner of choice within the educational and economic systems of our communities, by providing quality academic and career technical education.

We pave the way for a future of opportunities unique to each of our learners.

## ***Warren County Career Center Mission Statement***

To prepare youths and adults to make informed career choices and to successfully enter, compete, and advance in a changing work world.

## ***Warren County Career Values***

- Treating each other with respect, dignity, trust and mutual value
- Communicating openly and honestly
- Taking ownership of personal actions and being held accountable for results
- Upholding and demonstrating high ethical, educational and fiscal standards
- Exhibiting high levels of professionalism
- Providing high quality instruction and highly qualified staff to ensure success for all learners
- Making quality customer service a high priority
- Promoting partnerships and a team environment
- Celebrating team and individual achievements
- Using data to drive planning, decision making and actions

## *Course Design*

Courses are designed to reflect career-focused education, which combines high-level academics with real-life technical skills. The intent is to maximize a student's present and future academic and career success.

Career-focused education enhances the integration of academic and technical skills, designs programs that prepare students with transferable skills and promotes each student's career opportunities.

## *Course Philosophy*

We believe that each student participating in Culinary Technology should be properly prepared to continue their education at a post-secondary institution and to continue on to a successful workplace experience. Through the use of guest speakers, field trips, job shadowing, internships, advanced placement and other opportunities provided by Career-Technical education, each student will be exposed to various opportunities available to him/her.

We believe that each student needs a strong work ethic, a sense of responsibility, problem-solving skills, an ability to function effectively as a member of a team, strong interpersonal skills and exceptional business communication skills. Activities, both inside and outside the classroom, will provide each student the opportunity to develop, improve and master each of these skill sets. Such activities will include, but not be limited to, classroom projects, internships, advance placement, summer employment, FCCLA competitions and ProStart Internships and competitions.

We believe that each student should strive to develop employability, organizational and leadership skills. FCCLA activities, ProStart Activities and assignments in and out of the classroom will provide each student the opportunity to develop these skills.

We believe that each student, upon successful completion of the Culinary Technology Program will be prepared to excel in related postsecondary and career options of their choosing and to embrace the philosophy of life-long learning.

## *Course Goals*

The course goals for Culinary Technology are to:

1. Develop the competencies of the Major Culinary and Food Service Management within the Business & Management Career cluster of the Integrated Technical and Academic Competencies (ITAC) as outlined by the Ohio Department of Education. Develop the competencies of the ProStart School-to-Career Program as outlined by the National Restaurant Association Educational Foundation. Develop the competencies of the American Culinary Foundation as outlined by the ACCESS ACF program. Develop the competencies and recommendations of the Warren County Career Center Culinary Technology Career & Technical Advisory Committee. These competencies will enable each student to compete in a changing global workplace.
2. Develop competencies in the academic skill areas of communications, math, science, economics and government. These competencies will enable each student to successfully enter and advance through postsecondary options and eventually in the workplace.
3. Develop competencies in employability, technology and entrepreneurship in order to enable each student the opportunity to enter and advance at an even faster rate than their peers through postsecondary opportunities in our ever-changing global workplace.
4. Develop the areas of leadership, teamwork, work ethic, interpersonal skills, business communication skills and sense of responsibility. These skills will enable each student to obtain postsecondary placement and career placement in a changing global workplace.
5. Upon successful completion of the Culinary Technology Program, students will be prepared to enter postsecondary options at a two or four-year institution, are eligible for numerous scholarship opportunities and articulation agreements around the county. Upon successful completion of Culinary Technology Program, students will be on a fast track to achieving their educational and professional goals.

## ***Course Description***

The Culinary Technology Program is a two-year program designed to prepare students to follow the ProStart School-to-Career pathway. After completing two years at the Warren County Career Center students can secure employment in the industry of Culinary Technology and/or enroll in an additional two years at an articulated college. Students will be prepared to enter a dynamic and rewarding career in any number of hospitality industry related careers. Students will have the opportunity to compete in both ProStart and FCCLA competitive events. Opportunities are available to compete on local, state and national levels. Leadership opportunities are available on the local, state and national levels also. Students will be encouraged to pursue internships opportunities and further contact with business and industry professionals will be created through job shadowing, field trips and in-class speakers. As the program develops more meaningful internship opportunities through the ProStart State Coordinator and through our affiliation with the Cincinnati Ohio Restaurant Association, more advanced placement will be incorporated into the curriculum. Field trips, guest speakers and virtual tours of articulated colleges and scholarship opportunity research will encourage students to reach for their post-secondary goal and create more options to be considered. The concept of life-long learning will be put forth to each student throughout the entire program. Finally each student will have the opportunity to pursue an interesting, rewarding career in an extremely dynamic and rapidly growing industry.

## *Academic and Technical Integration*

Expectations of curriculum must be aligned with what is written, taught, assessed, and reported. Student expectations focus on active, project-centered learning—an approach to learning that emphasizes a connection between ideas in a discipline and the outside world. Educational programming and course content will clearly connect career and post-secondary opportunities. At the Warren County Career Center, the main goal is to design courses and projects that use strategies for authentic instruction. These characteristics of instruction focus on deep understanding, established opportunities for concept connections, provide anticipatory and abstract thinking, and emphasize genuine application.

The academic courses at the WCCC follow the state model curricula. They are designed to meet both associate school and state requirements. These standards respond to the need to improve student achievement, quality of curriculum and instruction, and strengthen school and community relationships.

## *Technology*

The Warren County Career Center board and staff believe that technology skills are essential for all students to achieve in the 21<sup>st</sup> century. It is the goal of this district to infuse technology into all facets of education:

- Instruction
- Assessment
- Administration
- Career planning
- Course design
- Professional development

Strategies to incorporate technology into all facets of education are a priority of the district and there is commitment to a continual process to provide updated hardware, software, and professional development for staff members for the purpose of providing a high quality education, with the integration of technology, for all students.

## *Job Shadowing*

Job Shadowing is designed to give the student a short-term overview of the many opportunities within a career field. Career-technical instructors confer with students to determine appropriate experiences.

Internships and Job Placement vary somewhat, but during each experience students should accomplish the following goals:

1. Work with mentors, supervisors, co-workers, and others to accomplish assigned tasks that contribute to the long- and short-term goals of the student. All aspects of the internship/placement (including dates, times, responsibilities, evaluations, etc.) will be outlined in an approved Internship Learning Plan that is coordinated by the career-technical instructor.
2. Apply basic skills and knowledge to "real world" business settings and learn new skills that are relevant to the career path.
3. Demonstrate a solid understanding of the basic skills outlined in the Internship Learning Plan.
4. Reflect upon the internship/placement/job shadowing in terms of post-secondary education/career options.

The criterion for participation in career-based learning experiences is included in the approved packet for each activity and may be obtained by the instructor.

The specifics of how these opportunities are offered in this career-technical program or statement of academic support are:

Students that meet the requirements set forth by the Early Placement Committee are eligible to work with local businesses during the second semester of their senior year. This allows the student to work during designated lab time with the approval of the Instructor. The Instructor will monitor academic eligibility along with the status of their field progress using contractor evaluations. In addition, parent approval and a written contract with the student for certain goals to be achieved will be required.

## *Students Served*

The population served by this program is juniors and seniors.

# *Scope and Sequence*

## Unit 1 – Orientation to Culinary & Food Service Industry

### **Expectation**

Change affects all occupations within culinary arts and food service segments. To remain competitive, workers in culinary and food service establishments must recognize current trends and issues. Individuals who possess broad-based knowledge related to the industry are better able to make informed choices regarding career paths and perform better on the job.

### **Competencies**

- 1.1 Demonstrate knowledge of the scope of and trends and issues in the culinary and food service segment
- 1.2 Identify career opportunities within and related to the culinary and food service segment

### **Sample Scenario**

You've been hired as an intern for the state restaurant association. Recent labor market information indicates a need to recruit more workers to the industry. You have been assigned to develop recruitment materials for all positions in the industry and present them to the Board of Trustees at an upcoming meeting.

### **Guiding Questions**

- How will you prepare to work with and seek input from the Board of Trustees?
- What kinds of information will you need to obtain for developing recruitment materials?
- How will you know whether the project has been successful?

### **Core ITAC Competency Connections**

<b>Strand 1: Solving Problems and Thinking Skillfully</b>	1.2
Strand 2: Communicating Effectively	None
Strand 3: Applying Technology	None
Strand 4: Working Responsibly	None
Strand 5: Planning and Managing a Career	5.1, 5.2, 5.3, 5.5, 5.6
Strand 6: Managing Resources	6.2

### **Business & Management**

#### **Career Cluster ITAC Competency Connections**

Strand 1: Solving Problems and Thinking Skillfully	1.1
Strand 2: Communicating Effectively	None
Strand 3: Applying Technology	None
Strand 4: Working Responsibly	None
Strand 5: Planning and Managing a Career	5.1, 5.3
Strand 6: Managing Resources	None

## **Academic Connections**

### **Social Studies**

- People in Societies: Explain how the United States has benefited from its multicultural diversity
- World Interactions: Examine human relationships which result from connections among regions
- World Interactions: Discuss the relationship between culture, technology, and the environment
- World Interactions: Determine patterns of movement of people, ideas, products, and capital and identify the linkages that prompt interdependence among people and societies
- Decision Making and Resources: Discuss how activities of government impact economic activity
- Decision Making and Resources: Investigate factors that influence the supply and the demand for resources, goods, and services

### **Language Arts**

- Reading/Meaning Construction: Use reading as a possible problem-solving strategy to clarify personal thinking and understanding
- Reading/Application: Select and read material for personal enjoyment and information
- Reading/Application: Develop and apply an understanding of the interrelationship of concepts
- Reading/Multidisciplinary: Value the thinking and language of others
- Listening/Structure: Expand vocabulary through listening/viewing varied media
- Listening/Meaning Construction: Develop the critical-thinking skills necessary to evaluate media and assess oral presentations
- Listening/Meaning Construction: Use information gathered from listening and viewing experiences to expand research
- Listening/Meaning Construction: Consider prior knowledge and experiences when attempting to understand the meaning of new texts

### **Foreign Language**

- Cultural Knowledge: Identify and describe contributions of the target culture(s) to the home culture
- Insights Into the Nature of Language and Culture: Examine the influence of the target culture on the home culture and vice versa
- Multidisciplinary Connections, Information, and Knowledge: Combine information from other school subjects with information from authentic target language sources to complete activities in the foreign language classroom

## **Competencies & Key Indicators**

### **1.1 Demonstrate knowledge of the scope of and trends and issues in the culinary and food service segment**

#### **Key Indicators:**

- 1.1.1 Identify trends that affect the culinary and food service segment (e.g., changing demographics and government regulations, food fads, computerization)
- 1.1.2 Identify relationships between the culinary and food service segment and other industries (e.g., sales and marketing, agriculture, manufacturing, technology, tourism, lodging)
- 1.1.3 Project the future of the culinary and food service segment
- 1.1.4 Keep up to date through trade journals and professional organizations related to the culinary and food service segment

### **1.2 Identify career opportunities within and related to the culinary and food service segment**

#### **Key Indicators:**

- 1.2.1 Identify types of culinary and food service operations
- 1.2.2 Identify desirable personal characteristics of the culinary and food service worker
- 1.2.3 Compare the organizational structures of different culinary and food service operations
- 1.2.4 Identify career opportunities in the culinary and food service segment and related fields
- 1.2.5 Identify advantages and disadvantages of culinary and food service work in terms of one's career goals and personal qualities and preferences
- 1.2.6 Identify the educational and professional requirements for each career path

## **Unit 2 – Customer Relations & Quality Services**

### **Expectation**

Individuals and families who eat out expect good food, cleanliness, and prompt and polite service. Good food alone will not bring customers back if service is slow and courtesy is lacking. Therefore, front-of-house employees must interact in a positive manner with customers and possess specific technical skills that result in quality customer service.

### **Competencies**

- 2.1 Process orders
- 2.2 Provide table service
- 2.3 Provide the services required by special situations

- 2.4 Maintain tables
- 2.5 Serve from food lines
- 2.6 Cater banquets

**Sample Scenario**

You have been working as a waiter for three years at the Classic Cafe, a small, family-owned business in a popular tourist town. The customers are mostly families and, occasionally, motor coach groups. Recently, customers have made negative comments about the quality and promptness of service. Your employer is paying you to research already-developed resources that will be used to train the restaurant service staff. You must prepare a written review of proposed selections and make recommendations for how you would conduct the training using the selected materials.

**Guiding Questions**

- What knowledge, skills, and abilities must be included in the training materials to successfully teach a new food service worker how to provide quality customer service?
- How will you assess the effectiveness of the training materials you research?
- What front-of-house tasks need to be included?

**Core ITAC Competency Connections**

Strand 1: Solving Problems and Thinking Skillfully	1.1, 1.5, 1.8
Strand 2: Communicating Effectively	2.1, 2.2, 2.5, 2.11
Strand 3: Applying Technology	3.3
Strand 4: Working Responsibly	4.1, 4.2, 4.3, 4.4, 4.6
Strand 5: Planning and Managing a Career	None
Strand 6: Managing Resources	6.1, 6.3, 6.4, 6.5, 6.10

**Business & Management**

**Career Cluster ITAC Competency Connections**

Strand 1: Solving Problems and Thinking Skillfully	1.15
Strand 2: Communicating Effectively	2.1, 2.3
Strand 3: Applying Technology	None
Strand 4: Working Responsibly	4.4
Strand 5: Planning and Managing a Career	None
Strand 6: Managing Resources	None

**Academic Connections**

**The Arts**

- Personal Expression and Production/Performance: Communicating Through the Arts: Develop and practice presentation skills

**Language Arts**

- Reading/Multidisciplinary: Read to explore and analyze a variety of cultural elements, attitudes, beliefs, and value structures, including compassion, courtesy, tolerance, honesty, responsibility, and self-discipline
- Listening/Visual Literacy/Meaning Construction: Gather information from listening and viewing experiences to enhance research
- Listening/Visual Literacy/Multidisciplinary: Investigate language and cultural differences through listening and viewing activities
- Oral Communication/Meaning Construction: Communicate orally to inform and persuade
- Oral Communication/Application: Develop and apply decision making strategies
- Oral Communication/Multidisciplinary: Investigate language and cultural differences through oral language activities

**Foreign Language**

- Cultural Knowledge: Develop sensitivity to cultural differences
- Cultural Knowledge: Describe common behavior patterns, beliefs, and attitudes of people in the target culture(s)
- Insights Into the Nature of language and Culture: Compare patterns of behavior of the home and target culture(s)

## Science

- Scientific Inquiry: Document potentially hazardous conditions and associated risks in selected homes and public areas
- Scientific Inquiry: Modify personal opinions, interpretations, and conclusions based on new information
- Applications for Science Learning: Propose courses of action that will validate and demonstrate personal understandings of scientific principles
- Applications for Science Learning: Make decisions regarding personal and public health

## Competencies & Key Indicators

### 2.1 Process orders

#### Key Indicators:

- 2.1.1 Open the sale
- 2.1.2 Present the menu
- 2.1.3 Use feature/benefit selling
- 2.1.4 Describe menu items
- 2.1.5 Demonstrate product knowledge
- 2.1.6 Employ suggestive selling techniques
- 2.1.7 Promote feature items/signature items
- 2.1.8 Record customers' orders
- 2.1.9 Repeat customers' orders
- 2.1.10 Record orders using a point-of-sale (POS) terminal
- 2.1.11 Establish timing for delivery of orders
- 2.1.12 Handle customers' concerns and complaints
- 2.1.13 Transfer order information to the food and/or beverage area(s)
- 2.1.14 Maintain POS printers
- 2.1.15 Check back soon after order delivery to verify satisfaction

### 2.2 Provide table service

#### Key Indicators:

- 2.2.1 Demonstrate knowledge of different types of service (oriental, French, Russian, American, formal, informal)
- 2.2.2 Maintain work area in accordance with established standards for cleanliness and sanitation
- 2.2.3 Demonstrate sensitivity to cultural differences during service
- 2.2.4 Apply teamwork skills during service
- 2.2.5 Provide booth or table service
- 2.2.6 Serve beverages
- 2.2.7 Serve multiple tables
- 2.2.8 Prepare food at tableside
- 2.2.9 Demonstrate food showmanship
- 2.2.10 Serve special foods
- 2.2.11 Package leftovers for customers
- 2.2.12 Monitor customers' dining experience
- 2.2.13 Remove dishes from dining area when customers are finished

### 2.3 Provide the services required by special situations

#### Key Indicators:

- 2.3.1 Resolve customer complaints (change situation from negative to positive)
- 2.3.2 Resolve stressful situations (e.g., unruly customers, con artists, high-volume periods, robberies)
- 2.3.3 Provide services required by customers with special needs
- 2.3.4 Provide services required by customers with special requests
- 2.3.5 Provide services required by customers with children

### 2.4 Maintain tables

**Key Indicators:**

- 2.4.1 Set tables for breakfast, lunch, and dinner
- 2.4.2 Wipe spills
- 2.4.3 Pre-bus tables
- 2.4.4 Load bussing tray/tub

**2.5 Serve from food lines****Key Indicators:**

- 2.5.1 Identify types of food lines
- 2.5.2 Display foods and beverages
- 2.5.3 Follow established procedures for setting up and serving foods (sanitation, safety, temperature control)
- 2.5.4 Prepare garnishes and decorations
- 2.5.5 Employ suggestive selling techniques
- 2.5.6 Demonstrate sensitivity to cultural differences during service
- 2.5.7 Apply teamwork skills during service
- 2.5.8 Describe menu items
- 2.5.9 Portion food in standardized volume and weight
- 2.5.10 Verify customers' orders
- 2.5.11 Monitor food quality
- 2.5.12 Package take-out orders
- 2.5.13 Dismantle food lines
- 2.5.14 Provide counter/snack-bar service

**2.6 Cater banquets****Key Indicators:**

- 2.6.1 Set up serving and eating areas
- 2.6.2 Demonstrate sensitivity to cultural differences during service
- 2.6.3 Apply teamwork skills during service
- 2.6.4 Maintain serving area (e.g., temperature, product quality)
- 2.6.5 Follow established procedures for the use of chafing dishes
- 2.6.6 Maintain chafing dishes
- 2.6.7 Break down eating and serving areas
- 2.6.8 Order/receive special decorations, supplies, and equipment
- 2.6.9 Transport food
- 2.6.10 Cater off-site

## Unit 3 – Work Ethics

**Expectation**

The public's right to know extends into the world of culinary arts and food service. The way food is produced, processed, and preserved prior to its arrival at the restaurant; the ingredients used to prepare a dish; and the way food is prepared can have serious consequences to individuals, particularly those on restricted diets. The level of sanitation during food preparation, as well as the degree of safety, is also of importance to customers and employees alike. Consequently, food service workers must be committed to applying safety and sanitation procedures.

**Competencies**

- 3.1 Acknowledge customers' right to know how food is produced, processed, and preserved
- 3.2 Demonstrate commitment to applying established safety and sanitation procedures

**Sample Scenario**

You have been a server at the Pine Tree Inn for nearly two years as you work your way through college. New business development and the expansion of local tourist attractions over the past year resulted in increased business at the Inn. Management had to hire several new servers quickly. As a veteran server, you have begun to recognize two problems with the new servers that you feel, ethically, should be remedied. First, they do not know enough about the Inn's products and services, and how they can affect a customer.

Second, proper safety and sanitation procedures are being compromised. After much thought, you approach management with your concerns. Management takes your concerns seriously and asks you to develop an outline for a Server Safety and Sanitation Manual. In addition, you have been asked to demonstrate the correct procedures and explain their importance in a server orientation meeting.

### Guiding Questions

- What are the ethical and legal responsibilities regarding safety and sanitation?
- What are the ethical and legal responsibilities regarding product knowledge?
- How can a lack of knowledge affect the customer?
- What major topics will you cover in your demonstration manual?

### Core ITAC Competency Connections

Strand 1: Solving Problems and Thinking Skillfully	1.2, 1.3
Strand 2: Communicating Effectively	2.1, 2.2, 2.5, 2.11
Strand 3: Applying Technology	3.1
Strand 4: Working Responsibly	4.3
Strand 5: Planning and Managing a Career	5.6
Strand 6: Managing Resources	6.3, 6.4, 6.5, 6.6, 6.9

### Business & Management

#### Career Cluster ITAC Competency Connections

Strand 1: Solving Problems and Thinking Skillfully	1.15
Strand 2: Communicating Effectively	2.1, 2.3
Strand 3: Applying Technology	3.1
Strand 4: Working Responsibly	4.1, 4.2, 4.3, 4.4
Strand 5: Planning and Managing a Career	None
Strand 6: Managing Resources	None

## Academic Connections

### Social Studies

- American Heritage: Draw conclusions between ideas, interests, beliefs, and ideologies and their influence on individual and group historical actions

### Language Arts

- Reading/Structure: Use reading as a possible problem-solving strategy to clarify personal thinking and understanding
- Reading/Structure: Use reference books to find, evaluate, and synthesize information
- Listening/Visual Literacy/Meaning Construction: Use information gathered from listening and viewing experiences to expand research
- Oral Communication/Structure: Refine speaking techniques for formal, semiformal, and informal settings
- Oral Communication/Application: Give an oral interpretation for a specific audience
- Oral Communication/Application: Develop and apply decision making strategies

### Science

- Applications for Science Learning: Choose consumer materials utilizing personal and environmental risk and benefit information
- Applications for Science Learning: Make decisions regarding personal and public health
- Applications for Science Learning: Evaluate the social and ecological risks and benefits resulting from the use of various consumer products
- Applications for Science Learning: Use scientific evidence to consider options and formulate positions about the health and safety of others and self

## Competencies & Key Indicators

- 3.1 Acknowledge customers' right to know how food is produced, processed, and preserved**  
**Key Indicators:**

- 3.1.1 Keep up to date about the methods used to produce, process, and preserve food in the employing food service establishment
- 3.1.2 Answer customer inquiries about food ingredients and preparation
- 3.1.3 Provide scientific information about products and services to employees

**3.2 Demonstrate commitment to applying established safety and sanitation procedures**

**Key Indicators:**

- 3.2.1 Keep up-to-date about safety and sanitation procedures
- 3.2.1 Correct violations of safety and sanitation procedures
- 3.2.2 Report persistent violations of safety and sanitation procedures

## Unit 4 – Side Work

**Expectation**

Effective implementation of side work supports quality customer service. Often the value of performing side work is not fully appreciated by staff until products are unavailable or stations are inefficiently maintained. Employees who can foresee shortages of supplies before they are depleted help to maintain efficient, effective quality customer service.

**Competencies**

- 4.1 Maintain dining room
- 4.2 Maintain beverage station
- 4.3 Maintain service items

**Sample Scenario**

You are a member of the server staff at a popular, trendy after-hours restaurant. Recently, the restaurant has experienced several busy periods during which service to customers has been poor. During these periods, staff have complained that side stations have not been stocked and this has interfered with providing fast, efficient service. The manager has assigned you and other employees to determine what actions need to be taken to prevent such situations in the future. At minimum, the manager requests that you develop job sheets and instructions for each side-work station, including opening and closing procedures. The manager expects you to present your work to all employees involved in maintaining the stations and dining area.

**Guiding Questions**

- How can you and your fellow employees identify the main (root) causes underlying the side-work problems?
- What skills, knowledge, and abilities are needed to do side work?
- What proactive steps can be taken by staff to prepare for and to function effectively during busy periods?
- How will you determine if your materials and presentation were successful?

**Core ITAC Competency Connections**

Strand 1: Solving Problems and Thinking Skillfully	1.1, 1.3, 1.8
Strand 2: Communicating Effectively	None
Strand 3: Applying Technology	None
Strand 4: Working Responsibly	4.3, 4.4
Strand 5: Planning and Managing a Career	None
Strand 6: Managing Resources	6.1, 6.3, 6.9

**Business & Management**

**Career Cluster ITAC Competency Connections**

Strand 1: Solving Problems and Thinking Skillfully	None
Strand 2: Communicating Effectively	None
Strand 3: Applying Technology	None
Strand 4: Working Responsibly	None
Strand 5: Planning and Managing a Career	None
Strand 6: Managing Resources	6.4

## Academic Connections

### Science

- Applications for Learning Science: Make decisions regarding personal and public health

## Competencies & Key Indicators

### 4.1 Maintain dining room

#### Key Indicators:

- 4.1.1 Apply knowledge of motion efficiency to design of dining area
- 4.1.2 Maintain work area in accordance with established standards for cleanliness and sanitation
- 4.1.3 Stock/restock service stations
- 4.1.4 Prepare various types of table settings
- 4.1.5 Prepare napkins by folding or by wrapping around tableware
- 4.1.6 Place linen and/or placemats on table
- 4.1.7 Fill salt and pepper shakers and condiment containers
- 4.1.8 Place condiments, candles, centerpiece, point-of-purchase (POP) displays, and salt and pepper shakers for dining

### 4.2 Maintain beverage station

#### Key Indicators:

- 4.2.1 Stock/restock beverage supplies
- 4.2.2 Prepare hot beverages using different types of equipment
- 4.2.3 Prepare cold beverages using different types of equipment
- 4.2.4 Prepare reconstituted beverages
- 4.2.5 Justify selected beverage preparation methods
- 4.2.6 Dispense beverages from hot and cold beverage equipment
- 4.2.7 Maintain scheduled servicing of beverage equipment (e.g., ice machines, beverage and water dispensers)

### 4.3 Maintain service items

#### Key Indicators:

- Maintain textile items in accordance with established procedures for use, storage, and loss prevention
- 4.3.1 Maintain flatware and glassware (e.g., storage, disposal)
- 4.3.2 Maintain menus (e.g., clean or replace)
- 4.3.3 Maintain napkin containers (e.g., clean, refill)
- 4.3.4 Maintain condiment containers (e.g., clean, refill)
- 4.3.5 Maintain single-service items (e.g., disposable items, portion packs)

## Unit 5 – Sanitation and Safety

### Expectation

In restaurants, serious illnesses can result from improper sanitation or handling during food processing and serving. Safety infractions in restaurants can cause injuries not only to employees, but also to customers. Health and safety inspectors can cite and/or close restaurants that are in violation of regulations. Consequently, all restaurant employees must have sanitation and safety knowledge and skills.

### Competencies

- 5.1 Demonstrate knowledge of sanitation and health codes
- 5.2 Perform cleaning and sanitizing duties in accordance with sanitation and health codes
- 5.3 Control conditions to prevent insect and pest infestations
- 5.4 Prevent food contamination
- 5.5 Dispose of garbage and wastes
- 5.6 Maintain a safe work environment

- 5.7 Follow established procedures for the handling and use of cutting tools
- 5.8 Demonstrate ability and qualifications to practice basic first aid techniques

### Sample Scenario

You are a sous-chef who has just started working in the kitchen of a popular restaurant. One day, during the middle of your shift, the owner makes a surprise visit and is very angry about health and safety violations in the kitchen. The owner directs the head chef to thoroughly clean and sanitize the kitchen and correct safety violations. Because you are the most recent culinary school graduate, the chef directs you to develop written materials and visuals to remind the staff of sanitation and safety rules. The owner will review the materials before they are posted.

### Guiding Questions

- What are some major sanitation and safety issues in a restaurant kitchen?
- What information will make a good visual and what needs to be put in written form?
- What are the ramifications of not following health and safety regulations?
- How can you design the visuals and written materials to motivate workers to follow the safety and sanitation rules?

### Core ITAC Competency Connections

Strand 1: Solving Problems and Thinking Skillfully	1.1, 1.3
Strand 2: Communicating Effectively	None
Strand 3: Applying Technology	None
Strand 4: Working Responsibly	4.3
Strand 5: Planning and Managing a Career	None
Strand 6: Managing Resources	6.3, 6.4, 6.5, 6.6

### Business & Management

#### Career Cluster ITAC Competency Connections

Strand 1: Solving Problems and Thinking Skillfully	None
Strand 2: Communicating Effectively	None
Strand 3: Applying Technology	None
Strand 4: Working Responsibly	4.1, 4.2, 4.3, 4.4
Strand 5: Planning and Managing a Career	None
Strand 6: Managing Resources	None

## Academic Connections

### Language Arts

- Reading/Meaning Construction: Use reference books to find, evaluate, and synthesize information
- Oral Communication/Application: Develop and apply decision making strategies

### Science

- Scientific Inquiry: Create, standardize, and document procedures
- Applications for Science Learning: Make decisions regarding personal and public health
- Applications for Science Learning: Identify and reduce risks and threats to a sustainable environment
- Applications for Science Learning: Choose consumer materials utilizing personal and environmental risk and benefit information
- Applications for Science Learning: Use scientific evidence to consider options and formulate positions about the health and safety of others and self

## Competencies & Key Indicators

### 5.1 Demonstrate knowledge of sanitation and health codes

#### Key Indicators:

- 5.1.2 Identify how sanitation and health codes apply to specific food service operations
- 5.1.3 Identify procedures for controlling the spread of disease (e.g., through proper handling of utensils, food, and equipment and personal hygiene practices)
- 5.1.4 Identify sanitation regulations and inspection requirements

- 5.1.5 Identify requirements for maintaining clean facilities and equipment
- 5.1.6 Identify sanitation procedures for receiving, preparing, storing, and serving food

**5.2. Perform cleaning and sanitizing duties in accordance with sanitation and health codes**

**Key Indicators:**

- 5.2.1 Identify food contact surfaces
- 5.2.2 Clean food contact surfaces (e.g., food prep tables, counters, sinks, shelving, high-chair trays)
- 5.2.3 Sanitize food contact surfaces (e.g., food prep tables, counters, sinks, shelving, high-chair trays)
- 5.2.4 Clean nonfood contact surfaces and equipment
- 5.2.5 Wash/rinse utensils and equipment
- 5.2.6 Sanitize utensils and equipment
- 5.2.7 Store utensils and equipment to maintain clean/sanitary conditions
- 5.2.8 Develop cleaning schedules for food and nonfood contact surfaces

**5.3 Control conditions to prevent insect and pest infestations**

**Key Indicators:**

- 5.3.1 Identify precautions that will help control pests
- 5.3.2 Store food item in accordance with established procedures
- 5.3.3 Clean spills
- 5.3.4 Interpret labels on chemical products
- 5.3.5 Follow procedures established for the safe use of chemicals in insect and pest control and prevention
- 5.3.6 Report signs of insects and pests

**5.4 Prevent food contamination**

**Key Indicators:**

- 5.4.1 Identify reasons that many common foods are potentially hazardous
- 5.4.2 Identify organisms that cause common food-borne illnesses
- 5.4.3 Demonstrate knowledge of how time and temperature affect microorganism growth
- 5.4.4 Distinguish between food poisoning, chemical food poisoning, and food infection)
- 5.4.5 Identify hazards related to food additives (e.g., sodium bisulfide, MSG)
- 5.4.6 Control biological hazards (e.g., bacteria, viruses, and parasites)
- 5.4.7 Control physical hazards (e.g., glass fragments, staples)
- 5.4.8 Control chemical hazards (e.g., cleaning agents, pesticides)
- 5.4.9 Comply with the standards established for the safe heating, reheating, and cooling of foods
- 5.4.10 Justify selected standards and methods for preventing food contamination

**5.5 Dispose of garbage and wastes**

**Key Indicators:**

- 5.5.1 Comply with the standards established for the safe handling and disposal of garbage, grease, and refuse
- 5.5.2 Clean garbage containers
- 5.5.3 Follow established procedures in operating a garbage disposal
- 5.5.4 Comply with environmental guidelines related to the disposal of garbage and wastes

**5.6 Maintain a safe work environment**

**Key Indicators:**

- 5.6.1 Comply with all federal and state laws relating to the safety of the work environment
- 5.6.2 Follow established safety rules and procedures (e.g., as presented in an employee handbook)
- 5.6.3 Analyze causes of accidents in food service operations
- 5.6.4 Monitor the conditions of equipment
- 5.6.5 Recognize potential safety hazards
- 5.6.6 Report unsafe conditions

- 5.6.7 Practice standard fire-prevention techniques
- 5.6.8 Maintain the traffic flow in compliance with fire regulations
- 5.6.9 Follow established procedures for the safe use of electricity
- 5.6.10 Follow established lifting and carrying procedures
- 5.6.11 Follow established procedures for reporting accidents
- 5.5.12 Justify the merit of established safety procedures

**5.7 Follow established procedures for the handling and use of cutting tools**

**Key Indicators:**

- 5.7.1 Sharpen cutting tools
- 5.7.2 Wash/rinse cutting tools
- 5.7.3 Sanitize cutting tools
- 5.7.4 Store cutting tools
- 5.7.5 Follow established procedures for the safe handling and use of knives
- 5.7.6 Follow established procedures for the safe handling and use of slicers
- 5.7.7 Follow established procedures for the safe handling and use of shredders and choppers
- 5.7.8 Justify the merit of established safety procedures

**5.8 Demonstrate ability and qualifications to practice basic first aid techniques**

**Key Indicators:**

- 5.8.1 Follow established emergency procedures
- 5.8.2 Classify cuts
- 5.8.3 Treat minor cuts
- 5.8.4 Classify burns
- 5.8.5 Treat minor burns

## Unit 6 – Management Operations

**Expectation**

Managers of restaurants have a broad range of responsibilities, including effective management of resources. Skillful managers help to reduce costs and maximize profits. They must be able to maintain a variety of food service records and systems so they can successfully manage the finances of an operation.

**Competencies**

- 6.1 Maintain food service records
- 6.2 Control costs
- 6.3 Manage food service finances
- 6.4 Follow basic facility operation procedures
- 6.5 Order food and supplies

**Sample Scenario**

You manage a family-owned restaurant in a small town. Recently, a well-known fast-food restaurant has opened nearby. To remain competitive, the owner-chef has directed you to review the restaurant’s operation and food service records looking for ways to control costs so he can better compete with the prices of the fast-food restaurant. Upon completion of your review, the owner will meet with you to discuss your findings and recommendations. Since the owner is a chef, not a trained business person, you need to provide verbal and/or written materials to help him understand your findings and recommendations.

**Guiding Questions**

- What factors of the family restaurant’s operation impact cost control?
- What food service records are needed to analyze costs?
- How will you analyze information and make recommendations?
- What factors about your competitor and the local market should your analysis and recommendations consider?

**Core ITAC Competency Connections**

Strand 1: Solving Problems and Thinking Skillfully	1.1, 1.4, 1.8
Strand 2: Communicating Effectively	2.1, 2.2, 2.3, 2.5, 2.11
Strand 3: Applying Technology	3.2, 3.3, 3.4, 3.5
Strand 4: Working Responsibly	4.3, 4.4, 4.6
Strand 5: Planning and Managing a Career	None
Strand 6: Managing Resources	6.1, 6.10

## **Business & Management**

### **Career Cluster ITAC Competency Connections**

Strand 1: Solving Problems and Thinking Skillfully	1.2, 1.3, 1.5, 1.10, 1.14
Strand 2: Communicating Effectively	2.1, 2.3
Strand 3: Applying Technology	3.1, 3.3
Strand 4: Working Responsibly	None
Strand 5: Planning and Managing a Career	None
Strand 6: Managing Resources	6.3, 6.4

## **Academic Connections**

### **Math**

- Data Analysis and Probability: Organize data into tables, charts, and graphs
- Data Analysis and Probability: Read, interpret, and use tables, charts, and graphs to identify patterns, note trends, draw conclusions, and make predictions

### **Language Arts**

- Reading/Meaning Construction: Use reference books to find, evaluate, and synthesize information

## **Competencies & Key Indicators:**

### **6.1 Maintain food service records**

#### **Key Indicators:**

- 6.1.1 Identify types of record-keeping systems for food service
- 6.1.2 Analyze record-keeping needs
- 6.1.3 Select a record-keeping system appropriate for a food service operation
- 6.1.4 Maintain the food service record-keeping system

### **6.2 Control costs**

#### **Key Indicators:**

- 6.2.1 Determine the economic impact of food spoilage
- 6.2.2 Establish a framework for cost control
- 6.2.3 Analyze costs using the established cost-control framework

### **6.3 Manage food service finances**

#### **Key Indicators:**

- 6.3.1 Analyze financial records
- 6.3.2 Determine the financial stability of the food service operation

### **6.4 Follow basic facility operation procedures**

#### **Key Indicators:**

- 6.4.1 Complete opening checklists
- 6.4.2 Perform table visits
- 6.4.3 Maintain service times
- 6.4.4 Perform customer readiness checks
- 6.4.5 Complete unit inspection forms
- 6.4.6 Complete closing checklists
- 6.4.7 Complete cleaning checklists
- 6.4.8 Complete preventive maintenance checklists

6.4.9 Report needed building equipment repairs

## 6.5 Order food and supplies

### Key Indicators:

- 6.5.1 Inventory perishable and nonperishable items
- 6.5.2 Manage food ordering using electronic inventory systems
- 6.5.3 Project inventory needs based on built-to amounts
- 6.5.4 Maintain food budgets
- 6.5.5 Determine food specifications and quantity to be ordered based on perpetual and physical inventory methods
- 6.5.6 Secure bids
- 6.5.7 Complete order and requisitions forms
- 6.5.8 Complete purchase orders
- 6.5.9 Follow up on orders with suppliers

# Unit 7 – Purchasing and Inventory Control

## Expectation

Purchasing and inventory control are fundamental management functions for business success in food service operations. Using contemporary computerized systems for these functions dramatically improves efficiency and helps to provide up-to-date information for making business decisions. Employees who can efficiently manage purchasing and inventory-control procedures help to support business success.

## Competencies

- 7.1 Receive foods and supplies
- 7.2 Store foods and supplies

## Sample Scenario

You are a stock clerk at a wholesale food service distribution company. Your job is to oversee the receipt of food and supplies from manufacturers, and the storing of inventory. In addition, you verify orders sent to local restaurants. Recently, the company has experienced an unexpected loss in profits. Company owners suspect it is due to improper on-site handling and storage processes. You have been assigned to analyze the handling and controlling of food products and supplies, summarize your findings in a report, and make recommendations for improvement.

## Guiding Questions

- Why is inventory control so important?
- When receiving food and nonfood products, what procedures should be followed?
- How can you ensure the proper storage of foods and supplies?
- How can you identify problems in your company's purchasing and inventory-control procedures?

## Core ITAC Competency Connections

Strand 1: Solving Problems and Thinking Skillfully	1.3, 1.8
Strand 2: Communicating Effectively	None
Strand 3: Applying Technology	3.4
Strand 4: Working Responsibly	None
Strand 5: Planning and Managing a Career	None
Strand 6: Managing Resources	6.1, 6.9, 6.10

## Business & Management

### Career Cluster ITAC Competency Connections

Strand 1: Solving Problems and Thinking Skillfully	None
Strand 2: Communicating Effectively	None
Strand 3: Applying Technology	3.1, 3.3
Strand 4: Working Responsibly	None
Strand 5: Planning and Managing a Career	None
Strand 6: Managing Resources	6.3, 6.4

## Academic Connections

### Science

- Scientific Inquiry: Utilize appropriate units for counts and measures
- Applications for Science Learning: Search for, use, create, and store objects and information using various strategies and methods of organization and access
- Applications for Science Learning: Use technology to collect, analyze, and communicate information (e.g., electronic networks, desktop publishing, remote sensing, graphing calculators, satellite telemetry)

## Competencies & Key Indicators

### 7.1 Receive foods and supplies

#### Key Indicators:

- 7.1.1 Manage food receiving using electronic inventory systems
- 7.1.2 Check shipments against orders
- 7.1.3 Verify vendors and orders
- 7.1.4 Count supplies
- 7.1.5 Weigh supplies
- 7.1.6 Inspect foods and supplies (e.g., expiration dates, temperature, dented cans, frozen crystals, and other visual cues)
- 7.1.7 Complete receiving records

### 7.2 Store foods and supplies

#### Key Indicators:

- 7.2.1 Manage food storage using electronic inventory systems
- 7.2.2 Determine type of food storage appropriate for various foods and supplies
- 7.2.3 Maintain sanitation of storage areas
- 7.2.4 Maintain storage temperatures required for foods
- 7.2.5 Organize inventory using the first-in, first-out (FIFO) rotation system
- 7.2.6 Distribute foods and supplies in accordance with needs

## Unit 8 – Nutrition and Menu Development

### Expectation

The menu of a restaurant operation drives the business. For example, needs for staff, equipment, food, and supplies are determined by what is needed to prepare and deliver the items on the menu. A blend of marketing, business, and culinary skills are vital to the creation of menus that satisfy customer needs and produce profits.

### Competencies

- 8.1 Demonstrate knowledge of nutrition
- 8.2 Apply nutritional information and trends in menu planning
- 8.3 Develop menu items using standardized recipes
- 8.4 Develop restaurant menus
- 8.5 Calculate costs

### Sample Scenario

You are a chef who is considering starting a small business. You have been exploring the trend of home meal replacement (HMR). Before making any decision, you decide to create an HMR menu program and present it to a focus group of potential, health-conscious customers from a suburban community. After reviewing the information gained from the focus group, you need to develop a short report of the results to be included in a business plan and revise the menu program.

### Guiding Questions

- Where can you find the nutritional information you will need to analyze the menu program?
- What resources can you use for menu ideas and recipes?

- What factors must you consider when calculating the costs associated with the menu program?

### **Core ITAC Competency Connections**

Strand 1: Solving Problems and Thinking Skillfully	1.1, 1.2, 1.4, 1.5
Strand 2: Communicating Effectively	2.3, 2.7
Strand 3: Applying Technology	3.2, 3.6
Strand 4: Working Responsibly	None
Strand 5: Planning and Managing a Career	None
Strand 6: Managing Resources	6.2, 6.3

### **Business & Management**

#### **Career Cluster ITAC Competency Connections**

Strand 1: Solving Problems and Thinking Skillfully	1.2, 1.3, 1.10, 1.15
Strand 2: Communicating Effectively	None
Strand 3: Applying Technology	3.4, 3.5
Strand 4: Working Responsibly	None
Strand 5: Planning and Managing a Career	None
Strand 6: Managing Resources	None

## **Academic Connections**

### **Math**

- Algebra: Decide when a problem situation is best solved using a computer, calculator, paper and pencil, or mental arithmetic/ estimation techniques
- Data Analysis and Probability: Read, interpret, and use tables, charts, and graphs to identify patterns, note trends, draw conclusions, and make predictions

### **Language Arts**

- Reading/Meaning Construction: Develop and apply an understanding of the interrelationship of concepts
- Reading/Meaning Construction: Assess the validity and quality of a selection read
- Writing/Structure: Use information synthesized from a variety of sources to construct meaning

### **Science**

- Scientific Inquiry: Make and read scale drawings, maps, models, and other representations to aid planning and understanding
- Scientific Inquiry: Utilize appropriate units for counts and measures
- Scientific Inquiry: Use ratios, proportions, and probabilities in appropriate problem situations
- Conditions for Learning Science: Synthesize scientific information from a variety of sources
- Applications for Science Learning: Choose everyday consumer products that utilize recent innovation and pass appropriate performance criteria
- Applications for Science Learning: Use technology to collect, analyze, and communicate information (e.g., electronic networks, desktop publishing, remote sensing, graphing calculators, satellite telemetry)

## **Competencies & Key Indicators**

### 8.1 Demonstrate knowledge of nutrition

#### Key Indicators:

- |       |   |
|-------|---|
| 8.1.1 | Access credible sources of information related to food science and safety (including Internet sources)                            |
| 8.1.2 | Demonstrate knowledge of basic and special dietary terminology, concepts, and principles (e.g., nutrients, digestion, metabolism) |
| 8.1.3 | Interpret written and graphic nutrition information (e.g., food labels, food pyramids, suggested recipes)                         |
| 8.1.4 | Judge the reliability and validity of nutritional information   |
| 8.1.5 | Demonstrate knowledge of the symptoms of and antidotes for food allergies   |
| 8.1.6 | Identify common substances found in food that are toxic   |
| 8.1.7 | Identify the impact of biotechnology on human health and wellness   |

- 8.1.8 Identify the nutritional impact of factors affecting eating habits (e.g., eating disorders, lifestyles, food availability)
- 8.1.9 Recognize that food science knowledge is dynamic, not static

## **8.2 Apply nutritional information and trends in menu planning**

### **Key Indicators:**

- 8.2.1 Analyze menu items to determine ways to lower salt, cholesterol, and fat
- 8.2.2 Develop nutritionally balanced menus
- 8.2.3 Develop menus for special dietary needs (e.g., low-salt, low-fat, soft, liquid, sugar-free, vegetarian, ethnic, religious)
- 8.2.4 Develop menus using nutrition-information resources available through electronic media

## **8.3 Develop menu items using standardized recipes**

### **Key Indicators:**

- 8.3.1 Interpret recipe information
- 8.3.2 Substitute recipe ingredients
- 8.3.3 Adjust herbs, spices, flavorings, and extracts
- 8.3.4 Calculate ingredient amounts needed to increase or decrease recipe yields
- 8.3.5 Calculate recipe yields
- 8.3.6 Calculate recipes using resources available through electronic media

## **8.4 Develop restaurant menus**

### **Key Indicators:**

- 8.4.1 Identify menu types
- 8.4.2 Analyze menu trends
- 8.4.3 Create menus for total food utilization
- 8.4.4 Create nutritionally balanced and appealing menus
- 8.4.5 Create menus using seasonal, ethnic, and regional foods
- 8.4.6 Create menus based on the type of restaurant operation
- 8.4.7 Create menus for holidays, themes, buffets, and special functions
- 8.4.8 Schedule the rotation of menus
- 8.4.9 Write appealing descriptions of menu items
- 8.4.10 Plan menu layouts
- 8.4.11 Critique the physical qualities of drafted menus (e.g., organization, readability, visual structure, aesthetic design)
- 8.4.12 Develop menus using resources available through electronic media
- 8.4.13 Develop menus using HACCP concepts
- 8.4.14 Identify foods that require consumer advisories

## **8.5 Calculate costs**

### **Key Indicators:**

- 8.5.1 Identify economic factors that affect the raw costs of food (e.g., season, strikes, weather)
- 8.5.2 Calculate food cost per serving (i.e., yield cost)
- 8.5.3 Calculate operational costs
- 8.5.4 Calculate labor productivity
- 8.5.5 Calculate menu prices incorporating all identified pricing factors

# **Unit 9 – Equipment**

## **Expectation**

Technology is an integral component in the operation of contemporary restaurant kitchens. A wide variety of equipment is available to today's chef. Operating the equipment properly helps ensure a job well done; equipment used improperly may result in injury and inferior product quality. Much of today's equipment is designed to speed production and reduce handwork, but without proper knowledge of operating procedures, expensive equipment may lay idle or not be used to its potential.

## **Competencies**

- 9.1 Demonstrate the procedures for operating and maintaining food preparation equipment
- 9.2 Demonstrate the procedures for operating and maintaining nonfood equipment in a kitchen

**Sample Scenario**

You have just been hired as a restaurant equipment salesperson. As part of your orientation, you must participate in a training program for operating food preparation and nonfood equipment. In the training, you will learn how to operate the equipment so that you can demonstrate it and answer questions about its operation. After the training, you will be expected to participate in demonstrations for local restaurant owners at a trade show.

**Guiding Questions**

- What are effective methods you can use to demonstrate equipment?
- What are the implications for the employee, employer, customer, and community of not following safety and sanitation procedures for equipment operation?
- How would you emphasize the benefits of new technology in relation to equipment?
- How will you help equipment users to learn how to more efficiently use the equipment and reap its full benefits?

**Core ITAC Competency Connections**

Strand 1: Solving Problems and Thinking Skillfully	1.2, 1.8
Strand 2: Communicating Effectively	None
Strand 3: Applying Technology	3.1
Strand 4: Working Responsibly	None
Strand 5: Planning and Managing a Career	None
Strand 6: Managing Resources	6.1, 6.2, 6.5

**Business & Management**

**Career Cluster ITAC Competency Connections**

Strand 1: Solving Problems and Thinking Skillfully	None
Strand 2: Communicating Effectively	None
Strand 3: Applying Technology	None
Strand 4: Working Responsibly	None
Strand 5: Planning and Managing a Career	None
Strand 6: Managing Resources	None

**Academic Connections**

**Language Arts**

- Reading/Meaning Construction: Use reference books to find, evaluate, and synthesize information

**Science**

- Applications for Science Learning: Do simple troubleshooting on common electrical and mechanical systems, identifying and eliminating possible causes of malfunctions
- Application for Science Learning: Make decisions regarding personal and public health

**Competencies & Key Indicators**

**9.1 Demonstrate the procedures for operating and maintaining food preparation equipment**

**Key Indicators:**

- 9.1.1 Arrange equipment
- 9.1.2 Operate proofing cabinets
- 9.1.3 Operate ovens (e.g., convection/cook-and-hold, standard microwave, conventional, infrared, combination oven-steamer)
- 9.1.4 Operate mixers and attachments
- 9.1.5 Operate steam tables
- 9.1.6 Operate steam kettles

- 9.1.7 Operate ranges
- 9.1.8 Operate fryer units
- 9.1.9 Operate tilt skillets
- 9.1.10 Operate pasta cookers
- 9.1.11 Operate grills, broilers, and charbroilers
- 9.1.12 Operate scales (e.g., baker's, electronic, inventory, and portion)
- 9.1.13 Operate blenders and food processors
- 9.1.14 Operate slicing machines
- 9.1.15 Operate toasters
- 9.1.16 Operate grinders and tenderizers
- 9.1.17 Operate holding and serving equipment
- 9.1.18 Maintain food preparation equipment according to manufacturer's specifications and agreements (e.g., warranties, service agreements)
- 9.1.19 Troubleshoot equipment problems

## 9.2 Demonstrate the procedures for operating and maintaining nonfood equipment in a kitchen

### Key Competencies:

- 9.2.1 Set up three-compartment sinks for use
- 9.2.2 Operate dish machines
- 9.2.3 Operate trash compactors and pulpers
- 9.2.4 Maintain waste disposals
- 9.2.5 Maintain refrigerators and freezers
- 9.2.6 Maintain ventilation hoods
- 9.2.7 Maintain nonfood equipment according to manufacturer's specifications
- 9.2.8 Follow established procedures for the safe handling and use of cleaning equipment

## Unit 10 – Food Preparation Basics

### Expectation

The basics of food preparation are derived from the academic skills and knowledge of math, science, and the arts. Employees who possess such academic knowledge and skills are better able to preserve and/or enhance the natural qualities of food; develop creative and nutritionally-sound menus; and respect and utilize safety and sanitation procedures in the preparation, storage, and presentation of food.

### Competencies

- 10.1 Apply math skills to food preparation
- 10.2 Apply artistic skills to food preparation and presentation
- 10.3 Apply scientific knowledge to food preparation, storage, and presentation
- 10.4 Perform pre-preparation procedures
- 10.5 Perform manual and mechanical cutting

### Sample Scenario

You are a food product developer for a well-known national franchise restaurant chain. Your team is responsible for developing seasonal menu items to be used in the restaurants. You need to develop a product-description pamphlet illustrating the artistic skills needed for preparation, plating, and serving; pricing information, including the profit margin; and scientific knowledge related to each product and its storage and preparation. A picture of the completed product is required for all pamphlets. The manager of product development expects to review and comment on each pamphlet prior to mass production.

### Guiding Questions

- What safety and sanitation procedures will you follow as you prepare, present, and store the food?
- How will scientific knowledge help to enhance the preparation and the storage of the food?
- How will artistic skills help to enhance the presentation of the food?
- How will you summarize the artistic, scientific, and pricing information in a pamphlet? • How will you assess the pamphlet's effectiveness?

### Core ITAC Competency Connections

Strand 1: Solving Problems and Thinking Skillfully	1.4, 1.5
Strand 2: Communicating Effectively	None
Strand 3: Applying Technology	None
Strand 4: Working Responsibly	None
Strand 5: Planning and Managing a Career	5.4
Strand 6: Managing Resources	6.1, 6.2, 6.5, 6.9

### **Business & Management**

#### **Career Cluster ITAC Competency Connections**

Strand 1: Solving Problems and Thinking Skillfully	1.3
Strand 2: Communicating Effectively	None
Strand 3: Applying Technology	3.1
Strand 4: Working Responsibly	None
Strand 5: Planning and Managing a Career	None
Strand 6: Managing Resources	None

## **Academic Connections**

### **The Arts**

- Personal Expression and Production/Performance: Communicating Through the Arts: Develop and practice presentation skills
- Personal Expression and Production/Performance: Communicating Through the Arts: Transform a work of art using a new or different technology

### **Math**

- Algebra: Describe problem situations by using and relating numerical, symbolic, and graphical representations

### **Science**

- Scientific Inquiry: Utilize appropriate units for counts and measures
- Scientific Inquiry: Use ratios, proportions, and probabilities in appropriate problem situations
- Scientific Knowledge: Investigate conservation principles associated with physical, chemical, and nuclear changes
- Applications for Science Learning: Identify and reduce risks and threats to a sustainable environment

## **Competencies & Key Indicators**

### **10.1 Apply math skills to food preparation**

#### **Key Indicators:**

- 10.1.1 Measure liquids and solids by weight or volume using appropriate equipment
- 10.1.2 Measure food temperature
- 10.1.3 Convert recipes to meet specific quantity needs
- 10.1.4 Calculate nutritional information per serving (calories, fat grams, cholesterol)

### **10.2 Apply artistic skills to food preparation and presentation**

#### **Key Indicators:**

- 10.2.1 Apply knowledge of shapes, colors, textures, and design to food preparation and presentation
- 10.2.2 Apply knowledge of the senses to food preparation and presentation
- 10.2.3 Apply creativity during food preparation and presentation
- 10.2.4 Determine themes for special occasions
- 10.2.5 Enhance food presentations using various technologies

### **10.3 Apply scientific knowledge to food preparation, storage, and presentation**

#### **Key Indicators:**

- 10.3.1 Apply knowledge of thermal energy transfer in the preparation, storage, and presentation of food
- 10.3.2 Control undesirable microbial growth in food using standard methods

- 10.3.3 Apply knowledge of acidity to food preparation, storage, and presentation
- 10.3.4 Apply knowledge of the action of water in food preparation, storage, and presentation
- 10.3.5 Recognize various types of chemical reactions during food preparation, storage, and presentation
- 10.3.6 Apply knowledge of how lipids affect the texture and tenderness of bakery products
- 10.3.7 Differentiate between various solutions (colloids, emulsions)
- 10.3.8 Apply knowledge of how oxidation affects foods
- 10.3.9 Allow for the effect of pressure, including altitude, on cooking

#### 10.4 Perform pre-preparation procedures

##### Key Indicators:

- 10.4.1 Select utensils, containers, and equipment appropriate for the task to be performed
- 10.4.2 Sanitize utensils, containers, equipment, and work space
- 10.4.3 Assemble needed recipes and ingredients
- 10.4.4 Apply work-efficiency principles in setting up work space

#### 10.5 Perform manual and mechanical cutting

##### Key Indicators:

- 10.5.1 Identify tools for cutting by hand
- 10.5.2 Identify types of knives for specific cuts
- 10.5.3 Perform classical cuts
- 10.5.4 Perform cuts using mechanical cutting tools (e.g. mandoline, food processor, buffalo chopper)

## Unit 11 – Garde Manger/Pantry

### Expectation

Garde-manger/pantry items are standard food choices in most restaurant operations. Often, such items are selected by appearance, taste, and texture to create buffets or they are used to enhance a main entrée. Consequently, it is vital that cooks and chefs be competent in the preparation of these items.

### Competencies

- 11.1 Prepare salads and salad dressings
- 11.2 Prepare hors d'oeuvres and appetizers
- 11.3 Prepare hot and cold sandwiches and trays of sandwich ingredients
- 11.4 Prepare garnishes

### Sample Scenario

You are the chef at Elegant Fare, a local catering company with an outstanding reputation for formal and informal off-premise catering. A local, private academy is looking for a caterer to provide food and services for an alumni fundraising brunch for about 1,000 people. The buffet is to include salads, miniature hot and cold sandwiches, hors d'oeuvres and appetizers. You must prepare a sales presentation for representatives of the academy that includes items for taste testing.

### Guiding Questions

- What factors should you consider in making your suggested menu selections for this event?
- What quality controls will you build into your plan?
- What garde-manger tools and techniques will be required for the suggested selections?
- How will you present the sample food items?

### Core ITAC Competency Connections

Strand 1: Solving Problems and Thinking Skillfully	1.1, 1.2
Strand 2: Communicating Effectively	2.8
Strand 3: Applying Technology	None
Strand 4: Working Responsibly	4.3, 4.4
Strand 5: Planning and Managing a Career	5.4
Strand 6: Managing Resources	6.1, 6.2, 6.9

## **Business & Management**

### **Career Cluster ITAC Competency Connections**

Strand 1: Solving Problems and Thinking Skillfully	None
Strand 2: Communicating Effectively	None
Strand 3: Applying Technology	None
Strand 4: Working Responsibly	None
Strand 5: Planning and Managing a Career	None
Strand 6: Managing Resources	None

## **Academic Connections**

### **The Arts**

- Personal Expression and Production/Performance: Communicating Through the Arts: Develop and practice presentation skills

### **Science**

- Applications for Science Learning: Propose courses of action that will validate and demonstrate personal understandings of scientific principles
- Applications for Science and Learning: Solve unique problems using the results of systematic analyses

## **Competencies & Key Indicators**

### **11.1 Prepare salads and salad dressings**

#### **Key Indicators:**

- 11.1.1 Identify greens, vegetables, and fruits
- 11.1.2 Identify the characteristics of various salad ingredients
- 11.1.3 Prepare greens, vegetables, and fruits
- 11.1.4 Prepare protein salads (e.g., meat, seafood, fish, cheese)
- 11.1.5 Prepare gelatin salads
- 11.1.6 Prepare pasta salads
- 11.1.7 Prepare vegetable salads
- 11.1.8 Portion salads
- 11.1.9 Present salads for serving
- 11.1.10 Prepare oil-based salad dressings
- 11.1.11 Prepare mayonnaise salad dressings
- 11.1.12 Prepare cooked salad dressings
- 11.1.13 Prepare fat-free salad dressings
- 11.1.14 Store prepared salad dressings
- 11.1.15 Assemble fruit and vegetable trays
- 11.1.16 Devise an efficient system for producing salads in quantity

### **11.2 Prepare hors d'oeuvres and appetizers**

#### **Key Indicators:**

- 11.2.1 Prepare hot hors d'oeuvres and appetizers
- 11.2.2 Prepare cold hors d'oeuvres and appetizers
- 11.2.3 Provide for nutritional balance in assembling hors d'oeuvre and appetizer platters
- 11.2.4 Provide for aesthetic appeal in assembling hors d'oeuvre and appetizer platters
- 11.2.5 Devise an efficient system for producing hors d'oeuvres and appetizers in quantity

### **11.3 Prepare hot and cold sandwiches and trays of sandwich ingredients**

#### **Key Indicators:**

- 11.3.1 Identify the various types of sandwiches
- 11.3.2 Select breads
- 11.3.3 Prepare breads for sandwich-making

- 11.3.4 Prepare fillings for sandwiches (e.g., meat, cheese, poultry, seafood)
- 11.3.5 Prepare accompaniments appropriate for each sandwich type
- 11.3.6 Prepare food items for hot sandwiches (e.g., grill, broil, sauté, deep-fry)
- 11.3.7 Assemble sandwiches
- 11.3.8 Garnish sandwiches
- 11.3.9 Prepare meat and/or cheese trays
- 11.3.10 Store sandwiches and meat and/or cheese trays
- 11.3.11 Devise an efficient system for producing sandwiches in quantity

#### 11.4 Prepare garnishes

##### Key Indicators:

- 11.4.1 Identify the characteristics of ingredients commonly used as garnishes
- 11.4.2 Prepare garnishes using standard equipment and techniques
- 11.4.3 Apply artistic principles in the use of garnishes

## Unit 12 – Main Entrees

### Expectation

An entrée is the primary item of many dining experiences. The selection and quality of entrées often define and reflect on the reputation of the restaurant. Consequently, restaurant workers need to understand the importance and value of selecting and preparing entrées.

### Competencies

- 12.1 Prepare eggs and egg dishes
- 12.2 Prepare dairy products
- 12.3 Prepare cheeses and cheese dishes
- 12.4 Prepare fruits and fruit dishes
- 12.5 Prepare vegetables and vegetable dishes
- 12.6 Prepare pasta and pasta dishes
- 12.7 Prepare grains and cereals and grain/cereal dishes
- 12.8 Prepare rice and rice dishes
- 12.9 Prepare legumes and legume dishes
- 12.10 Prepare contemporary vegetarian dishes
- 12.11 Prepare meats and meat dishes

### Sample Scenario

You are a chef and member of the local American Culinary Federation (ACF) chapter. The chapter has agreed to contribute to the local Big Brothers/Big Sisters Gala by preparing entrées for a fundraising event. It has agreed to prepare a wide variety of entrées for a culturally and ethnically diverse group of 500 people. Food will be served buffet style in snack or sampling portions. You need to present a menu of entrées, the table layout, and sample items to the event coordinator for approval.

### Guiding Questions

- What preparation techniques should you use to ensure a quality product?
- Based on selected recipes and portion sizes, how much of each entrée is needed?
- What food-safety issues demand attention for a long buffet line and the large quantity of food preparation for this event?

### Core ITAC Competency Connections

Strand 1: Solving Problems and Thinking Skillfully	1.1, 1.2, 1.4
Strand 2: Communicating Effectively	None
Strand 3: Applying Technology	None
Strand 4: Working Responsibly	4.3, 4.4
Strand 5: Planning and Managing a Career	5.4
Strand 6: Managing Resources	6.1, 6.2, 6.9

### Business & Management

Career Cluster ITAC Competency Connections	
Strand 1: Solving Problems and Thinking Skillfully	None
Strand 2: Communicating Effectively	None
Strand 3: Applying Technology	None
Strand 4: Working Responsibly	None
Strand 5: Planning and Managing a Career	None
Strand 6: Managing Resources	None

## Academic Connections

### The Arts

- Personal Expression and Production/Performance: Communicating Through the Arts: Develop and practice presentations skills

### Science

- Application for Science Learning: Propose courses of action that will validate and demonstrate personal understandings of scientific principles

## Competencies & Key Indicators

### 12.1 Prepare eggs and egg dishes

#### Key Indicators:

- 12.1.1 Identify the composition of eggs
- 12.1.2 Distinguish between the various sizes and grades of eggs
- 12.1.3 Store eggs according to their form (e.g., fresh, frozen, dried, liquid pasteurized)
- 12.1.4 Bind foods using eggs
- 12.1.5 Thicken foods using eggs
- 12.1.6 Coat foods for breading using eggs
- 12.1.7 Emulsify foods using eggs
- 12.1.8 Clarify foods using eggs
- 12.1.9 Leaven foods using eggs
- 12.1.10 Bake eggs
- 12.1.11 Boil eggs
- 12.1.12 Fry eggs
- 12.1.13 Scramble eggs
- 12.1.14 Stir eggs
- 12.1.15 Poach eggs
- 12.1.16 Prepare deviled eggs
- 12.1.17 Prepare omelets
- 12.1.18 Prepare egg custards
- 12.1.19 Prepare soufflés
- 12.1.20 Prepare quiches
- 12.1.21 Present eggs and egg dishes for serving
- 12.1.22 Store prepared egg dishes

### 12.2 Prepare dairy products

#### Key Indicators:

- 12.2.1 Select dairy products (e.g., milk, cream, butter)
- 12.2.2 Store dairy products according to their form (e.g., fresh, frozen, dried, cooked)
- 12.2.3 Follow established procedures in using dairy products in food preparation
- 12.2.4 Present dairy products for serving

### 12.3 Prepare cheeses and cheese dishes

#### Key Indicators:

- 12.3.1 Identify the various types of cheeses (current, aged, processed)
- 12.3.2 Select cheeses/cheese food according to intended use

- 12.3.3 Identify alternative low-fat and low-sodium cheeses
- 12.3.4 Store cheeses according to their form (e.g., soft, semi-hard, hard, processed)
- 12.3.5 Follow established procedures in using cheeses in cooked dishes and sauces
- 12.3.6 Present cheeses and cheese dishes and sauces for serving
- 12.3.7 Store prepared cheese dishes and sauces

## **12.4 Prepare fruits and fruit dishes**

### **Key Indicators:**

- 12.4.1 Identify the various types of fruits, fruit dishes, and juices
- 12.4.2 Select fresh or processed fruits and juices (e.g., frozen, canned, or dried) according to intended use
- 12.4.3 Store fruits according to their form (e.g., fresh, frozen, canned, dried)
- 12.4.4 Prepare fresh fruits for processing or use (e.g., wash, peel)
- 12.4.5 Zest citrus fruits
- 12.4.6 Glaze fruit
- 12.4.7 Garnish fruit
- 12.4.8 Section fruit
- 12.4.9 Puree fruit
- 12.4.10 Simmer fruit
- 12.4.11 Stew fruit
- 12.4.12 Cream fruit
- 12.4.13 Broil fruit
- 12.4.14 Deep-fry fruit
- 12.4.15 Bake fruit
- 12.4.16 Braise fruit
- 12.4.17 Marinate fruit
- 12.4.18 Extract juice from fruit
- 12.4.19 Prepare processed fruits for processing or use (e.g., rinse, reconstitute, thaw)
- 12.4.20 Present fruits and fruit dishes for serving
- 12.4.21 Store prepared fruits, fruit dishes, and juices

## **12.5 Prepare vegetables and vegetable dishes**

### **Key Indicators:**

- 12.5.1 Identify the various types of vegetables and vegetable dishes
- 12.5.2 Select fresh or processed vegetables (e.g., frozen, canned, dried) according to intended use
- 12.5.3 Store vegetables according to their form (e.g., fresh, frozen, canned, dried)
- 12.5.4 Prepare fresh vegetables for processing or use (e.g., wash, peel)
- 12.5.5 Identify vegetable cookery methods designed to maintain nutritional value, color, and texture
- 12.5.6 Follow established procedures in food preparation
- 12.5.7 Prepare vegetable casseroles
- 12.5.8 Deep-fry vegetables
- 12.5.9 Grill vegetables
- 12.5.10 Poach vegetables
- 12.5.11 Puree vegetables
- 12.5.12 Simmer vegetables
- 12.5.13 Steam vegetables
- 12.5.14 Stew vegetables
- 12.5.15 Cream vegetables
- 12.5.16 Broil vegetables
- 12.5.17 Bake vegetables
- 12.5.18 Braise vegetables
- 12.5.19 Marinate vegetables
- 12.5.20 Glaze vegetables
- 12.5.21 Extract juice from vegetables
- 12.5.22 Prepare vegetables for processing or use (e.g., drain, chill, marinate, thaw)
- 12.5.23 Present vegetables and vegetable dishes for serving

12.5.24 Store prepared vegetables and vegetable dishes

**12.6 Prepare pasta and pasta dishes**

**Key Indicators:**

- 12.6.1 Select type of pasta according to intended use
- 12.6.2 Make fresh pasta
- 12.6.3 Cook pasta, including fresh pasta
- 12.6.4 Follow established procedures in using pasta in entrées
- 12.6.5 Troubleshoot problems with pasta preparation and presentation
- 12.6.6 Prepare pasta sauces (e.g., white, red, meat, cheese, oil)
- 12.6.7 Present pasta and pasta dishes for serving
- 12.6.8 Store prepared pasta and pasta dishes

**12.7 Prepare grains and cereals and grain/cereal dishes**

**Key Indicators:**

- 12.7.1 Select hot and cold grain and cereal products according to intended use
- 12.7.2 Store grains and cereals
- 12.7.3 Cook grains and cereals
- 12.7.4 Follow established procedures in using grains and cereals in food preparation
- 12.7.5 Present grains, cereals, and grain/cereal dishes for serving
- 12.7.6 Store prepared grains, cereals, and grain/cereal dishes

**12.8 Prepare rice and rice dishes**

**Key Indicators:**

- 12.8.1 Select type of rice according to intended use
- 12.8.2 Cook rice using boiling method
- 12.8.3 Cook rice using pilaf method
- 12.8.4 Follow established procedures in using rice in food preparation
- 12.8.5 Present rice and rice dishes for serving
- 12.8.6 Store prepared rice and rice dishes

**12.9 Prepare legumes and legume dishes**

**Key Indicators:**

- 12.9.1 Identify types of legumes (e.g., peas, beans, lentils)
- 12.9.2 Select legumes according to intended use
- 12.9.3 Store legumes
- 12.9.4 Cook legumes
- 12.9.5 Follow established procedures in using legumes in food preparation
- 12.9.6 Present legumes and legume dishes for serving
- 12.9.7 Store prepared legumes and legume dishes

**12.10 Prepare contemporary vegetarian dishes**

**Key Indicators:**

- 12.10.1 Identify types of vegetarianism
- 12.10.2 Demonstrate knowledge of common ingredients used in contemporary vegetarian dishes
- 12.10.3 Demonstrate knowledge of common substitutes for meats and meat stocks in recipes
- 12.10.4 Follow established procedures in using vegetarian ingredients in food preparation
- 12.10.5 Present vegetarian dishes for serving
- 12.10.6 Store prepared vegetarian dishes

**12.11 Prepare meats and meat dishes**

**Key Indicators:**

- 12.11.1 Demonstrate knowledge of the federal grading systems for meats (red meat, white meat, poultry, fish, and seafood)
- 12.11.2 Identify the various forms of meat
- 12.11.3 Select meat, poultry, fish, or seafood according to intended use
- 12.11.4 Follow established procedures in using meats in food preparation
- 12.11.5 Store meats

12.11.6	Tenderize meats
12.11.7	Marinate meats
12.11.8	Trim meats
12.11.9	Grind meats
12.11.10	Prepare meat casseroles
12.11.11	Roast meats
12.11.12	Bake meats
12.11.13	Pan-fry meats
12.11.14	Sauté meats
12.11.15	Stir-fry meats
12.11.16	Broil meats
12.11.17	Grill meats
12.11.18	Blacken meats
12.11.19	Braise meats
12.11.20	Stew meats
12.11.21	Boil meats
12.11.22	Poach meats
12.11.23	Deep-fry meats
12.11.24	Barbecue meats
12.11.25	Smoke meats
12.11.26	Garnish meats and meat dishes
12.11.27	Prepare stuffing /dressing
12.11.28	Present meats and meat dishes for serving
12.11.29	Store prepared meats and meat dishes

## Unit 13 – Stocks, Soups, Sauces, and Gravy

### Expectation

Properly prepared stocks, soups, sauces, and gravies are integral to the quality of fine-dining experiences. While frequently served as stand-alone items, they are often the foundation of entrées, desserts, and other food products as well. Consequently, individuals who can prepare such items are valued restaurant employees.

### Competencies

- 13.1 Prepare stocks and soups
- 13.2 Prepare basic sauces and gravies

### Sample Scenario

You are the executive chef at a French restaurant in town. The owner has expressed interest in developing a new seasonal menu. He would like you and your staff to prepare a variety of products from recipes that contain stocks, soups, sauces, and gravies for him and a taste-testing panel that he has selected from frequent customers. Using the recommendations from the owner and the panel, you will need to develop a seasonal menu for the restaurant.

### Guiding Questions

- What factors should you consider in choosing the products to prepare?
- How will you ensure the products are replicated to appropriate standards?
- What scientific knowledge is needed to effectively prepare stocks, soups, sauces, and gravies?
- How will you collect useful information from the panel for revising the recipes and developing a seasonal menu?

### Core ITAC Competency Connections

Strand 1: Solving Problems and Thinking Skillfully	1.1, 1.2
Strand 2: Communicating Effectively	None
Strand 3: Applying Technology	None
Strand 4: Working Responsibly	4.3, 4.4
Strand 5: Planning and Managing a Career	5.4
Strand 6: Managing Resources	6.1, 6.2, 6.9

## **Business & Management**

### **Career Cluster ITAC Competency Connections**

Strand 1: Solving Problems and Thinking Skillfully	None
Strand 2: Communicating Effectively	None
Strand 3: Applying Technology	None
Strand 4: Working Responsibly	None
Strand 5: Planning and Managing a Career	None
Strand 6: Managing Resources	None

## **Academic Connections**

### **The Arts**

- Personal Expression and Production/Performance: Communicating Through the Arts: Develop and practice presentations skills

### **Science**

- Application for Science Learning: Propose courses of action that will validate and demonstrate personal understandings of scientific principles

## **Competencies & Key Indicators**

### **13.1 Prepare stocks and soups**

#### **Key Indicators:**

- 13.1.1 Identify ingredients, seasonings, and procedures used in stock preparation
- 13.1.2 Prepare stocks using commercially prepared bases
- 13.1.3 Prepare vegetable, veal, white, brown, poultry, and fish stocks
- 13.1.4 Prepare pureed, vegetable, consommé, and nationality soups
- 13.1.5 Prepare broth-based soups
- 13.1.6 Prepare cream-based soups
- 13.1.7 Prepare cold soups
- 13.1.8 Prepare chowders
- 13.1.9 Present soups for serving
- 13.1.20 Store stocks and soups

### **13.2 Prepare basic sauces and gravies**

#### **Key Indicators:**

- 13.2.1 Identify major sauce families
- 13.2.2 Identify thickening agents and their uses
- 13.2.3 Prepare thickening agents
- 13.2.4 Identify the ingredients and procedures for preparing mother sauces (e.g., brown, white, tomato, Hollandaise, veloute)
- 13.2.5 Prepare mother sauces
- 13.2.6 Prepare butter sauces
- 13.2.7 Prepare cold sauces
- 13.2.8 Prepare salsas
- 13.2.9 Prepare sauces from commercially prepared products
- 13.2.10 Prepare pan gravy
- 13.2.11 Present sauces and gravies for serving
- 13.2.12 Reconstitute broken sauces
- 13.2.13 Store sauces and gravies

## **Unit 14 – Bakery Products and Desserts**

### **Expectation**

Baked products and desserts are essential items in successful restaurants. Some type of baked product is offered in all food service establishments, whether it is prepared in-house or purchased from a vendor. For in-house

preparation, employees need to understand the basics of baking to ensure quality. In all instances, proper storage of these items preserve their quality for extended periods. Thus, all employees need to have basic knowledge related to baked products and desserts.

### Competencies

- 14.1 Apply the basic principles of baking
- 14.2 Prepare non-yeast products
- 14.3 Prepare yeast products (e.g., raised breads, rolls, doughnuts)
- 14.4 Prepare cookies
- 14.5 Prepare cakes
- 14.6 Prepare washes, glazes, icings, frostings, and fillings
- 14.7 Prepare pies, pastries, and meringues
- 14.8 Prepare specialty desserts
- 14.9 Prepare baked products from commercial mixes

### Sample Scenario

You are a baker and owner of a small, popular bakery. In exchange for free advertising, you have agreed to prepare an exciting array of desserts and baked goods for a hot-air balloon festival to help raise funds for public radio. During the event, you will offer free samples and survey the attendees for their opinions. You will analyze the survey results and determine whether or not to add any of the products to your existing menu.

### Guiding Questions

- What range of products should you know how to prepare before taking on this type of job?
- If asked to prepare specialty cakes, what would you consider making?
- How will you ensure quality products?
- How will you decide what recipes or products to use?
- What kinds of information do you need to collect from the attendees?

### Core ITAC Competency Connections

Strand 1: Solving Problems and Thinking Skillfully	1.1, 1.2, 1.3, 1.4, 1.5
Strand 2: Communicating Effectively	None
Strand 3: Applying Technology	None
Strand 4: Working Responsibly	4.3, 4.4
Strand 5: Planning and Managing a Career	5.4
Strand 6: Managing Resources	6.1, 6.2, 6.9

### Business & Management

#### Career Cluster ITAC Competency Connections

Strand 1: Solving Problems and Thinking Skillfully	1.3
Strand 2: Communicating Effectively	None
Strand 3: Applying Technology	None
Strand 4: Working Responsibly	None
Strand 5: Planning and Managing a Career	None
Strand 6: Managing Resources	None

### The Arts

- Personal Expression and Production/Performance: Communicating Through the Arts: Develop and practice presentation skills

### Science

- Scientific Inquiry: Utilize appropriate units for counts and measures
- Scientific Inquiry: Use ratios, proportions, and probabilities in appropriate problem situations
- Scientific Knowledge: Investigate conservation principles associated with physical, chemical, and nuclear changes

## Competencies & Key Indicators

- 14.1 Apply basic principles of baking

**Key Indicators:**

- 14.1.1 Identify the properties and functions of the basic ingredients used in baked goods
- 14.1.2 Weigh ingredients used in baking
- 14.1.3 Measure ingredients used in baking
- 14.1.4 Convert recipes
- 14.1.5 Balance dough formulas

**14.2 Prepare non-yeast products**

**Key Indicators:**

- 14.2.1 Prepare muffins
- 14.2.2 Prepare biscuits
- 14.2.3 Prepare coffee cakes
- 14.2.4 Prepare corn breads
- 14.2.5 Prepare pancakes, crepes, and waffles
- 14.2.6 Prepare quick breads
- 14.2.7 Prepare cake doughnuts
- 14.2.8 Store baked non-yeast products

**14.3 Prepare yeast products (e.g., raised breads, rolls, doughnuts)**

**Key Indicators:**

- 14.3.1 Mix yeast dough
- 14.3.2 Proof yeast products
- 14.3.3 Bake yeast products
- 14.3.4 Glaze and/or wash baked yeast products
- 14.3.5 Prepare sponge rolls (e.g., sourdough starter)
- 14.3.6 Store baked yeast products

**14.4 Prepare cookies**

**Key Indicators:**

- 14.4.1 Prepare bar cookies
- 14.4.2 Prepare drop cookies
- 14.4.3 Prepare hand-cut cookies
- 14.4.4 Prepare rolled cookies
- 14.4.5 Prepare refrigerator cookies
- 14.4.6 Prepare pressed cookies
- 14.4.7 Prepare molded cookies
- 14.4.8 Store cookies

**14.5 Prepare cakes**

**Key Indicators:**

- 14.5.1 Prepare batter cakes
- 14.5.2 Prepare foam cakes
- 14.5.3 Prepare fruitcakes
- 14.5.4 Prepare sponge cakes
- 14.5.5 Portion cakes for serving
- 14.5.6 Store cakes

**14.6 Prepare washes, glazes, icings, frostings, and fillings**

**Key Indicators:**

- 14.6.1 Prepare washes and glazes
- 14.6.2 Prepare icings (e.g., Royal, boiled)
- 14.6.3 Prepare frostings (e.g., buttercream)
- 14.6.4 Prepare whipped toppings and fillings
- 14.6.5 Decorate bakery and dessert products
- 14.6.6 Store washes, glazes, icings, frostings, and fillings

**14.7 Prepare pies, pastries, and meringues**

**Key Indicators:**

- 14.7.1 Prepare pie crust dough
- 14.7.2 Prepare crumb crusts
- 14.7.3 Prepare puff pastries
- 14.7.4 Prepare fruit fillings
- 14.7.5 Prepare custard fillings
- 14.7.6 Prepare cream fillings
- 14.7.7 Prepare chiffon fillings
- 14.7.8 Prepare meringues
- 14.7.9 Bake pies and pastries
- 14.7.10 Portion pies and pastries for serving
- 14.7.11 Store pies, pastries, and meringues

**14.8 Prepare specialty desserts**

**Key Indicators:**

- 14.8.1 Identify the various types of specialty desserts
- 14.8.2 Prepare candies
- 14.8.3 Prepare cheesecakes
- 14.8.4 Prepare crepes
- 14.8.5 Prepare mousses
- 14.8.6 Prepare tortes
- 14.8.7 Prepare frozen desserts
- 14.8.8 Prepare syrups and sweet sauces
- 14.8.9 Portion specialty desserts for serving
- 14.8.10 Store specialty desserts

**14.9 Prepare baked products from commercial mixes**

**Key Indicators:**

- 14.9.1 Identify commercial mixes available for baked products (e.g., cakes, pancakes, waffles, muffins, rolls, cookies)
- 14.9.2 Bake products in accordance with package directions
- 14.9.3 Prepare convenience products in accordance with package directions

# *Technology Standards*

## **Standard 1: Nature of Technology**

**Students develop an understanding of technology, its characteristics, scope, core concepts\* and relationships between technologies and other fields.**

Benchmark A: Synthesize information, evaluate and make decisions about technologies.

Benchmark B: Apply technological knowledge in decision-making.

Benchmark C: Examine the synergy between and among technologies and other fields of study when solving technological problems.

## **Standard 2: Technology and Society Interaction**

**Students recognize interactions among society, the environment and technology, and understand technology's relationship with history. Consideration of these concepts forms a foundation for engaging in responsible and ethical use of technology.**

Benchmark A: Interpret and practice responsible citizenship relative to technology.

Benchmark B: Demonstrate the relationship among people, technology and the environment.

Benchmark C: Interpret and evaluate the influence of technology throughout history, and predict its impact on the future.

Benchmark D: Analyze ethical and legal technology issues and formulate solutions and strategies that foster responsible technology usage.

Benchmark E: Forecast the impact of technological products and systems.

## **Standard 3: Technology for Productivity Applications**

**Students learn the operations of technology through the usage of technology and productivity tools.**

Benchmark A: Integrate conceptual knowledge of technology systems in determining practical applications for learning and technical problem-solving.

Benchmark B: Identify, select and apply appropriate technology tools and resources to produce creative works and to construct technology-enhanced models.

#### **Standard 4: Technology and Communication Applications**

**Students use an array of technologies and apply design concepts to communicate with multiple audiences, acquire and disseminate information and enhance learning.**

Benchmark A: Apply appropriate communication design principles in published and presented projects.

Benchmark B: Create, publish and present information, utilizing formats appropriate to the content and audience.

Benchmark C: Identify communication needs, select appropriate communication tools and design collaborative interactive projects and activities to communicate with others, incorporating emerging technologies.

#### **Standard 5: Technology and Information Literacy**

**Students engage in information literacy strategies, use the Internet, technology tools and resources, and apply information-management skills to answer questions and expand knowledge.**

Benchmark A: Determine and apply an evaluative process to all information sources chosen for a project.

Benchmark B: Apply a research process model to conduct research and meet information needs.

Benchmark C: Formulate advanced search strategies, demonstrating an understanding of the strengths and limitations of the Internet, and evaluate the quality and appropriate use of Internet resources.

Benchmark D: Evaluate choices of electronic resources and determine their strengths and limitations.

#### **Standard 6: Design**

**Students apply a number of problem-solving strategies demonstrating the nature of design, the role of engineering and the role of assessment.**

Benchmark A: Identify and produce a product or system using a design process, evaluate the final solution and communicate the findings.

Benchmark B: Recognize the role of teamwork in engineering design and of prototyping in the design process.

Benchmark C: Understand and apply research, development and experimentation to problem-solving.

## **Standard 7: Designed World**

**Students understand how the physical, informational and bio-related technological systems of the designed world are brought about by the design process. Critical to this will be students' understanding of their role in the designed world: its processes, products, standards, services, history, future, issues and career connections.**

Benchmark A: Classify, demonstrate, examine, and appraise energy and power technologies.

Benchmark B: Classify, demonstrate, examine and appraise transportation technologies.

Benchmark C: Classify, demonstrate, examine and appraise manufacturing technologies.

Benchmark D: Classify, demonstrate, examine and appraise construction technologies.

Benchmark E: Classify, demonstrate, examine and appraise information and communication technologies

Benchmark F: Classify, demonstrate, examine and appraise medical technologies.

Benchmark G: Classify, demonstrate, examine and appraise agricultural and related biotechnologies.

# *Performance Measures/Student Assessment/Instructional Strategies*

## **Assessments/Evaluations**

- Observations
- Demonstrations
- Portfolios
- Standardized Tests
- Class Assignment
- Quizzes/Tests/Exams
- Web Exam/Certification

## **Instructional Strategies**

- Teacher-Directed & Student-Centered Activities
- Case Study Problem Solving
- Cooperative Learning
- Project-Based Learning
- Career-Based Learning (Internships/Shadowing/Placement)
- Community-Based Learning (CTSOs and Other)
- Exploratory Learning
- Independent Research
- Team Teaching

## **Content Specific Strategies**