Hospitality and Tourism
Career Field Content Standards

Ohio Department of Education & Workforce

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Foreword

The Career Field Technical Content Standards serve as the curricular framework for Ohio's career-technical education pathway programs as outlined in Ohio Administrative Code 3301-61-03 (Criteria for Secondary Workforce Development Programs).

Career Field Technical Content Standards outline the knowledge and skills needed for success in careers across multiple pathways. Validated by Ohio business and industry representatives, these standards form the basis for developing educational programming in Ohio secondary schools. The standards also serve as the framework for developing strong career pathways that connect secondary education with postsecondary education systems and the workplace.

This version of Career Field Technical Content Standards is intended to support the ongoing evolution of career technical education pathway programs. The standards tend to be somewhat broader than previous versions and are not repeated for individual pathways or occupational areas. The broader and non-duplicated statements are intended to capture the knowledge and skills that can be applied across any number of occupations in a pathway rather than focusing on the requirement of a single occupation. After all, the intent of a pathway program is to prepare a student for a range of educational and career opportunities following high school.

Pathway programs prepare students to combine broad knowledge, insight and understanding of business processes, academic attainment and workplace readiness with depth of knowledge and expertise in a technical area. Knowing that many careers will require some level of postsecondary education, the content standards also delineate the knowledge and skills necessary to seamlessly transition to postsecondary educational programs.

This document seeks to provide the basis for educational programming that will provide the employee with fundamental skill-sets that employers demand. This ensures that Ohio's workforce of tomorrow is competitive in a global environment. An environment that requires knowledge and skills can be applied in a broader context, aimed at innovation to support new products and services in an ever-changing economy.

In addition to the extensive engagement of secondary and postsecondary educators and business/industry professionals, development of these standards represents a collaborative effort of the following professional partners: the Ohio Department of Education's Office of Career-Technical Education; the Ohio Board of Regents Secondary Career-Technical Alignment Initiative; and MBA Research and Curriculum Center.

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Acknowledgements

A number of individuals contributed their time and expertise to this development. Special thanks go to all the business representatives and educators named in this document.

Further acknowledgement is due to:

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- Donna Montgomery, Business/Industry Liaison, MBA Research and Curriculum Center.

Those listed above provided vision and implementation support for the Hospitality and Tourism Career Fields Technical Content Standards and Ohio's Hospitality and Tourism educational programs.

Philosophy and Principles for Implementation

Ohio Career Field Initiative

The overarching framework for Ohio career-technical education is outlined in the Ohio Revised Code and subsequent administrative rules, which specify career-technical programming based on 16 career fields. These 16 fields provide the framework for an Ohio career field initiative that seeks to foster the educational shift necessary to respond to the needs of a rapidly changing global environment.

A career field is a "group of occupations and broad industries based on common characteristics" (see www.careertech.org). Career fields are the basis for developing both broad and specialized technical content standards that serve as a framework for curriculum, instruction, assessment and program design, addressing the needs of an entire industry and business sector. Ohio's 16 career fields align with national efforts to broaden career-technical education, integrate career-technical with academic study and reflect the workforce needs of today and tomorrow. For today's students to be adequately prepared for tomorrow's workforce, they must have an education that:

- **Incorporates a broad, long-term conception of work in combination with the depth of specialization skills;**
  Employees need a comprehensive understanding beyond a single occupational area. Career-technical programming needs to be provided in a larger context, so students can generalize learning, make connections between education and work and adapt to changes in their careers. Workplace knowledge and skills are needed to prepare employees for collaborating and problem solving while contributing to the broader business process.

- **Emphasizes the acquisition of strong academic knowledge and skills; and**
  Academic skills provide the foundation for career success. The integration of academic content standards with career field technical content standards helps to contextualize learning for students, making English language arts, mathematics, social studies and science relevant to students as a means to an important end—success at work and in life.

- **Facilitates high-school-to-postsecondary transitions.**
  A lifetime of change means a lifetime of learning, including postsecondary education. Students need knowledge and skills for success in a variety of postsecondary options, including apprenticeships, industry credentialing through adult education, two- and four-year college degree programs and graduate school.

Career Pathways

A key component of the Ohio Career Field Initiative is a career pathway, which is a coherent, articulated sequence of rigorous academic and career-technical coursework commencing in the ninth grade and leading to an associate degree, baccalaureate degree and beyond–an industry-recognized certificate and/or licensure. Pathways facilitate a seamless transition from high school to postsecondary education (including apprenticeships, adult education, two- and four-year colleges and graduate school) and from postsecondary education to the workplace. The career pathway is developed, implemented and maintained in partnership among secondary and postsecondary education, business and employers. Career pathways are available to all students, including adult learners and lead to rewarding careers.

To effectively facilitate the transition from secondary to postsecondary education and a career, high school career pathways should encompass:

1. Challenging technical coursework in a chosen career field based on career field technical content standards;
2. Rigorous academics that meet Ohio's academic content standards and grade-level expectations;
3. Electives that relate to career objectives;
4. Instructional enhancements such as experiential and authentic learning opportunities (e.g., work-based learning, mentorships, internships) and career-technical student organization participation;
5. Opportunities (when appropriate) for program and student certification and licensure;
6. Preparation for transition to further study that includes college readiness and opportunities to earn college credit while in high school;
7. Preparation for transition to employment with advancement opportunities;
8. Performance targets that include high school academic and technical testing/exit and postsecondary entry/placement requirements;
9. Various sector(s) within an industry or encompass a function that crosses industry sectors;
10. The scope of opportunities in the related industry and available college programs;
11. Opportunities to prepare for a range of careers, including
    a. multiple employment opportunities after high school and
    b. opportunities for students to enter and succeed in postsecondary and continuing education programs;
12. Transferable skills required for employment in the range of occupations aligned to the pathway; and
13. Opportunities to learn skills across the pathway as well as in specialized areas.

For additional information on the Career Field Initiative, including Ohio Career Field Technical Content Standards and Career Pathways, go to http://education.ohio.gov/Topics/Career-Tech/Career-Fields.

Structure and Format

The Career Field Technical Content Standards document is composed of a series of strands comprised of outcomes that each contains a set of competencies.

- A strand is a large content area under which multiple outcomes are organized, regardless of the pathway. It includes a title and a concise description with statements that capture multiple, broad areas of learner knowledge and skills expected across all outcomes in the strand. There are approximately six strands of content per career field. Strand 1, Business Operations/21st Century Skills (employability skills, leadership and communications, business ethics and law, knowledge management and information technology, global environment, business literacy, entrepreneurship/entrepreneurs, operations management, financial management, sales and marketing and principles of business economics), is the same for all career-technical education career fields.
- An outcome is an overarching statement that summarizes the knowledge and skills described in a set of individual competencies to be learned by the end of the 12th grade. There are usually 5–15 outcomes within a strand, depending on the breadth of content to be addressed.
- A competency is a specific statement of essential knowledge or skill to be learned in the pathway program. There are usually 5–12 competencies under an outcome.

Each set of outcomes and competencies is included in one or more pathways in the career field. Outcomes and competencies form the basis for developing secondary courses, programs, instruction and assessment, facilitating transition from one educational level to the next and to the workplace. This supports career readiness and long-term career success by:

- Providing the basis for effective collaboration, teamwork and communication across pathways;
- Laying the groundwork for successful transfer of knowledge and skills across pathways, thereby facilitating horizontal and vertical career success and
- Equipping students and workers with the skills needed to transition to new and emerging careers throughout a working lifetime.

All outcomes and competencies in the Career Field Technical Content Standards have been verified as essential by business and labor representatives within the pathway or pathways specified.

These essential outcomes and competencies specify industry-based knowledge or hands-on skills that CTE students need by the end of the 12th grade to be successful in their selected career pathway and on-going learning (such as college, apprenticeships and military opportunities).

Development of the Hospitality and Tourism Career Field Technical Content Standards

The process for the development of the Hospitality and Tourism Career Fields Technical Content Standards began in July 2014 and culminated in May 2015. Over the course of 2014-2015, numerous business and industry representatives as well as secondary and postsecondary educators from across the state of Ohio took part in the formal development process. The following summarizes the various stages of the development process.

Research and Development

The involvement of subject matter experts was critical to the completion of the draft revision of the document. Development was also informed by consulting the following sources of information:

- 2020 Ohio Job Outlook Employment Projections
- Association for Career and Technical Education
- Board of Studies New South Wales
- Bureau of Economic Analysis and the United States Regional Economic Analysis Project
- Bureau of Labor Market Information
- Bureau of Labor Statistics
- CareerOneStop
- Career-Technical Transfer Assurance Guides (CTAGs)
- Discover Ohio
- Food Waste Reduction Alliance
- Industry-based certifications/standards;
  - American Culinary Association
  - American Hotel and Lodging Association
  - Association of Destination Management Executives
  - Convention Industry Council
  - Destination Marketing Association International
  - International Association of Amusement Parks
  - International Festival and Events Association
  - International Special Events Society
  - Meeting Professionals International
  - National Restaurant Association
  - The Travel Institute
  - U.S. Food and Drug Administration
  - U.S. Personal Chef Association
- Luxury Institute
- National Association of State Directors of Career Technical Education Consortium (NASDCTEc) Common Career Technical Core (CCTC) standards and Programs of Study

- Occupational Employment Statistics
- Occupational Information Network (O*Net)
- Ohio Department of Jobs and Family Services, Bureau of Labor Market Information
- Ohio Development Services Agency Industries Series and Economic Overview
- Ohio Industry Employment Projections Report, 2008-18
- Ohio Travel Association
- Partnership for 21st Century Skills
- Scottish Qualifications Authority
- University System of Ohio Academic Program Guide
- U.S. Bureau of Labor Statistics, Department of Labor
- U.S. Environmental Protection Agency
- U.S. Tour Operators Association
- U.S. Travel Association
- World Travel & Tourism Council

Futuring Panels

On September 10 and 16, 2014, the Hospitality and Tourism futuring panels brought together key business and industry representatives from across the state to advise the Ohio Department of Education on trends impacting the Hospitality and Tourism career fields. The participants were asked to share their perceptions on changes in the workplace, employment trends, changes in technical skill requirements, needed workplace readiness skills and available industry-recognized standards and credentials. This feedback was used to develop and streamline the standards document into what is most demanded by the labor market.

Validation Panels

On March 3 and 5, 2015, a diverse group of Ohio business and industry representatives participated in panels to validate the importance of the work-related competencies in the draft standards document. Drawn from various sectors and regions of the state, the panels identified what employees should know and be able to do in the Culinary and Foodservice Operations and the Lodging and Travel Services pathways. Secondary and postsecondary representatives participated on the panels to gain an understanding of the standards development process as well as to provide their perspective to the business representatives, when needed.

Postsecondary Alignment

The goal of the Secondary Career-Technical Alignment Initiative (SCTAI) was to develop new statewide Career-Technical Assurance Guides (CTAGs) for secondary career-technical institutions using the combined process of the Ohio Board of Regents' CTAG development process with the Ohio Department of Education's Career Field Technical Content Standards development process. The result of this collaboration was a tighter alignment between secondary career-technical and postsecondary content and the development of pathways that encourage college-going and increase statewide postsecondary options for career technical students. For more information on CTAGs and opportunities for statewide postsecondary articulated transfer credit, visit https://www.ohiohighered.org/transfer/ct2.

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Career Pathways Definitions

The Hospitality and Tourism Career Field prepares students for careers in various hospitality and tourism disciplines across a variety of industries important to the economic vitality of the State of Ohio. Students may also pursue entrepreneurship within a specific discipline.

Culinary and Foodservice Operations

Educational programs in culinary and foodservice operations prepare learners for careers in the art and science of food preparation and presentation as well as the skills needed for restaurant management.

Careers for which this pathway prepares students include:

Banquet Setup Employee
Caterer
Catering and Banquet Manager
Executive Chef
Food and Beverage Manager

Line Cook
Pastry and Specialty Chef
Personal Chef
Restaurant Manager
Restaurant Owner
Sous Chef

Postsecondary majors for which this pathway prepares students include:

Catering
Culinary Arts
Culinary Science Technology

Hospitality Management
Restaurant and Foodservice Management
Restaurant Owner

Lodging and Travel Services

Educational programs in lodging and travel service prepare learners for careers in management, marketing and operations of lodging facilities, meetings and events and travel-related services.

Careers for which this pathway prepares students include:

Convention Service Manager
Destination Marketer
Director of Hospitality Sales
Executive Housekeeper
Front Desk Supervisor
Front Office Manager
Gaming and Casino Supervisor

General Manager
Meeting Planner
Reservationist
Rooms Division Manager
Tourism Marketing Specialist
Small Business Owner
Welcome Center Supervisor

Postsecondary majors for which this pathway prepares students include:

Administrative Management Technology
Hotel, Tourism and Event Management
Meeting and Events Planning

Gaming Management
Hotel and Restaurant Management

Strand/Outcome Pathway Chart

An "X" indicates that the pathway applies to the outcome.

Strand/Outcome	Culinary and Foodservice Operations	Lodging and Travel Services
Strand 1: Business Operations/21st Century Skills **Page 2**		
Outcome 1.1: Employability Skills	X	X
Outcome 1.2: Leadership and Communications	X	X
Outcome 1.3: Business Ethics and Law	X	X
Outcome 1.4: Knowledge Management and Information Technology	X	X
Outcome 1.5: Global Environment	X	X
Outcome 1.6: Business Literacy	X	X
Outcome 1.7: Entrepreneurship/Entrepreneurs	X	X
Outcome 1.8: Operations Management	X	X
Outcome 1.9: Financial Management	X	X
Outcome 1.10: Sales and Marketing	X	X
Outcome 1.11: Principles of Business Economics	X	X
Strand 2: Experience Management **Page 13**		
Outcome 2.1: Hospitality and Tourism Fundamentals	X	X
Outcome 2.2: Hospitality and Tourism Environment	X	X
Outcome 2.3: Brand Positioning	X	X
Outcome 2.4: Marketing Research	X	X
Outcome 2.5: Brand Communications	X	X
Outcome 2.6: Customer Services	X	X
Outcome 2.7: People Management	X	X
Strand 3: Safety and Sanitation **Page 20**		
Outcome 3.1: Pathogens, Illnesses and Diseases	X	X
Outcome 3.2: Personal Safety and Sanitation	X	X
Outcome 3.3: Food Safety and Sanitation	X	X
Outcome 3.4: Equipment Safety and Sanitation	X	X
Outcome 3.5: Site Safety and Sanitation	X	X
Strand 4: Culinary Arts **Page 25**		
Outcome 4.1: Culinary Industry Fundamentals	X	X

Strand/Outcome	Culinary and Foodservice Operations	Lodging and Travel Services
Outcome 4.2: Sandwiches and Appetizers	X	X
Outcome 4.3: Ingredient Selection and Preparation	X	X
Outcome 4.4: Food Staples and Sides Preparation	X	X
Outcome 4.5: Meat, Poultry and Seafood	X	X
Outcome 4.6: Food Presentation	X	X
Outcome 4.7: Beverage Preparation	X	X
Outcome 4.8: Banquet and High-Volume Cookery	X	
Strand 5: Baking and Pastry Arts **Page 33**		
Outcome 5.1: Baking and Pastry Science	X	
Outcome 5.2: Baking, Confectionary Arts and Pastry Techniques	X	
Outcome 5.3: Breads	X	
Outcome 5.4: Decorating and Presentation	X	
Strand 6: Nutrition Science and Management **Page 37**		
Outcome 6.1: Food Science	X	
Outcome 6.2: Nutritional Analysis	X	
Outcome 6.3: Research for Recipe Development	X	
Outcome 6.4: Menu Development	X	
Strand 7: Foodservice Operations **Page 41**		
Outcome 7.1: Purchasing and Inventory Management	X	X
Outcome 7.2: Kitchen Management and Distribution	X	
Outcome 7.3: Dining Room Operations	X	
Strand 8: Lodging Operations **Page 44**		
Outcome 8.1: Lodging Fundamentals		X
Outcome 8.2: Guest Operations		X
Outcome 8.3: Housekeeping Operations		X
Outcome 8.4: Facilities Maintenance		X
Outcome 8.5: Property Accounting		X
Outcome 8.6: Property Sales		X
Outcome 8.7: Property Management		X
Strand 9: Travel and Tourism Operations **Page 51**		
Outcome 9.1: Travel and Tourism Fundamentals		X
Outcome 9.2: Tourism Geography		X
Outcome 9.3: Travel Services and Operations		X

Strand/Outcome	Culinary and Foodservice Operations	Lodging and Travel Services
Outcome 9.4: Travel and Tourism Promotion		X
Outcome 9.5: Event Planning		X
Outcome 9.6: Event Design		X
Outcome 9.7: Event Set-Up, Execution and Evaluation		X
Total Outcomes by Pathway:	42	45
Total Outcomes:	**56**	

HOSPITALITY AND TOURISM CAREER FIELD

CAREER FIELD TECHNICAL CONTENT STANDARDS

STRANDS 1-9

Strand 1.   Business Operations/21st Century Skills

Learners apply principles of economics, business management, marketing and employability in an entrepreneur, manager and employee role to the leadership, planning, developing and analyzing of business enterprises related to the career field.

Outcome 1.1.   Employability Skills

Develop career awareness and employability skills (e.g., face-to-face, online) needed for gaining and maintaining employment in diverse business settings.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
X	X

Competencies

1.1.1.   Identify the knowledge, skills and abilities necessary to succeed in careers.

1.1.2.   Identify the scope of career opportunities and the requirements for education, training, certification, licensure and experience.

1.1.3.   Develop a career plan that reflects career interests, pathways and secondary and postsecondary options.

1.1.4.   Describe the role and function of professional organizations, industry associations and organized labor and use networking techniques to develop and maintain professional relationships.

1.1.5.   Develop strategies for self-promotion in the hiring process (e.g., filling out job applications, résumé writing, interviewing skills, portfolio development).

1.1.6.   Explain the importance of work ethic, accountability and responsibility and demonstrate associated behaviors in fulfilling personal, community and workplace roles.

1.1.7.   Apply problem-solving and critical-thinking skills to work-related issues when making decisions and formulating solutions.

1.1.8.   Identify the correlation between emotions, behavior and appearance and manage those to establish and maintain professionalism.

1.1.9.   Give and receive constructive feedback to improve work habits.

1.1.10.   Adapt personal coping skills to adjust to taxing workplace demands.

1.1.11.   Recognize different cultural beliefs and practices in the workplace and demonstrate respect for them.

1.1.12.   Identify healthy lifestyles that reduce the risk of chronic disease, unsafe habits and abusive behavior.

1.1.13.   Manage time, priorities, and resources to achieve personal and professional goals.

Strand 1.   Business Operations/21st Century Skills

Learners apply principles of economics, business management, marketing and employability in an entrepreneur, manager and employee role to the leadership, planning, developing and analyzing of business enterprises related to the career field.

Outcome 1.2.   Leadership and Communications

Process, maintain, evaluate and disseminate information in a business. Develop leadership and team building to promote collaboration.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
X	X

Competencies

1.2.1.   Extract relevant, valid information from materials and cite sources of information (e.g., medical reports, fitness assessment, medical test results).
1.2.2.   Deliver formal and informal presentations.
1.2.3.   Identify and use verbal, nonverbal and active listening skills to communicate effectively.
1.2.4.   Use negotiation and conflict-resolution skills to reach solutions.
1.2.5.   Communicate information for an intended audience and purpose.
1.2.6.   Use proper grammar and expression in all aspects of communication.
1.2.7.   Use problem-solving and consensus-building techniques to draw conclusions and determine next steps.
1.2.8.   Identify the strengths, weaknesses and characteristics of leadership styles that influence internal and external workplace relationships.
1.2.9.   Identify advantages and disadvantages involving digital and/or electronic communications.
1.2.10.   Use interpersonal skills to provide group leadership, promote collaboration and work in a team.
1.2.11.   Write professional correspondence, documents, job applications and résumés.
1.2.12.   Use technical writing skills to complete forms and create reports.
1.2.13.   Identify stakeholders and solicit their opinions.
1.2.14.   Use motivational strategies to accomplish goals.
1.2.15.   Adapt to different decision-making styles (e.g., analytical, abstract or conceptual, intuitive, creative, procedural or directive).
1.2.16.   Identify ways to affect workplace change

Strand 1.   Business Operations/21st Century Skills

Learners apply principles of economics, business management, marketing and employability in an entrepreneur, manager and employee role to the leadership, planning, developing and analyzing of business enterprises related to the career field.

Outcome 1.3.   Business Ethics and Law

Analyze how professional, ethical and legal behavior contributes to continuous improvement in organizational performance and regulatory compliance.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
X	X

Competencies

1.3.1.   Analyze how regulatory compliance affects business operations and organizational performance.

1.3.2.   Follow protocols and practices necessary to maintain a clean, safe and healthy work environment.

1.3.3.   Use ethical character traits consistent with workplace standards (e.g., honesty, personal integrity, compassion, justice).

1.3.4.   Identify how federal and state consumer protection laws affect products and services.

1.3.5.   Access and implement safety compliance measures (e.g., quality assurance information, safety data sheets [SDSs], product safety data sheets [PSDSs], United States Environmental Protection Agency [EPA], United States Occupational Safety and Health Administration [OSHA]) that contribute to the continuous improvement of the organization.

1.3.6.   Identify deceptive practices (e.g., bait and switch, identity theft, unlawful door-to-door sales, deceptive service estimates, fraudulent misrepresentations) and their overall impact on organizational performance.

1.3.7.   Identify the labor and practice laws that affect employment and the consequences of noncompliance for both employee and employer (e.g., harassment, labor, employment, employment interview, testing, minor labor laws, Americans with Disabilities Act, Fair Labor Standards Acts, Equal Employment Opportunity Commission [EEOC], human trafficking) and interpret personal safety rights according to the employee Right-to-Know Plan.

1.3.8.   Verify compliance with computer and intellectual property laws and regulations.

1.3.9.   Identify potential conflicts of interest (e.g., personal gain, project bidding) between personal, organizational and professional ethical standards.

Strand 1.   Business Operations/21st Century Skills

Learners apply principles of economics, business management, marketing and employability in an entrepreneur, manager and employee role to the leadership, planning, developing and analyzing of business enterprises related to the career field.

Outcome 1.4.   Knowledge Management and Information Technology

Demonstrate current and emerging strategies and technologies used to collect, analyze, record and share information in business operations.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
X	X

Competencies

1.4.1.   Use office equipment to communicate (e.g., phone, radio equipment, fax machine, scanner, public address systems).

1.4.2.   Select and use software applications to locate, record, analyze and present information (e.g., word processing, e-mail, spreadsheet, databases, presentation, Internet search engines).

1.4.3.   Verify compliance with security rules, regulations and codes (e.g., property, privacy, access, accuracy issues, client and patient record confidentiality) pertaining to technology specific to the industry pathway.

1.4.4.   Use system hardware to support software applications.

1.4.5.   Use information technology tools to maintain, secure and monitor business records.

1.4.6.   Use an electronic database to access and create business and technical information.

1.4.7.   Use personal information management and productivity applications to optimize assigned tasks (e.g., lists, calendars, address books).

1.4.8.   Use electronic media to communicate and follow network etiquette guidelines.

Strand 1.   Business Operations/21st Century Skills

Learners apply principles of economics, business management, marketing and employability in an entrepreneur, manager and employee role to the leadership, planning, developing and analyzing of business enterprises related to the career field.

Outcome 1.5.   Global Environment

Evaluate how beliefs, values, attitudes and behaviors influence organizational strategies and goals.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
X	X

Competencies

1.5.1.   Describe how cultural understanding, cultural intelligence skills and continual awareness are interdependent.

1.5.2.   Describe how cultural intelligence skills influence the overall success and survival of an organization.

1.5.3.   Use cultural intelligence to interact with individuals from diverse cultural settings.

1.5.4.   Recognize barriers in cross-cultural relationships and implement behavioral adjustments.

1.5.5.   Recognize the ways in which bias and discrimination may influence productivity and profitability.

1.5.6.   Analyze work tasks for understanding and interpretation from a different cultural perspective.

1.5.7.   Use intercultural communication skills to exchange ideas and create meaning.

1.5.8.   Identify how multicultural teaming and globalization can foster development of new and improved products and services and recognition of new opportunities.

Strand 1.   Business Operations/21st Century Skills

Learners apply principles of economics, business management, marketing and employability in an entrepreneur, manager and employee role to the leadership, planning, developing and analyzing of business enterprises related to the career field.

Outcome 1.6.   Business Literacy

Develop foundational skills and knowledge in entrepreneurship, financial literacy and business operations.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
X	X

Competencies

1.6.1.   Identify business opportunities.

1.6.2.   Assess the reality of becoming an entrepreneur, including advantages and disadvantages (e.g., risk versus reward, reasons for success and failure).

1.6.3.   Explain the importance of planning your business.

1.6.4.   Identify types of businesses, ownership and entities (i.e., individual proprietorships, partnerships, corporations, cooperatives, public, private, profit, not-for-profit).

1.6.5.   Describe organizational structure, chain of command, the roles and responsibilities of the organizational departments and interdepartmental interactions (e.g., following physician's orders).

1.6.6.   Identify the target market served by the organization, the niche that the organization fills and an outlook of the industry.

1.6.7.   Identify the effect of supply and demand on products and services.

1.6.8.   Identify the features and benefits that make an organization's product or service competitive.

1.6.9.   Explain how the performance of an employee, a department and an organization is assessed.

1.6.10.   Describe the impact of globalization on an enterprise or organization.

1.6.11.   Describe how all business activities of an organization work within the parameters of a budget.

1.6.12.   Describe classifications of employee benefits, rights, deductions and compensations.

Strand 1.   Business Operations/21st Century Skills

Learners apply principles of economics, business management, marketing and employability in an entrepreneur, manager and employee role to the leadership, planning, developing and analyzing of business enterprises related to the career field.

Outcome 1.7.   Entrepreneurship/Entrepreneurs

Analyze the environment in which a business operates and the economic factors and opportunities associated with self-employment.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
X	X

Competencies

1.7.1.   Compare and contrast the four types of business ownership (i.e., individual proprietorships, partnerships, corporations, cooperatives).

1.7.2.   Explain the role of profit as the incentive to entrepreneurs in a market economy.

1.7.3.   Identify the factors that contribute to the success and failure of entrepreneurial ventures.

1.7.4.   Assess the roles of nonprofit and for-profit businesses.

1.7.5.   Develop a business plan.

1.7.6.   Describe life cycles of an entrepreneurial business and an entrepreneur.

1.7.7.   Create a list of personal strengths, weaknesses, skills and abilities needed to be successful as an entrepreneur.

1.7.8.   Explain pathways used to become an entrepreneur.

1.7.9.   Conduct a self-assessment to determine entrepreneurial potential.

1.7.10.   Describe techniques for obtaining experience (e.g., apprenticeship, co-operative [co-op] education, work placement, internship, job shadowing) related to an entrepreneurial objective.

1.7.11.   Identify initial steps in establishing a business (e.g., limited liability company [LLC], tax ID, permits, insurance, licensing).

1.7.12.   Identify resources available to entrepreneurs (e.g., Small Business Administration, mentors, information resources, educational opportunities).

1.7.13.   Protect intellectual property and knowledge (e.g., copyright, patent, trademark, trade secrets, processes).

1.7.14.   Determine financial decisions needed for business start-up and operations.

Strand 1.   Business Operations/21st CenturySkills

Learners apply principles of economics, business management, marketing and employability in an entrepreneur, manager and employee role to the leadership, planning, developing and analyzing of business enterprises related to the career field.

Outcome 1.8.   Operations Management

Plan, organize and monitor an organization or department to maximize contribution to organizational goals and objectives.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
X	X

Competencies

1.8.1.   Forecast future resources and budgetary needs using financial documents (e.g., balance sheet, demand forecasting, financial ratios).

1.8.2.   Select and organize resources to develop a product or a service.

1.8.3.   Analyze the performance of organizational activities and reallocate resources to achieve established goals.

1.8.4.   Identify alternative actions to take when goals are not met (e.g., changing goals, changing strategies, efficiencies).

1.8.5.   Use inventory and control systems to purchase materials, supplies and equipment (e.g., Last In, First Out [LIFO]; First In, First Out [FIFO]; Just in Time [JIT]; LEAN).

1.8.6.   Identify the advantages and disadvantages of carrying cost and Just-in-Time (JIT) production systems and the effects of maintaining inventory (e.g., perishable, shrinkage, insurance) on profitability.

1.8.7.   Collect information and feedback to help assess the organization's strategic planning and policymaking processes.

1.8.8.   Identify routine activities for maintaining business facilities and equipment.

1.8.9.   Develop a budget that reflects the strategies and goals of the organization.

1.8.10.   Analyze how business management and environmental management systems (e.g., health, safety) contribute to continuous improvement and sustainability.

1.8.11.   Select and manage suppliers (e.g., qualification, selection, billing, quality control, resolution of issues).

1.8.12.   Analyze environmental issues and trends, and identify sustainable efforts and initiatives that organizations use in response.

1.8.13.   Develop and implement energy and water management programs.

1.8.14.   Track usage, profitability and productivity measures.

Strand 1. Business Operations/21st Century Skills

Learners apply principles of economics, business management, marketing and employability in an entrepreneur, manager and employee role to the leadership, planning, developing and analyzing of business enterprises related to the career field.

Outcome 1.9. Financial Management

Use financial tools, strategies and systems to develop, monitor and control the use of financial resources to ensure personal and business financial well-being.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
X	X

Competencies

1.9.1. Create, analyze and interpret financial documents (e.g., budgets, income statements).

1.9.2. Identify tax obligations.

1.9.3. Review and summarize savings, investment strategies and purchasing options (e.g., cash, lease, finance, stocks, bonds).

1.9.4. Identify credit types and their uses in order to establish credit.

1.9.5. Identify ways to avoid or correct debt problems.

1.9.6. Explain how credit ratings and the criteria lenders use to evaluate repayment capacity affect access to loans.

1.9.7. Review and summarize categories (types) of insurance and identify how insurances can reduce financial risk.

1.9.8. Identify income sources and expenditures.

1.9.9. Compare and contrast different banking services available through financial institutions.

1.9.10. Identify the role of depreciation in tax planning and liability.

1.9.11. Implement established accounting processes and internal cash controls.

Strand 1.   Business Operations/21st Century Skills

Learners apply principles of economics, business management, marketing and employability in an entrepreneur, manager and employee role to the leadership, planning, developing and analyzing of business enterprises related to the career field.

Outcome 1.10.   Sales and Marketing

Manage pricing, place, promotion, packaging, positioning and public relations to improve quality customer service.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
X	X

Competencies

1.10.1.   Identify how the roles of sales, advertising and public relations contribute to a company's brand.

1.10.2.   Determine the customer's/client's needs and identify solutions and potential community resources.

1.10.3.   Communicate features, benefits and warranties of a product or service to the customer/client.

1.10.4.   Identify the company policies and procedures for initiating product and service improvements.

1.10.5.   Monitor customer/client expectations and determine product/service satisfaction by using measurement tools.

1.10.6.   Discuss the importance of correct pricing to support a product's or service's positioning in the marketing mix.

1.10.7.   Describe the importance and diversity of distribution channels (i.e., direct, indirect) to sell a product.

1.10.8.   Use promotional techniques to maximize sales revenues (e.g., advertising, sales promotions, publicity, public relations).

1.10.9.   Describe how product mix (e.g., product line, product items) maximizes sales revenues, market, share and profit margin.

1.10.10.   Demonstrate sales techniques.

1.10.11.   Evaluate competitors' products, brands and activities.

1.10.12.   Use pricing strategies and tactics throughout the product and customer lifecycle.

1.10.13.   Implement and assess seasonal and situational pricing policies.

1.10.14.   Develop marketing plan.

Strand 1.   Business Operations/21st Century Skills

Learners apply principles of economics, business management, marketing and employability in an entrepreneur, manager and employee role to the leadership, planning, developing and analyzing of business enterprises related to the career field.

Outcome 1.11.   Principles of Business Economics

Examine and employ economic principles, concepts and policies to accomplish organizational goals and objectives.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
X	X

Competencies

1.11.1.   Identify the economic principles that guide geographic location of an industry's facilities (e.g., relative scarcity, price, quantity of products and services).

1.11.2.   Identify the difference between monetary and nonmonetary incentives and explain how changes in incentives cause changes in behavior.

1.11.3.   Use economic indicators to identify economic trends and conditions (e.g., inflation, interest rate fluctuations, unemployment rates).

1.11.4.   Determine how the quality, quantity and pricing of goods and services are affected by domestic and international competition in a market economy.

1.11.5.   Analyze factors that affect currency and exchange rates.

1.11.6.   Explain how financial markets and government policies influence interest rates (credit ratings/debt ceiling), trade deficits and unemployment.

1.11.7.   Describe how economic performance and culture are interdependent.

1.11.8.   Identify the relationships between economy, society and environment that lead to sustainability.

1.11.9.   Describe how laws and regulations influence domestic and international trade.

Strand 2. Experience Management

Learners apply customer behavior concepts to create a brand identity, design and deliver exceptional customer experiences, and build customer loyalty and brand equity.

Outcome 2.1. Hospitality and Tourism Fundamentals

Explain the composition and economic significance of the hospitality and tourism industry.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
X	X

Competencies

2.1.1. Describe the relationship between the economy and the hospitality and tourism industry.

2.1.2. Identify the key segments of the hospitality and tourism industry, and explain their interdependence.

2.1.3. Explain the role of Convention and Visitor Bureaus (CVB), Destination Marketing Organizations (DMO) and tourism distribution organizations in generating hospitality and tourism business.

2.1.4. Identify changes occurring in hospitality and tourism as a result of technological advancements and competing online services.

Strand 2.   Experience Management

Learners apply customer behavior concepts to create a brand identity, design and deliver exceptional customer experiences, and build customer loyalty and brand equity.

Outcome 2.2. Hospitality and Tourism Environment
Analyze how customer service principles, hospitality services and operational processes work together to create a culture that allows organizations to meet or exceed customer expectations.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
X	X

Competencies

2.2.1.   Describe how the principles of R.A.V.E. (respect and value everyone), customer satisfaction and quality affect service delivery.

2.2.2.   Explain the unique characteristics of services (i.e., intangibility, inseparability, variability and perishability).

2.2.3.   Explain the influence of an organization's mission and vision statement on customer service practices.

2.2.4.   Explain the factors that shape customer expectations of a particular service and how subjective and objective elements of service quality can be assessed.

2.2.5.   Identify the types of outcomes possible during guest recovery and the impact of proactive guest experience management on realizing a positive outcome.

2.2.6.   Maintain and mine databases of customer or visitor activity and preferences.

Strand 2. Experience Management

Learners apply customer behavior concepts to create a brand identity, design and deliver exceptional customer experiences, and build customer loyalty and brand equity.

Outcome 2.3. Brand Positioning
Determine how the visible and intangible elements of a brand work together to identify and distinguish the brand in the customers' mind.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
X	X

Competencies

2.3.1.　Identify the components and types of brands and branding strategies.

2.3.2.　Determine branding positioning.

2.3.3.　Select products and services to offer that enhance brand image.

2.3.4.　Determine how customer touch points impact branding strategy.

2.3.5.　Coordinate people, processes and technology to deliver the brand promise.

2.3.6.　Determine the impact of an organization's reputation on its brand image.

Strand 2.   Experience Management

Learners apply customer behavior concepts to create a brand identity, design and deliver exceptional customer experiences, and build customer loyalty and brand equity.

Outcome 2.4. Marketing Research
Conduct qualitative and quantitative research to gather, synthesize and analyze information about a specified problem, issue or opportunity.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
X	X

Competencies

2.4.1.   Distinguish between market-driven and customer-driven information.

2.4.2.   Explain reasons for conducting marketing research and the importance and scope of marketing research activities.

2.4.3.   Explain marketing-research design considerations; and identify the type of research appropriate for different business objectives, problems or opportunities.

2.4.4.   Determine who and how many respondents are needed to adequately represent the population.

2.4.5.   Determine how to obtain primary and secondary data needed for marketing research.

2.4.6.   Collect quantitative and qualitative marketing-research data.

2.4.7.   Apply statistical methods and software systems to analyze research data.

2.4.8.   Conduct analytical review of marketing data.

2.4.9.   Translate findings into actionable business recommendations.

Strand 2. Experience Management

Learners apply customer behavior concepts to create a brand identity, design and deliver exceptional customer experiences, and build customer loyalty and brand equity.

Outcome 2.5. Brand Communications
Plan, create, implement, and manage brand-related communications to reinforce the organization's brand image.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
X	X

Competencies

2.5.1. Explain how brand identifiers interact with marketing to influence customer expectations and create brand loyalty.

2.5.2. Explain the use of social media marketing in the hospitality and tourism industry.

2.5.3. Differentiate between the use of social media for personal and business purposes.

2.5.4. Analyze the impact of traditional, word-of-mouth and social media on brand image and reach.

2.5.5. Coordinate brand messaging of internal and external partners.

2.5.6. Create social media content.

2.5.7. Track and respond to user-generated content (UGC).

2.5.8. Use communications strategies to manage crises and protect or recover reputation.

2.5.9. Develop policies and procedures to guide internal and external communication.

Strand 2.   Experience Management

Learners apply customer behavior concepts to create a brand identity, design and deliver exceptional customer experiences, and build customer loyalty and brand equity.

Outcome 2.6. Customer Services
Apply strategies and techniques to identify and meet guest needs and to establish a sense of connectedness with guests in a hospitality and tourism environment.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
X	X

Competencies
2.6.1.   Interpret unspoken needs based on understanding of human behavior, preference patterns and prior experiences.

2.6.2.   Determine strategies for responding to potentially sensitive, compromising, fraudulent or dangerous situations.

2.6.3.   Accommodate special needs and specific requests of customers.

2.6.4.   Process customer orders accurately and efficiently while building rapport.

2.6.5.   Balance multiple resource demands, and maintain service standards during peak volumes.

2.6.6.   Respond to customer inquiries, resolve their complaints, and follow up on situations.

2.6.7.   Take and process customer payments.

2.6.8.   Identify and deliver on opportunities to make a difference in the customer experience (i.e., positive moments of truth).

2.6.9.   Leverage customer experiences to build brand preference and loyalty.

2.6.10.   Identify and utilize credit-card fraud prevention methods, and understand the importance of identity theft controls.

Strand 2. Experience Management

Learners apply customer behavior concepts to create a brand identity, design and deliver exceptional customer experiences, and build customer loyalty and brand equity.

Outcome 2.7. People Management

Apply strategies, policies and procedures to manage new hires, union and nonunion employees and volunteers to meet quality standards.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
X	X

Competencies

2.7.1.   Determine the impact of ethics and social responsibility policies and practices on business operations.

2.7.2.   Determine job responsibilities and expectations, and provide detailed job descriptions.

2.7.3.   Recruit, screen, and interview job applicants.

2.7.4.   Make hiring decisions and job offers.

2.7.5.   Orient talent to organizational culture, values, norms, policies and procedures.

2.7.6.   Train, cross-train, and coach employees and volunteers using talent-development and motivation theories.

2.7.7.   Schedule employees and volunteers across shifts and during peak service times.

2.7.8.   Plan, delegate, and direct the work of employees and volunteers.

2.7.9.   Identify procedures for employee termination.

2.7.10. Assess and document employee performance.

2.7.11. Communicate outcomes of employee assessment, and take corrective measures.

2.7.12. Supervise union and nonunionized staff and volunteers.

2.7.13. Develop employee handbook.

Strand 3.   Safety and Sanitation

Learners apply knowledge of biological, physical and chemical hazards and the concepts of safety and sanitation to protect employees and customers from injuries, illnesses and diseases.

Outcome 3.1.   Pathogens, Illnesses and Diseases

Identify pathogens that could render food unsafe for consumption without appropriate precautions and controls.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
X	X

Competencies

3.1.1.   Identify methods and practices to control or eliminate pathogens and the spread of harmful bacteria, viruses, parasites, fungi and toxins.

3.1.2.   Describe the nature and scope of the government agencies responsible for the prevention of foodborne illnesses.

3.1.3.   Identify types of foodborne illness caused by bacteria and viruses, their common symptoms and the food items most at risk for contamination.

3.1.4.   Identify parasites, fungi and biological toxins by their characteristics and the major foodborne illnesses with which they are linked.

3.1.5.   Identify conditions under which bacteria multiply rapidly (i.e., FAT TOM: food, acidity, temperature, time, oxygen, moisture), and implement preventive measures.

3.1.6.   Identify the symptoms and consequences of allergic reactions and intolerances, and implement exposure-prevention strategies.

3.1.7.   Identify sources of common allergens, and implement exposure prevention strategies.

Strand 3. Safety and Sanitation

Learners apply knowledge of biological, physical and chemical hazards and the concepts of safety and sanitation to protect employees and customers from injuries, illnesses and diseases.

Outcome 3.2. Personal Safety and Sanitation
Demonstrate strategies for preventing risks and biological and physical contamination through personal hygiene, proper attire and precautionary medical safeguards.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
X	X

Competencies

3.2.1.   Identify personal actions and behaviors that contribute to contamination and cross-contamination of food, and describe ways to prevent those issues.

3.2.2.   Identify when hand-washing must occur, and wash hands using the five-step technique.

3.2.3.   Select, maintain, and use proper work attire and personal protective clothing and equipment appropriate to job tasks.

3.2.4.   Handle situations involving bodily fluids.

3.2.5.   Describe situations when food-handlers should be restricted or excluded from working with food or being in the operation.

3.2.6.   Lift and move heavy materials and equipment following established ergonomic processes.

3.2.7.   Explain how personal safety and sanitation contribute to an organization's response to allergies and intolerances.

Strand 3.   Safety and Sanitation

Learners apply knowledge of biological, physical and chemical hazards and the concepts of safety and sanitation to protect employees and customers from injuries, illnesses and diseases.

Outcome 3.3.   Food Safety and Sanitation
Demonstrate strategies for preventing and controlling biological, physical and chemical contamination of food products through proper food handling and sanitization procedures.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
X	X

Competencies
3.3.1.   Describe food-safety guidelines (e.g., FDA Food Code), local health-code requirements and the consequences of failing to comply.

3.3.2.   Describe the impact of Hazard Analysis and Critical Control Point (HAACP) food safety management system on food service.

3.3.3.   Identify critical control points (Hazard Analysis and Critical Control Point [HAACP]).

3.3.4.   Identify potential biological, chemical and physical hazards.

3.3.5.   Identify potentially hazardous foods (PHF), Time and Temperature Control for Safety of Food (TCS) and foods in the temperature danger zone (TDZ).

3.3.6.   Follow precautionary guidelines established to address food-safety issues for high-risk populations and to reduce potential exposure to harmful pathogens.

3.3.7.   Identify the effects of water characteristics, food pH levels and moisture levels on food safety and sanitation.

3.3.8.   Monitor and track food temperatures throughout the receiving, thawing, storing, cooking and holding processes.

3.3.9.   Control environment for consumer self-service foods.

3.3.10.   Mark, label, store, and dispose of food and food by-products (e.g., fats, oil, grease).

3.3.11.   Identify warning signs indicating potential food safety issues during the receiving, storing and serving processes based on food type.

3.3.12.   Take corrective actions to maintain food safety.

Strand 3.   Safety and Sanitation

Learners apply knowledge of biological, physical and chemical hazards and the concepts of safety and sanitation to protect employees and customers from injuries, illnesses and diseases.

Outcome 3.4.   Equipment Safety and Sanitation
Demonstrate strategies and techniques for eliminating biological, physical and chemical contamination through proper equipment use, storage and maintenance.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
X	X

Competencies

3.4.1.   Distinguish between cleaning, sterilizing and sanitizing.

3.4.2.   Implement equipment safety requirements, and adhere to health and safety codes that restrict equipment use.

3.4.3.   Set up, program, sanitize, and use commercial equipment and machines.

3.4.4.   Break down and maintain commercial equipment and machines.

3.4.5.   Calibrate temperature probes.

3.4.6.   Inspect, use, sanitize, and store knives, hand tools and implements.

3.4.7.   Clean, sanitize, and store tableware and equipment.

3.4.8.   Adjust equipment and workstations to respond to allergies, food intolerances and special requests.

3.4.9.   Lock out and tag out equipment until fixed.

Strand 3.　　　Safety and Sanitation

Learners apply knowledge of biological, physical and chemical hazards and the concepts of safety and sanitation to protect employees and customers from injuries, illnesses and diseases.

Outcome 3.5.　　　Site Safety and Sanitation

Analyze how the physical environment contributes to safety risks, identify strategies used to reduce or eliminate risks, and follow defined safety procedures.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
X	X

Competencies

3.5.1.　Analyze the root causes of accidents, and identify prevention strategies.

3.5.2.　Handle, maintain, and dispose of garbage and non-food refuse.

3.5.3.　Identify signs of infestations.

3.5.4.　Develop and implement pest management procedures.

3.5.5.　Select and mix cleaning or sanitation solutions in the right proportions, and label container.

3.5.6.　Handle, label, store, and dispose of hazardous chemicals and waste.

3.5.7.　Determine actions to take in response to biohazard and contamination incidents.

3.5.8.　Assess fire hazards, and determine fire prevention strategies.

3.5.9.　Develop and implement evacuation procedures and protocols in a variety of settings.

3.5.10.　Respond to illness outbreaks, medical issues and medical emergencies.

3.5.11.　Respond to health code violations, and develop corrective action plans.

3.5.12.　Prepare for internal and external safety checks and inspections.

3.5.13.　Conduct self-inspection audits.

Strand 4. Culinary Arts

Learners apply principles of sociology, chemistry, cultural psychology and food science in the preparation, cooking and presentation of food and beverages.

Outcome 4.1. Culinary Industry Fundamentals
Analyze the effects of sociological, cultural, historical and environmental developments on consumer food preferences and the resulting culinary issues and challenges.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
X	X

Competencies

4.1.1. Differentiate among the segments of the culinary and foodservice operations industry, and identify the types of food served by these segments.

4.1.2. Analyze the effect of cultural, historical, sociological and environmental developments on food preparation and presentation.

4.1.3. Analyze food preparation and presentation trends.

4.1.4. Identify characteristics of various international cuisines, and recognize notable dishes of cuisines common to different regions.

4.1.5. Determine customer behavioral characteristics and factors that influence customer selection of food places and menu items.

Strand 4.   Culinary Arts

Learners apply principles of sociology, chemistry, cultural psychology and food science in the preparation, cooking and presentation of food and beverages.

Outcome 4.2.   Sandwiches and Appetizers
Select ingredients and prepare sandwiches, appetizers and small plates.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
X	X

Competencies
4.2.1.   Identify types and components of hot and cold sandwiches which are comprised of base, spread, filling, accent and garnish.

4.2.2.   Prepare sandwich components, and assemble open, closed, hot and cold sandwiches.

4.2.3.   Prepare meat and cheese trays.

4.2.4.   Prepare amuse bouche, hors d'oeuvres, appetizers and small plates.

Strand 4. Culinary Arts

Learners apply principles of sociology, chemistry, cultural psychology and food science in the preparation, cooking and presentation of food and beverages.

Outcome 4.3. Ingredient Selection and Preparation

Follow mise en place principles when organizing food and equipment, determine amounts to use, and prepare ingredients for use in recipes.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
X	X

Competencies

4.3.1.   Explain the importance of product specifications and portion control.

4.3.2.   Measure solids and liquids, apply ratios and equations to scale, and convert U.S. and metric measurements.

4.3.3.   Use and convert standardized recipes to achieve specific quantities and serving sizes.

4.3.4.   Adjust recipes and preparation techniques to respond to dietary restrictions.

4.3.5.   Select production methods (e.g., heat transfer, moist heat, dry heat) and equipment appropriate for the food product and environment.

4.3.6.   Explain mise en place principles and their impact on kitchen operations.

4.3.7.   Demonstrate mise en place principles in setting up work space.

4.3.8.   Select tools and equipment that foster best results in food preparation.

4.3.9.   Perform processing necessary to prepare ingredients for use in a recipe (e.g., clarify, seed, soak, steep, bread, batter, caramelize, reduce, emulsify).

4.3.10. Use standard knife and fabrication skills and techniques.

Strand 4.   Culinary Arts

Learners apply principles of sociology, chemistry, cultural psychology and food science in the preparation, cooking and presentation of food and beverages.

Outcome 4.4.   Food Staples and Sides Preparation
Apply cooking principles and methods, cultural and ethnic knowledge and nutrition-management strategies to prepare and pair staples and sides.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
X	X

Competencies
4.4.1.   Use quality factors to select food products and produce.

4.4.2.   Identify seasonings, oils, flavor enhancers and food additives by type, class and purpose.

4.4.3.   Create marinades and rubs

4.4.4.   Identify types and grading of egg products.

4.4.5.   Prepare egg-based dishes.

4.4.6.   Identify types, grading and classification of dairy products.

4.4.7.   Use dairy products in food dishes.

4.4.8.   Prepare salads and salad dressings.

4.4.9.   Select dip ingredients, and prepare dips.

4.4.10.   Select stock ingredients; and prepare stocks, bouillons, broths and bases.

4.4.11.   Prepare sauces and gravies using appropriate thickening agents.

4.4.12.   Prepare clear soups, thick soups and specialty soups.

4.4.13.   Prepare fruits.

4.4.14.   Prepare vegetables and legumes.

4.4.15.   Prepare starchy foods.

Strand 4. Culinary Arts

Learners apply principles of sociology, chemistry, cultural psychology and food science in the preparation, cooking and presentation of food and beverages.

Outcome 4.5. Meat, Poultry and Seafood
Apply cooking principles and methods, cultural and ethnic knowledge and nutrition-management strategies to prepare meat, poultry and seafood dishes.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
X	X

Competencies

4.5.1.   Identify types, grades and cuts of beef, veal, lamb and pork.

4.5.2.   Identify how meat composition influences food quality and preparation.

4.5.3.   Select meat cuts, and prepare meat dishes.

4.5.4.   Identify types, grades and cuts of chicken, turkey, duck and goose.

4.5.5.   Select poultry cuts, and prepare poultry dishes.

4.5.6.   Identify and prepare offal meats.

4.5.7.   Describe the characteristics, uses and methods of preparing charcuterie.

4.5.8.   Identify and assess the quality of fish and shellfish.

4.5.9.   Prepare and cook fish and shellfish.

Strand 4. Culinary Arts

Learners apply principles of sociology, chemistry, cultural psychology and food science in the preparation, cooking and presentation of food and beverages.

Outcome 4.6. Food Presentation
Apply plating and presentation principles to deliver attractive and balanced menu items.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
X	X

Competencies
4.6.1.   Plate food using design principles of color, height, focal point, proportion and temperature.

4.6.2.   Prepare platter and buffet presentations.

4.6.3.   Garnish plates, soups and desserts.

4.6.4.   Maintain nutritional value and dietary restrictions during the plating and presentation process.

Strand 4.   Culinary Arts

Learners apply principles of sociology, chemistry, cultural psychology and food science in the preparation, cooking and presentation of food and beverages.

Outcome 4.7.   Beverage Preparation
Recommend beverage selections, and prepare non-alcoholic specialty drinks.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
X	X

Competencies
4.7.1.   Select types of coffee and coffee flavorings, and prepare coffee drinks.

4.7.2.   Select types of tea and tea flavorings, and prepare specialty tea drinks.

4.7.3.   Prepare milk and dairy-based drinks.

4.7.4.   Prepare specialty juices, water and energy drinks.

4.7.5.   Prepare carbonated beverages.

4.7.6.   Monitor beverage temperatures and holding times.

4.7.7.   Determine beverage pairings appropriate for particular menu items.

Strand 4.   Culinary Arts

Learners apply principles of sociology, chemistry, cultural psychology and food science in the preparation, cooking and presentation of food and beverages.

Outcome 4.8.   Banquet and High-Volume Cookery
Prepare food in high volume to service high traffic and special requests.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
X	

Competencies
4.8.1.   Explain the challenges, principles and corrective actions associated with preparing and serving foods to large groups.

4.8.2.   Maintain quality controls, and apply appropriate cooking methodology during batch cooking.

4.8.3.   Set up stations to support high-volume production.

4.8.4.   Adjust preparation schedules and sequencing to support high-volume production.

Strand 5. Baking and Pastry Arts

Learners apply principles of chemistry, physics and nutrition science to the preparation and baking of breads, desserts and pastries.

Outcome 5.1. Baking and Pastry Science
Analyze the scientific principles that determine baking techniques required to achieve a desired outcome.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
X	

Competencies

5.1.1. Explain the chemical reactions occurring during kneading, mixing and creaming.

5.1.2. Describe the consequences of under- and over-manipulation.

5.1.3. Explain considerations in using active, active-dry and instant yeast.

5.1.4. Proof yeast, and monitor and adjust environmental conditions to maximize yeast fermentation.

5.1.5. Describe how the composition of baking ingredients and temperature affect the chemical structure of the end product.

5.1.6. Analyze the effect of ingredient substitutions on chemical reactions and baking outcomes.

5.1.7. Analyze how the use of different smallwares, hand tools and equipment affects the types of chemical reactions that occur during the baking process.

Strand 5.   Baking and Pastry Arts

Learners apply principles of chemistry, physics and nutrition science to the preparation and baking of breads, desserts and pastries.

Outcome 5.2.   Baking and Pastry Techniques
Select tools and apply procedures and techniques to bake a variety of desserts and baked goods.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
X	

Competencies
5.2.1.   Select ingredients for use in cakes, confections and pastries.

5.2.2.   Prepare and bake cookies to achieve the desired flavor, texture and shape.

5.2.3.   Prepare, bake and fill pie crusts, tarts and pastries.

5.2.4.   Prepare, bake and assemble cakes and tortes.

5.2.5.   Prepare custards, puddings, gelatins, mousses and soufflés.

5.2.6.   Prepare syrups, creams and sauces.

5.2.7.   Prepare frozen desserts.

5.2.8.   Prepare fruit desserts.

5.2.9.   Temper chocolate and coatings.

Strand 5. Baking and Pastry Arts

Learners apply principles of chemistry, physics and nutrition science to the preparation and baking of breads, desserts and pastries.

Outcome 5.3. Breads
Apply baking production techniques to prepare a variety of breads.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
X	

Competencies

Competencies

5.3.1. Select ingredients for use in breads.

5.3.2. Prepare and bake quick-bread doughs and batters (e.g., biscuits, muffins, fritters, crepes, pâté à choux).

5.3.3. Prepare, shape, proof, and bake yeast-leavened dough.

5.3.4. Prepare artisan and specialty breads, sourdoughs, bagels, pretzels, holiday or seasonal breads and flat breads.

Strand 5.   Baking and Pastry Arts

Learners apply principles of chemistry, physics and nutrition science to the preparation and baking of breads, desserts and pastries.

Outcome 5.4.   Specialized Decorating and Presentation
Apply specialized decorating techniques to service special events and requests.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
X	

Competencies

5.4.1.   Explain concepts that affect the presentation of baked goods and pastries (e.g., figure, ground, line, contrast, pattern, proportion, color, symmetry, movement, unity, balance).

5.4.2.   Prepare washes and glazes, icings, frostings, whipped toppings and fillings.

5.4.3.   Model chocolate for decorative purposes.

5.4.4.   Demonstrate bagging and piping techniques.

5.4.5.   Prepare and apply base, crumb, marzipan and fondant cake coatings.

5.4.6.   Prepare and apply edible decorations.

5.4.7.   Decorate cakes and cookies according to themes and designs.

5.4.8.   Maintain freshness and quality of baked goods, pastries and desserts in ready state to be served at a later time.

Strand 6.   Nutrition Science

Learners apply food science and nutrition to manage the health and wellness concerns of customers and to research and develop new food products that meet quality assurance standards.

Outcome 6.1.   Food Science

Apply principles of biology, chemistry and physics to determine the nutritional values and health impacts of food products.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
X	

Competencies

6.1.1.   Describe sources and forms of energy and the relationship between temperature and energy transfer.

6.1.2.   Describe how food responds to temperature.

6.1.3.   Sample food products for moisture content, acidity level, specific gravity or butter-fat content.

6.1.4.   Assess water's function in food processing, distinguish between moisture content and water activity and differentiate how water activity affects food functionality and storage.

6.1.5.   Describe the composition, structure and sources of sugars, complex carbohydrates, lipids, vitamins, minerals and proteins (i.e., functional ingredients) and their nutritional contributions to dietary needs.

6.1.6.   Relate the functions and physical properties of simple and complex carbohydrates, lipids, vitamins, minerals and proteins (i.e., functional ingredients) to the selection of food ingredients.

6.1.7.   Describe the roles of enzymes as catalysts and the factors that affect enzyme activity.

6.1.8.   Differentiate the metabolic processes and the factors that affect metabolic changes in the human body, including anabolism, catabolism and basal metabolism.

6.1.9.   Describe the structure of molds, bacteria, viruses, prions and yeast; how they reproduce; the factors that affect their growth and their roles in food production.

6.1.10.   Describe the nature, purpose and chemical and physical effects of food additives and colorings.

6.1.11.   Analyze the effects of pesticides, genetic modifications and other food alterations on nutritional values and physical health.

6.1.12.   Explain the chemical nature, required elements and nutritional implications of fermentation, gel formation, dextrinization and retrogradation processes.

Strand 6. Nutrition Science

Learners apply food science and nutrition to manage the health and wellness concerns of customers and to research and develop new food products that meet quality assurance standards.

Outcome 6.2. Nutritional Analysis

Apply concepts of nutrition science to determine the effects of recipes and food combinations on customer health.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
X	

Competencies

6.2.1. Analyze recommended dietary guidelines, and apply the five food-group categories to balance food selection.

6.2.2. Analyze the nutritional challenges of meeting special dietary needs, and identify suitable ingredient substitutes.

6.2.3. Determine the nutritional value of foods using ingredient lists and food labels.

6.2.4. Develop standardized recipes that preserve nutrients during cooking and promote healthy eating habits.

Strand 6. Nutrition Science

Learners apply food science and nutrition to manage the health and wellness concerns of customers and to research and develop new food products that meet quality assurance standards.

Outcome 6.3. Research for Recipe Development
Apply principles of food composition and chemistry, nutrition science and innovation processes to research and develop marketable new recipes.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
X	

Competencies

6.3.1.   Conduct a sensory evaluation of the food product.

6.3.2.   Explain how product availability, cost, product quality, nutrition science, allergies and intolerances affect the food innovation process.

6.3.3.   Analyze trends to identify opportunities for food innovation.

6.3.4.   Determine the nutritional value of food products.

6.3.5.   Develop new food concepts.

6.3.6.   Evaluate operational considerations, and recommend new food recipes.

6.3.7.   Conduct test market.

Strand 6. Nutrition Science

Learners apply food science and nutrition to manage the health and wellness concerns of customers and to research and develop new food products that meet quality assurance standards.

Outcome 6.4. Menu Development

Apply principles of food science, nutritional analysis and human behavior to plan and design menus.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
X	

Competencies

6.4.1.   Analyze sociocultural trends, food habits, preferences and nutritional guidelines to identify menu options.

6.4.2.   Select menu items consistent with defined brand and operational capabilities.

6.4.3.   Balance the nutritional value of food pairings.

6.4.4.   Determine menu price points and menu prices.

6.4.5.   Design menus, menu item descriptions and nutritional disclosures.

6.4.6.   Create menus for room service, special occasions and events.

6.4.7.   Modify menus and recipes to adjust to food-chain supply issues (e.g., outbreaks, crop destruction, recalls, excess inventory).

6.4.8.   Evaluate compliance with truth-in-menu laws as they relate to product and menu descriptions and nutritional claims.

Strand 7. Foodservice Operations

Learners use foodservice management principles to achieve profit objectives and deliver customer experiences consistent with the brand.

Outcome 7.1. Purchasing and Inventory Management
Plan and implement procedures and techniques to maintain food and beverage safety and quality, reduce costs and achieve organizational objectives during inventory acquisition, storage and use.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
X	X

Competencies

7.1.1.   Determine how food and beverage purchasing decisions are influenced by food defense, security and supplier's agricultural and manufacturing practices.

7.1.2.   Conduct make or buy analysis, and determine course of action.

7.1.3.   Establish food specifications and prep lists.

7.1.4.   Calculate unit costs, total costs and yield measures for standard recipes.

7.1.5.   Calculate plate, buffet and salad bar requirements and costs.

7.1.6.   Develop ingredient and portion control guides.

7.1.7.   Determine sources of food loss, and select corrective procedures.

7.1.8.   Apply first-in first-out (FIFO) inventory control method to store and use food products.

7.1.9.   Identify sustainability considerations in purchasing food and nonfood products.

7.1.10. Develop and implement food and nonfood waste-reduction management program.

Strand 7.   Foodservice Operations

Learners use foodservice management principles to achieve profit objectives and deliver customer experiences consistent with the brand.

Outcome 7.2.   Kitchen Management and Distribution

Design, implement, and manage distribution processes to achieve quality standards, expedite workflow and sustain customer satisfaction at a reasonable cost, using continuous-improvement techniques.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
X	

Competencies

7.2.1.   Develop and communicate quality check processes and procedures (e.g., line checks, par stops, restaurant logs, unit inspections).

7.2.2.   Forecast and schedule food production.

7.2.3.   Coordinate meal distribution based on meal type, service categories and available transportation mechanisms.

7.2.4.   Select packaging, and prepare food product for distribution.

Strand 7.   Foodservice Operations

Learners use foodservice management principles to achieve profit objectives and deliver customer experiences consistent with the brand.

Outcome 7.3.   Dining Room Operations
Manage dining room staff, operations and systems to achieve organizational objectives.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
X	

Competencies

7.3.1.   Strategically interact with customers and staff.

7.3.2.   Determine the customer dynamics occurring during different shifts, and assess their impact on operations.

7.3.3.   Integrate online reservations and orders into culinary and restaurant management systems.

7.3.4.   Establish and implement processes to manage table turns, wait lines and table assignments.

7.3.5.   Establish and implement processes to facilitate interaction between the different service teams.

7.3.6.   Identify types of table service.

7.3.7.   Provide table and beverage service.

7.3.8.   Maintain eating areas, meeting spaces and serving stations.

7.3.9.   Describe the procedures foodservice establishments use to manage liability risks associated with alcohol consumption.

Strand 8.   Lodging Operations

Learners use principles of lodging to achieve profit objectives and deliver customer experiences consistent with the brand.

Outcome 8.1.   Lodging Fundamentals
Analyze the lodging industry to understand its classifications, service levels, divisions and role and responsibilities.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
	X

Competencies

8.1.1.   Explain the components of the lodging "product" and the role of services in providing the product.

8.1.2.   Analyze the effect of cultural, historical and sociological developments and trends on lodging services.

8.1.3.   Describe the classifications of lodging accommodations and room types.

8.1.4.   Differentiate service levels and features by accommodation types and classifications.

8.1.5.   Identify common divisions, or functional areas of lodging establishments; and explain their responsibilities, activities and interactions.

8.1.6.   Describe the role of hotel management companies and the use of management contracts.

8.1.7.   Analyze the role that physical facilities, property location and destination features have on customer appeal and guest mix.

8.1.8.   Identify complementary business partnerships that support lodging services.

8.1.9.   Explain lodging market segments.

Strand 8. Lodging Operations

Learners use principles of lodging to achieve profit objectives and deliver customer experiences consistent with the brand.

Outcome 8.2. Guest Operations

Apply guest experience-management principles and knowledge of the guest life cycle and guest management systems to service lodging guests consistently to meet or exceed brand and customer expectations.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
	X

Competencies

8.2.1.   Identify the factors that impact the customer experience throughout the guest life cycle.

8.2.2.   Analyze the effect of guest services, concierge and guest relations on the lodging guest's experience.

8.2.3.   Book direct and indirect individual room reservations, and block group reservations.

8.2.4.   Confirm, modify, and cancel reservations.

8.2.5.   Resolve reservation issues.

8.2.6.   Describe check-in and check-out processes available to lodging customers.

8.2.7.   Check in and orient guests to the lodging property.

8.2.8.   Determine services to offer arriving guests.

8.2.9.   Process guest requests, and complete front-desk transactions.

8.2.10.   Follow front-desk procedures to maintain guest safety and security.

8.2.11.   Process guest departures and late-guest checkouts, and provide services to departing guests.

8.2.12.   Maintain up-to-date guest room status using the Property Management System.

Strand 8. Lodging Operations

Learners use principles of lodging to achieve profit objectives and deliver customer experiences consistent with the brand.

Outcome 8.3. Housekeeping Operations

Maintain guest rooms consistent with brand and quality standards, and manage housekeeping services to meet organizational standards.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
	X

Competencies

8.3.1.   Explain flow and cycle of linens.

8.3.2.   Determine whether guest rooms and public areas meet quality standards.

8.3.3.   Select lodging cleaning supplies, equipment and processes based on the situation.

8.3.4.   Determine whether room conditions warrant facilities management involvement.

8.3.5.   Prepare, clean, monitor, and stock rooms and assigned areas.

8.3.6.   Remove stains from hotel surfaces and linens.

8.3.7.   Maintain rooms and public areas.

8.3.8.   Create, implement, and monitor a housekeeping plan.

8.3.9.   Create and monitor performance and productivity standards for all cleaning areas.

8.3.10. Develop a green cleaning program.

Strand 8.   Lodging Operations

Learners use principles of lodging to achieve profit objectives and deliver customer experiences consistent with the brand.

Outcome 8.4.   Facilities Maintenance

Develop and monitor standards for hotel operations.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
	X

Competencies

8.4.1.   Assess quality of facilities and guest rooms.

8.4.2.   Schedule preventive maintenance, repair and renovation.

8.4.3.   Develop a cleaning and maintenance program for carpets, window treatments and furniture.

8.4.4.   Develop and implement a waste redirection and recycling plan for materials, equipment and furnishings.

8.4.5.   Create and implement strategies for guest use of energy and water.

8.4.6.   Establish a schedule for grounds maintenance and landscaping care.

Strand 8. Lodging Operations

Learners use principles of lodging to achieve profit objectives and deliver customer experiences consistent with the brand.

Outcome 8.5. Property Accounting

Manage, track, record, and evaluate financial transactions to enable achievement of organizational goals.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
	X

Competencies

8.5.1. Identify uniform systems of accounts relevant to the lodging segment.

8.5.2. Check cashiers in and out, and verify banks at shift end.

8.5.3. Track and assess guests' credit availability and usage.

8.5.4. Process advance deposits on reservations.

8.5.5. Calculate and analyze revenue per available room (RevPAR).

8.5.6. Describe types of lodging taxes paid by guests and the uses of those taxes.

8.5.7. Forecast rooms and occupancy rates, and manage yield.

8.5.8. Complete a night audit, reconcile accounting issues, and produce reports.

8.5.9. Analyze room rates and departmental allocations.

Strand 8. Lodging Operations

Learners use principles of lodging to achieve profit objectives and deliver customer experiences consistent with the brand.

Outcome 8.6. Property Sales
Support property sales activities to facilitate achievement of financial and operational goals.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
	X

Competencies
8.6.1. Describe meeting products and services, and calculate time and usage requirements for function rooms.

8.6.2. Identify lodging sales opportunities.

8.6.3. Evaluate property sales capacity and opportunities, and research potential clients.

8.6.4. Select room distribution management techniques, strategies and payment models.

8.6.5. Develop and use a property fact book.

8.6.6. Prepare a sales kit.

8.6.7. Recommend types of food functions and types of food-and-beverage services.

8.6.8. Determine programs and amenities to offer guests.

8.6.9. Distinguish between a letter of agreement and a contract, and complete a letter of agreement.

8.6.10. Coordinate client services.

8.6.11. Classify, maintain, and manage key accounts.

Strand 8. Lodging Operations

Learners use principles of lodging to achieve profit objectives and deliver customer experiences consistent with the brand.

Outcome 8.7. Property Management
Manage lodging properties to achieve organizational objectives.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
	X

Competencies

8.7.1. Explain how demographic and psychographic information is used to determine lodging property characteristics, features, prices and group or event negotiation strategies.

8.7.2. Explain the role and components of property management systems, and describe their importance in maintaining accurate guest room status and accounts.

8.7.3. Create and monitor standards for front-office operations.

8.7.4. Create and maintain standards and procedures for general housekeeping operations.

8.7.5. Coordinate amenities and services across multiple property outlets.

Strand 9. Travel and Tourism Operations

Learners conduct geopolitical, environmental and ethnographic analyses; and apply principles of sales and marketing, event design and customer service to create unique experiences that attract tourists and visitors.

Outcome 9.1. Travel and Tourism Fundamentals

Examine the scope of organizations that make up the travel and tourism industry, their roles, current trends, challenges and strategies.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
	X

Competencies

9.1.1. Compare the similarities and differences of the major types of destinations (e.g., ethnic, cultural, natural, recreational, seasonal).

9.1.2. Describe types of business and leisure users of travel and tourism services and their motivations to travel.

9.1.3. Describe types of tours.

9.1.4. Identify destination attractions, types and options.

9.1.5. Identify types and roles of businesses and organizations that market and promote tourism.

9.1.6. Describe the scope of the convention and meetings industry and the characteristics that determine meeting or event appeal.

9.1.7. Identify tourism challenges, opportunities and trends.

9.1.8. Describe the importance of contracted services to travel and tourism organizations.

Strand 9.   Travel and Tourism Operations

Learners conduct geopolitical, environmental and ethnographic analyses; and apply principles of sales and marketing, event design and customer service to create unique experiences that attract tourists and visitors.

Outcome 9.2.   Tourism Geography
Analyze sociological, cultural, historical and environmental factors that make a destination unique and appealing to visitors.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
	X

Competencies
9.2.1.   Identify local attractions and events of interest to travelers.

9.2.2.   Identify key travel destinations in major geographical regions and countries.

9.2.3.   Describe ways that a region's climate, natural features, and attractions affect tourism.

9.2.4.   Assess the impact of natural features and attractions on economic development and growth.

9.2.5.   Explain the social and cultural elements of a region or country and their impact on travel and tourism.

9.2.6.   Evaluate the impact of geographical, psychological and sociological factors on travel, customs and health issues.

9.2.7.   Analyze the environmental impact of tourism and strategies designed to prolong the attractiveness of the tourism location.

9.2.8.   Explain tourism's impact on an area's transportation systems, safety and security.

Strand 9.   Travel and Tourism Operations

Learners conduct geopolitical, environmental and ethnographic analyses; and apply principles of sales and marketing, event design and customer service to create unique experiences that attract tourists and visitors.

Outcome 9.3.   Travel Services and Operations
Plan and coordinate travel activities, leveraging knowledge of state, national and global travel destinations to achieve tourist objectives.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
	X

Competencies
9.3.1.   Select transportation modes and booking considerations.

9.3.2.   Select accommodation options by their classification, rating and booking considerations.

9.3.3.   Research, select and recommend attractions, events and entertainment relevant to the individual or group profile.

9.3.4.   Develop itineraries to fit individual and group traveler profiles and expectations.

9.3.5.   Utilize Global Distribution System (GDS) to fulfill travel requests.

9.3.6.   Manage pre- and post-booking travel processes.

9.3.7.   Identify travel and tour plans to coordinate with vendors.

9.3.8.   Establish payment plans and fee structures for travel and tour packages.

9.3.9.   Prepare and organize tours.

9.3.10. Develop travel and tour packages to offer targeted audiences.

Strand 9.   Travel and Tourism Operations

Learners conduct geopolitical, environmental and ethnographic analyses; and apply principles of sales and marketing, event design and customer service to create unique experiences that attract tourists and visitors.

Outcome 9.4.   Travel and Tourism Promotion
Develop and implement processes, policies and techniques to guide promotional activities for defined goal achievement.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
	X

Competencies
9.4.1.   Determine promotional messages for targeted travel and tourism audience.

9.4.2.   Select promotional channels to best communicate with targeted travel and tourism audience.

9.4.3.   Select and use social media to promote travel and tourism.

9.4.4.   Develop travel literature to support travel packages and sales strategies.

9.4.5.   Determine and update website's content.

9.4.6.   Determine affinity marketing strategies.

9.4.7.   Select sales-promotion materials for use in promoting travel and tourism.

9.4.8.   Create and use marketing calendars.

9.4.9.   Arrange promotional displays for tours and travel services.

9.4.10.   Develop and foster media relationships and community partnerships.

9.4.11.   Plan and conduct familiarization (FAM) tour.

Strand 9.   Travel and Tourism Operations

Learners conduct geopolitical, environmental and ethnographic analyses; and apply principles of sales and marketing, event design and customer service to create unique experiences that attract tourists and visitors.

Outcome 9.5.   Event Planning
Analyze risks, identify needs, and develop strategies to achieve meeting, exposition, event or convention (MEEC) goals.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
	X

Competencies

9.5.1.   Define event concept using situation and feasibility analysis.

9.5.2.   Conduct pre-event research on event history, brand image and risks.

9.5.3.   Develop a sustainability plan to ensure event continuity.

9.5.4.   Develop scope of work and assign responsibilities.

9.5.5.   Select strategies to prevent or manage event risks and costs.

9.5.6.   Determine stakeholder groups or individuals who can affect or are affected by the achievement of event objectives.

9.5.7.   Set attendance and participation goals and deadlines for sponsorships, vendors and participants.

9.5.8.   Determine budget and timeline specifications.

9.5.9.   Develop and distribute request for proposals to select venue, vendors, performers and auxiliary services.

9.5.10.   Develop the major components of an event plan that consider critical elements of a successful event.

9.5.11.   Develop contingency plan.

9.5.12.   Determine required contracts, licenses, permits and intellectual-property use restrictions for event.

9.5.13.   Create an event breakdown and timeline.

9.5.14.   Create sponsorship package, and solicit event sponsors.

Strand 9.　　　　Travel and Tourism Operations

Learners conduct geopolitical, environmental and ethnographic analyses; and apply principles of sales and marketing, event design and customer service to create unique experiences that attract tourists and visitors.

Outcome 9.6.　　Event Design

Devise and organize a meeting, exposition, event or convention (MEEC) that achieves defined goals.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
	X

Competencies

9.6.1.　Structure the event, and create production schedules and call sheets, media plan and event specification guides.

9.6.2.　Define the event registration and evaluation processes.

9.6.3.　Analyze proposals; and select site, performers and auxiliary service providers.

9.6.4.　Determine event-hosted merchandise and product sale requirements.

9.6.5.　Develop facilities plan and functional site specifications.

9.6.6.　Design and document site layouts and logistical plans.

9.6.7.　Determine and coordinate the design of event-related activities and materials.

9.6.8.　Develop on-site communication plan, and identify signage and A/V needs.

9.6.9.　Develop participant packages that include negotiated hotel room block rates and negotiated tour packages to attractions and amenities.

9.6.10.　Determine event decor and amenities.

9.6.11.　Develop guest transportation plans.

9.6.12.　Identify required guest services, and develop cost-effective options.

9.6.13.　Develop alternative staffing models.

Strand 9. Travel and Tourism Operations

Learners conduct geopolitical, environmental and ethnographic analyses; and apply principles of sales and marketing, event design and customer service to create unique experiences that attract tourists and visitors.

Outcome 9.7. Event Set-up, Execution and Evaluation

Set up and execute a meeting, event, exposition or convention (MEEC) to meet client expectations; and evaluate event success.

An "X" indicates that the pathway applies to the outcome.

Culinary and Foodservice Operations	Lodging and Travel Services
	X

Competencies

9.7.1.   Use facilities plan and functional site specifications.

9.7.2.   Implement guest transportation plans.

9.7.3.   Secure required guest services.

9.7.4.   Implement alternative staffing models.

9.7.5.   Determine conference room and banquet room needs and setup requirements, and complete specification sheets.

9.7.6.   Secure required resources using in-house or outsourced services.

9.7.7.   Set up and tear down rooms according to requirements, and store materials and equipment.

9.7.8.   Manage event logistics, operations and service providers.

9.7.9.   Conduct post-event assessment.

9.7.10. Recommend improvements for future events.

Webb's Depth of Knowledge (DOK)
For Hospitality and Tourism

1 - Low 4 - High

Standard/Outcome/Competency		DOK Level
Strand 1: Business Operations/21st Century Skills		
Outcome 1.1. REQUIRED Employability Skills: Develop career awareness and employability skills (e.g., face-to-face, online) needed for gaining and maintaining employment in diverse business settings.		
Outcome 1.1. DOK Frequency	**Level 1:**	0
	Level 2:	0
	Level 3:	0
	Level 4:	0
Outcome 1.10. OPTIONAL Sales and Marketing: Manage pricing, place, promotion, packaging, positioning and public relations to improve quality customer service.		
Outcome 1.10. DOK Frequency	**Level 1:**	0
	Level 2:	0
	Level 3:	0
	Level 4:	0
Outcome 1.11. OPTIONAL Principles of Business Economics: Examine and employ economic principles, concepts and policies to accomplish organizational goals and objectives.		
Outcome 1.11. DOK Frequency	**Level 1:**	0
	Level 2:	0
	Level 3:	0
	Level 4:	0
Outcome 1.2. REQUIRED Leadership and Communications: Process, maintain, evaluate and disseminate information in a business. Develop leadership and team building to promote collaboration.		

		Level 1:	0
Outcome 1.2. DOK Frequency		Level 2:	0
		Level 3:	0
		Level 4:	0

Outcome 1.3. REQUIRED Business Ethics and Law: Analyze how professional, ethical and legal behavior contributes to continuous improvement in organizational performance and regulatory compliance.

		Level 1:	0
Outcome 1.3. DOK Frequency		Level 2:	0
		Level 3:	0
		Level 4:	0

Outcome 1.4. REQUIRED Knowledge Management and Information Technology: Demonstrate current and emerging strategies and technologies used to collect, analyze, record and share information in business operations.

		Level 1:	0
Outcome 1.4. DOK Frequency		Level 2:	0
		Level 3:	0
		Level 4:	0

Outcome 1.5. REQUIRED Global Environment: Evaluate how beliefs, values, attitudes and behaviors influence organizational strategies and goals.

		Level 1:	0
Outcome 1.5. DOK Frequency		Level 2:	0
		Level 3:	0
		Level 4:	0

Outcome 1.6. REQUIRED Business Literacy: Develop foundational skills and knowledge in entrepreneurship, financial literacy and business operations.

		Level 1:	0
Outcome 1.6. DOK Frequency		Level 2:	0
		Level 3:	0
		Level 4:	0

Outcome 1.7. OPTIONAL Entrepreneurship/Entrepreneurs: Analyze the environment in which a business operates and the economic factors and opportunities associated with self-employment.

	Level 1:	0
Outcome 1.7. DOK Frequency	Level 2:	0
	Level 3:	0
	Level 4:	0

Outcome 1.8. OPTIONAL Operations Management: Plan, organize and monitor an organization or department to maximize contribution to organizational goals and objectives.

	Level 1:	0
Outcome 1.8. DOK Frequency	Level 2:	0
	Level 3:	0
	Level 4:	0

Outcome 1.9. REQUIRED Financial Management: Use financial tools, strategies and systems to develop, monitor and control the use of financial resources to ensure personal and business financial well-being.

	Level 1:	0
Outcome 1.9. DOK Frequency	Level 2:	0
	Level 3:	0
	Level 4:	0

	Level 1:	0
Strand 1. DOK Frequency	Level 2:	0
	Level 3:	0
	Level 4:	0

Strand 2: Experience Management: Learners apply customer behavior concepts to create a brand identity, design and deliver exceptional customer experiences, and build customer loyalty and brand equity.

Outcome 2.1. Hospitality and Tourism Fundamentals: Explain the composition and economic significance of the hospitality and tourism industry.	2
2.1.1. Describe the relationship between the economy and the hospitality and tourism industry.	2
2.1.2. Identify the key segments of the hospitality and tourism industry, and explain their interdependence.	2
2.1.3. Explain the role of Convention and Visitor Bureaus (CVB), Destination Marketing Organizations (DMO) and tourism distribution organizations in generating hospitality and tourism business.	2
2.1.4. Identify changes occurring in hospitality and tourism as a result of technological advancements and competing online services.	2

Outcome 2.1. DOK Frequency	**Level 1:**	0
	Level 2:	4
	Level 3:	0
	Level 4:	0

Outcome 2.2. Hospitality and Tourism Environment: Analyze how customer service principles, hospitality services and operational processes work together to create a culture that allows organizations to meet or exceed customer expectations.	2
2.2.1. Describe how the principles of R.A.V.E. (respect and value everyone), customer satisfaction and quality affect service delivery.	2
2.2.2. Explain the unique characteristics of services (i.e., intangibility, inseparability, variability and perishability).	2
2.2.3. Explain the influence of an organization's mission and vision statement on customer service practices.	2
2.2.4. Explain the factors that shape customer expectations of a particular service and how subjective and objective elements of service quality can be assessed.	2
2.2.5. Identify the types of outcomes possible during guest recovery and the impact of proactive guest experience management on realizing a positive outcome.	2
2.2.6. Maintain and mine databases of customer or visitor activity and preferences.	3

Outcome 2.2. DOK Frequency	**Level 1:**	0
	Level 2:	5
	Level 3:	1
	Level 4:	0

Outcome 2.3. Brand Positioning: Determine how the visible and intangible elements of a brand work together to identify and distinguish the brand in the customers' mind.	3
2.3.1. Identify the components and types of brands and branding strategies.	2
2.3.2. Determine branding positioning.	3
2.3.3. Select products and services to offer that enhance brand image.	3
2.3.4. Determine how customer touch points impact branding strategy.	3
2.3.5. Coordinate people, processes and technology to deliver the brand promise.	4
2.3.6. Determine the impact of an organization's reputation on its brand image.	4

Outcome 2.3. DOK Frequency	**Level 1:**	0
	Level 2:	1
	Level 3:	3
	Level 4:	2

Outcome 2.4. Marketing Research: Conduct qualitative and quantitative research to gather, synthesize and analyze information about a specified problem, issue or opportunity.	4
2.4.1. Distinguish between market-driven and customer-driven information.	2
2.4.2. Explain reasons for conducting marketing research and the importance and scope of marketing research activities.	2
2.4.3. Explain marketing-research design considerations; and identify the type of research appropriate for different business objectives, problems or opportunities.	2
2.4.4. Determine who and how many respondents are needed to adequately represent the population.	3
2.4.5. Determine how to obtain primary and secondary data needed for marketing research.	3
2.4.6. Collect quantitative and qualitative marketing-research data.	4
2.4.7. Apply statistical methods and software systems to analyze research data.	4
2.4.8. Conduct analytical review of marketing data.	4
2.4.9. Translate findings into actionable business recommendations.	4

	Level 1:	0
Outcome 2.4. DOK Frequency	**Level 2:**	3
	Level 3:	2
	Level 4:	4

Outcome 2.5. Brand Communications: Plan, create, implement, and manage brand-related communications to reinforce the organization's brand image.	3
2.5.1. Explain how brand identifiers interact with marketing to influence customer expectations and create brand loyalty.	2
2.5.2. Explain the use of social media marketing in the hospitality and tourism industry.	2
2.5.3. Differentiate between the use of social media for personal and business purposes.	2
2.5.4. Analyze the impact of traditional, word-of-mouth and social media on brand image and reach.	3
2.5.5. Coordinate brand messaging of internal and external partners.	3
2.5.6. Create social media content.	3
2.5.7. Track and respond to user-generated content (UGC).	3
2.5.8. Use communications strategies to manage crises and protect or recover reputation.	4
2.5.9. Develop policies and procedures to guide internal and external communication.	3

	Level 1:	0
Outcome 2.5. DOK Frequency	**Level 2:**	3
	Level 3:	5
	Level 4:	1

Outcome 2.6. Customer Services: Apply strategies and techniques to identify and meet guest needs and to establish a sense of connectedness with guests in a hospitality and tourism environment.	3
2.6.1 Interpret unspoken needs based on understanding of human behavior preference patterns and prior experiences.	3
2.6.2. Determine strategies for responding to potentially sensitive, compromising, fraudulent or dangerous situations.	3
2.6.3. Accommodate special needs and specific requests of customers.	3
2.6.4. Process customer orders accurately and efficiently while building rapport.	3
2.6.5. Balance multiple resource demands, and maintain service standards during peak volumes.	3
2.6.6. Respond to customer inquiries, resolve their complaints, and follow up on situations.	3
2.6.7. Take and process customer payments.	3
2.6.8. Identify and deliver on opportunities to make a difference in the customer experience (i.e., positive moments of truth).	4
2.6.9. Leverage customer experiences to build brand preference and loyalty.	4
2.6.10. Identify and utilize credit-card fraud prevention methods, and understand the importance of identity theft controls.	3

	Level 1:	0
Outcome 2.6. DOK Frequency	**Level 2:**	0
	Level 3:	8
	Level 4:	2

Outcome 2.7. People Management: Apply strategies, policies and procedures to manage new hires, union and non;union employees and volunteers to meet quality standards.	4
2.7.1. Determine the impact of ethics and social responsibility policies and practices on business operations.	3
2.7.2. Determine job responsibilities and expectations, and provide detailed job descriptions.	3
2.7.3. Recruit, screen, and interview job applicants.	3
2.7.4. Make hiring decisions and job offers.	3

2.7.5. Orient talent to organizational culture, values, norms, policies and procedures.		4
2.7.6. Train, cross-train, and coach employees and volunteers using talent-development and motivation theories.		4
2.7.7. Schedule employees and volunteers across shifts and during peak service times.		4
2.7.8. Plan, delegate, and direct the work of employees and volunteers.		4
2.7.9. Identify procedures for employee termination.		2
2.7.10. Assess and document employee performance.		4
2.7.11. Communicate outcomes of employee assessment, and take corrective measures.		4
2.7.12. Supervise union and nonunionized staff and volunteers.		4
2.7.13. Develop employee handbook.		3
Outcome 2.7. DOK Frequency	**Level 1:**	0
	Level 2:	1
	Level 3:	5
	Level 4:	7
Strand 2. DOK Frequency	**Level 1:**	0
	Level 2:	19
	Level 3:	27
	Level 4:	18

Strand 3: Safety and Sanitation: Learners apply knowledge of biological, physical and chemical hazards and the concepts of safety and sanitation to protect employees and customers from injuries, illnesses and diseases.

Outcome 3.1. Pathogens, Illnesses and Diseases: Identify pathogens that could render food unsafe for consumption without appropriate precautions and controls.	2
3.1.1. Identify methods and practices to control or eliminate pathogens and the spread of harmful bacteria, viruses, parasites, fungi and toxins.	2
3.1.2. Describe the nature and scope of the government agencies responsible for the prevention of foodborne illnesses.	2
3.1.3. Identify types of foodborne illness caused by bacteria and viruses, their common symptoms and the food items most at risk for contamination.	2
3.1.4. Identify parasites, fungi and biological toxins by their characteristics and the major foodborne illnesses with which they are linked.	2
3.1.5. Identify conditions under which bacteria multiply rapidly (i.e., FAT TOM: food, acidity, temperature, time, oxygen, moisture), and implement preventive measures.	2

3.1.6. Identify the symptoms and consequences of allergic reactions and intolerances, and implement exposure-prevention strategies.	2
3.1.7. Identify sources of common allergens, and implement exposure prevention strategies.	2

Outcome 3.1 DOK Frequency	Level 1:	0
	Level 2:	7
	Level 3:	0
	Level 4:	0

Outcome 3.2. Personal Safety and Sanitation: Demonstrate strategies for preventing risks and biological and physical contamination through personal hygiene, proper attire and precautionary medical safeguards.	2
3.2.1. Identify personal actions and behaviors that contribute to contamination and cross-contamination of food, and describe ways to prevent those issues.	2
3.2.2. Identify when hand-washing must occur, and wash hands using the five-step technique.	2
3.2.3. Select, maintain, and use proper work attire and personal protective clothing and equipment appropriate to job tasks.	3
3.2.4. Handle situations involving bodily fluids.	3
3.2.5. Describe situations when food-handlers should be restricted or excluded from working with food or being in the operation.	2
3.2.6. Lift and move heavy materials and equipment following established ergonomic processes.	3
3.2.7. Explain how personal safety and sanitation contribute to an organization's response to allergies and intolerances.	2

Outcome 3.2. DOK Frequency	Level 1:	0
	Level 2:	4
	Level 3:	3
	Level 4:	0

Outcome 3.3. Food Safety and Sanitation: Demonstrate strategies for preventing and controlling biological, physical and chemical contamination of food products through proper food handling and sanitization procedures.	3
3.3.1. Describe food-safety guidelines (e.g., FDA Food Code), local health-code requirements and the consequences of failing to comply.	2
3.3.2. Describe the impact of Hazard Analysis and Critical Control Point (HAACP) food safety management system on food service.	2

3.3.3. Identify critical control points (Hazard Analysis and Critical Control Point [HAACP]).		3
3.3.4. Identify potential biological, chemical and physical hazards.		3
3.3.5. Identify potentially hazardous foods (PHF), Time and Temperature Control for Safety of Food (TCS) and foods in the temperature danger zone (TDZ).		3
3.3.6. Follow precautionary guidelines established to address food-safety issues for high-risk populations and to reduce potential exposure to harmful pathogens.		3
3.3.7. Identify the effects of water characteristics, food pH levels and moisture levels on food safety and sanitation.		3
3.3.8. Monitor and track food temperatures throughout the receiving, thawing, storing, cooking and holding processes.		4
3.3.9. Control environment for consumer self-service foods.		4
3.3.10. Mark, label, store, and dispose of food and food by-products (e.g., fats, oil, grease).		3
3.3.11. Identify warning signs indicating potential food safety issues during the receiving, storing and serving processes based on food type.		3
3.3.12. Take corrective actions to maintain food safety.		4
Outcome 3.3. DOK Frequency	**Level 1:**	0
	Level 2:	2
	Level 3:	7
	Level 4:	3
Outcome 3.4. Equipment Safety and Sanitation: Demonstrate strategies and techniques for eliminating biological, physical and chemical contamination through proper equipment use, storage and maintenance.		3
3.4.1. Distinguish between cleaning, sterilizing and sanitizing.		2
3.4.2. Implement equipment safety requirements, and adhere to health and safety codes that restrict equipment use.		3
3.4.3. Set up, program, sanitize, and use commercial equipment and machines.		3
3.4.4. Break down and maintain commercial equipment and machines.		3
3.4.5. Calibrate temperature probes.		3
3.4.6. Inspect, use, sanitize, and store knives, hand tools and implements.		3
3.4.7. Clean, sanitize, and store tableware and equipment.		3
3.4.8. Adjust equipment and workstations to respond to allergies, food intolerances and special requests.		3
3.4.9. Lock out and tag out equipment until fixed.		3

	Level 1:	0
Outcome 3.4. DOK Frequency	Level 2:	1
	Level 3:	8
	Level 4:	0

Outcome 3.5. Site Safety and Sanitation: Analyze how the physical environment contributes to safety risks, identify strategies used to reduce or eliminate risks, and follow defined safety procedures.	3
3.5.1. Analyze the root causes of accidents, and identify prevention strategies.	3
3.5.2. Handle, maintain, and dispose of garbage and non-food refuse.	3
3.5.3. Identify signs of infestations.	3
3.5.4. Develop and implement pest management procedures.	3
3.5.5. Select and mix cleaning or sanitation solutions in the right proportions, and label container.	3
3.5.6. Handle, label, store, and dispose of hazardous chemicals and waste.	3
3.5.7. Determine actions to take in response to biohazard and contamination incidents.	3
3.5.8. Assess fire hazards, and determine fire prevention strategies.	3
3.5.9. Develop and implement evacuation procedures and protocols in a variety of settings.	3
3.5.10. Respond to illness outbreaks, medical issues and medical emergencies.	3
3.5.11. Respond to health code violations, and develop corrective action plans.	3
3.5.12. Prepare for internal and external safety checks and inspections.	3
3.5.13. Conduct self-inspection audits.	3

	Level 1:	0
Outcome 3.5. DOK Frequency	Level 2:	0
	Level 3:	13
	Level 4:	0

	Level 1:	0
Strand 3. DOK Frequency	Level 2:	16
	Level 3:	34
	Level 4:	3

Strand 4: Culinary Arts: Learners apply principles of sociology, chemistry, cultural psychology and food science in the preparation, cooking and presentation of food and beverages.	
Outcome 4.1. Culinary Industry Fundamentals: Analyze the effects of sociological, cultural, historical and environmental developments on consumer food preferences and the resulting culinary issues and challenges.	2

4.1.1. Differentiate among the segments of the culinary and foodservice operations industry, and identify the types of food served by these segments.		2
4.1.2. Analyze the effect of cultural, historical, sociological and environmental developments on food preparation and presentation.		3
4.1.3. Analyze food preparation and presentation trends.		3
4.1.4. Identify characteristics of various international cuisines, and recognize notable dishes of cuisines common to different regions.		2
4.1.5. Determine customer behavioral characteristics and factors that influence customer selection of food places and menu items.		2
Outcome 4.1. DOK Frequency	**Level 1:**	0
	Level 2:	3
	Level 3:	2
	Level 4:	0
Outcome 4.2. Sandwiches and Appetizers: Select ingredients and prepare sandwiches, appetizers and small plates.		3
4.2.1. Identify types and components of hot and cold sandwiches which are comprised of base, spread, filling, accent and garnish.		2
4.2.2. Prepare sandwich components, and assemble open,closed, hot and cold sandwiches.		3
4.2.3. Prepare meat and cheese trays.		3
4.2.4. Prepare amuse bouche, hors d'oeuvres, appetizers and small plates.		3
Outcome 4.2. DOK Frequency	**Level 1:**	0
	Level 2:	1
	Level 3:	3
	Level 4:	0
Outcome 4.3. Ingredient Selection and Preparation: Follow mise en place principles when organizing food and equipment, determine amounts to use, and prepare ingredients for use in recipes.		4
4.3.1. Explain the importance of product specifications and portion control.		2
4.3.2. Measure solids and liquids, apply ratios and equations to scale, and convert U.S. and metric measurements.		3
4.3.3. Use and convert standardized recipes to achieve specific quantities and serving sizes.		3
4.3.4. Adjust recipes and preparation techniques to respond to dietary restrictions.		4
4.3.5. Select production methods (e.g., heat transfer, moist heat, dry heat) and equipment appropriate for the food product and environment.		3
4.3.6. Explain mise en place principles and their impact on kitchen operations.		2
4.3.7. Demonstrate mise en place principles in setting up work space.		3

4.3.8. Select tools and equipment that foster best results in food preparation.		3
4.3.9. Perform processing necessary to prepare ingredients for use in a recipe (e.g., clarify, seed, soak, steep, bread, batter, caramelize, reduce, emulsify).		4
4.3.10. Use standard knife and fabrication skills and techniques.		4
Outcome 4.3. DOK Frequency	**Level 1:**	0
	Level 2:	2
	Level 3:	5
	Level 4:	3
Outcome 4.4. Food Staples and Sides Preparation: Apply cooking principles and methods, cultural and ethnic knowledge and nutrition-management strategies to prepare and pair staples and sides.		3
4.4.1. Use quality factors to select food products and produce.		3
4.4.2. Identify seasonings, oils, flavor enhancers and food additives by type, class and purpose.		2
4.4.3. Create marinades and rubs		3
4.4.4. Identify types and grading of egg products.		2
4.4.5. Prepare egg-based dishes.		3
4.4.6. Identify types, grading and classification of dairy products.		2
4.4.7. Use dairy products in food dishes.		3
4.4.8. Prepare salads and salad dressings.		3
4.4.9. Select dip ingredients, and prepare dips.		3
4.4.10. Select stock ingredients; and prepare stocks, bouillons, broths and bases.		3
4.4.11. Prepare sauces and gravies using appropriate thickening agents.		3
4.4.12. Prepare clear soups, thick soups and specialty soups.		3
4.4.13. Prepare fruits.		3
4.4.14. Prepare vegetables and legumes.		3
4.4.15. Prepare starchy foods.		3
Outcome 4.4. DOK Frequency	**Level 1:**	0
	Level 2:	3
	Level 3:	12
	Level 4:	0
Outcome 4.5. Meat, Poultry, and Seafood: Apply cooking principles and methods, cultural and ethnic knowledge and nutrition-management strategies to prepare meat, poultry and seafood dishes.		3
4.5.1. Identify types, grades and cuts of beef, veal, lamb and pork.		3
4.5.2. Identify how meat composition influences food quality and preparation.		2

4.5.3. Select meat cuts, and prepare meat dishes.		3
4.5.4. Identify types, grades and cuts of chicken, turkey, duck and goose.		3
4.5.5. Select poultry cuts, and prepare poultry dishes.		3
4.5.6. Identify and prepare offal meats.		3
4.5.7. Describe the characteristics, uses and methods of preparing charcuterie.		3
4.5.8. Identify and assess the quality of fish and shellfish.		3
4.5.9. Prepare and cook fish and shellfish.		3
Outcome 4.5. DOK Frequency	**Level 1:**	0
	Level 2:	1
	Level 3:	8
	Level 4:	0
Outcome 4.6. Food Presentation: Apply plating and presentation principles to deliver attractive and balanced menu items.		3
4.6.1. Plate food using design principles of color, height, focal point, proportion and temperature.		3
4.6.2. Prepare platter and buffet presentations.		3
4.6.3. Garnish plates, soups and desserts.		3
4.6.4. Maintain nutritional value and dietary restrictions during the plating and presentation process.		3
Outcome 4.6. DOK Frequency	**Level 1:**	0
	Level 2:	0
	Level 3:	4
	Level 4:	0
Outcome 4.7. Beverage Preparation: Recommend beverage selections, and prepare nonalcoholic specialty drinks.		3
4.7.1. Select types of coffee and coffee flavorings, and prepare coffee drinks.		3
4.7.2. Select types of tea and tea flavorings, and prepare specialty tea drinks.		3
4.7.3. Prepare milk and dairy-based drinks.		3
4.7.4. Prepare specialty juices, water and energy drinks.		3
4.7.5. Prepare carbonated beverages.		3
4.7.6. Monitor beverage temperatures and holding times.		3
4.7.7. Determine beverage pairings appropriate for particular menu items.		3

Outcome 4.7. DOK Frequency	**Level 1:**	0
	Level 2:	0
	Level 3:	7
	Level 4:	0

Outcome 4.8. Banquet and High-Volume Cookery: Prepare food in high volume to service high traffic and special requests.	3
4.8.1. Explain the challenges, principles and corrective actions associated with preparing and serving foods to large groups.	2
4.8.2. Maintain quality controls, and apply appropriate cooking methodology during batch cooking.	3
4.8.3. Set up stations to support high-volume production.	3
4.8.4. Adjust preparation schedules and sequencing to support high-volume production.	3

Outcome 4.8. DOK Frequency	**Level 1:**	0
	Level 2:	1
	Level 3:	3
	Level 4:	0

Strand 4. DOK Frequency	**Level 1:**	0
	Level 2:	12
	Level 3:	50
	Level 4:	4

Strand 5: Baking and Pastry Arts: Learners apply principles of chemistry, physics and nutrition science to the preparation and baking of breads, desserts and pastries.

Outcome 5.1. Baking and Pastry Science: Analyze the scientific principles that determine baking techniques required to achieve a desired outcome.	3
5.1.1. Explain the chemical reactions occurring during kneading, mixing and creaming.	2
5.1.2. Describe the consequences of under- and over-manipulation.	2
5.1.3. Explain considerations in using active, active-dry and instant yeast.	2
5.1.4. Proof yeast, and monitor and adjust environmental conditions to maximize yeast fermentation.	3
5.1.5. Describe how the composition of baking ingredients and temperature affect the chemical structure of the end product.	2
5.1.6. Analyze the effect of ingredient substitutions on chemical reactions and baking outcomes.	3
5.1.7. Analyze how the use of different smallwares, hand tools and equipment affects the types of chemical reactions that occur during the baking process.	3

	Level 1:	0
Outcome 5.1. DOK Frequency	**Level 2:**	4
	Level 3:	3
	Level 4:	0

Outcome 5.2. Baking and Pastry Techniques: Select tools and apply procedures and techniques to bake a variety of desserts and baked goods.	3
5.2.1. Select ingredients for use in cakes, confections and pastries.	3
5.2.2. Prepare and bake cookies to achieve the desired flavor, texture and shape.	3
5.2.3. Prepare, bake and fill pie crusts, tarts and pastries.	3
5.2.4. Prepare, bake and assemble cakes and tortes.	3
5.2.5. Prepare custards, puddings, gelatins, mousses and soufflés.	3
5.2.6. Prepare syrups, creams and sauces.	3
5.2.7. Prepare frozen desserts.	3
5.2.8. Prepare fruit desserts.	3
5.2.9. Temper chocolate and coatings.	3

	Level 1:	0
Outcome 5.2. DOK Frequency	**Level 2:**	0
	Level 3:	9
	Level 4:	0

Outcome 5.3. Breads: Apply baking production techniques to prepare a variety of breads.	3
5.3.1. Select ingredients for use in breads.	3
5.3.2. Prepare and bake quick-bread doughs and batters (e.g., biscuits, muffins, fritters, crepes, pate a choux).	3
5.3.3. Prepare, shape, proof, and bake yeast-leavened dough.	3
5.3.4. Prepare artisan and specialty breads, sourdoughs, bagels, pretzels, holiday or seasonal breads and flat breads.	3

	Level 1:	0
Outcome 5.3. DOK Frequency	**Level 2:**	0
	Level 3:	4
	Level 4:	0

Outcome 5.4. Specialized Decorating and Presentation: Apply specialized decorating techniques to service special events and requests.	3
5.4.1. Explain concepts that affect the presentation of baked goods and pastries (e.g., figure, ground, line, contrast, pattern, proportion, color, symmetry, movement, unity, balance).	2

5.4.2. Prepare washes and glazes, icings, frostings, whipped toppings and fillings.	3
5.4.3. Model chocolate for decorative purposes.	3
5.4.4. Demonstrate bagging and piping techniques.	3
5.4.5. Prepare and apply base, crumb, marzipan and fondant cake coatings.	3
5.4.6. Prepare and apply edible decorations.	3
5.4.7. Decorate cakes and cookies according to themes and designs.	3
5.4.8. Maintain freshness and quality of baked goods, pastries and desserts in ready state to be served at a later time.	3

Outcome 5.4. DOK Frequency	**Level 1:**	0
	Level 2:	1
	Level 3:	7
	Level 4:	0
Strand 5. DOK Frequency	**Level 1:**	0
	Level 2:	5
	Level 3:	27
	Level 4:	0

Strand 6: Nutrition Science Management: Learners apply food science and nutrition to manage the health and wellness concerns of customers and to research and develop new food products that meet quality assurance standards.	
Outcome 6.1. Food Science: Apply principles of biology, chemistry and physics to determine the nutritional values and health impacts of food products.	3
6.1.1. Describe sources and forms of energy and the relationship between temperature and energy transfer.	2
6.1.2. Describe how food responds to temperature.	2
6.1.3. Sample food products for moisture content, acidity level, specific gravity or butter-fat content.	3
6.1.4. Assess water's function in food processing, distinguish between moisture content and water activity and differentiate how water activity affects food functionality and storage.	3
6.1.5. Describe the composition, structure and sources of sugars, complex carbohydrates, lipids, vitamins, minerals and proteins (i.e., functional ingredients) and their nutritional contributions to dietary needs.	3
6.1.6. Relate the functions and physical properties of simple and complex carbohydrates, lipids, vitamins, minerals and proteins (i.e., functional ingredients) to the selection of food ingredients.	4
6.1.7. Describe the roles of enzymes as catalysts and the factors that affect enzyme activity.	3

6.1.8. Differentiate the metabolic processes and the factors that affect metabolic changes in the human body, including anabolism, catabolism and basal metabolism.	3
6.1.9. Describe the structure of molds, bacteria, viruses, prions and yeast; how they reproduce; the factors that affect their growth and their roles in food production.	3
6.1.10. Describe the nature, purpose and chemical and physical effects of food additives and colorings.	2
6.1.11. Analyze the effects of pesticides, genetic modifications and other food alterations on nutritional values and physical health.	3
6.1.12. Explain the chemical nature, required elements and nutritional implications of fermentation, gel formation, dextrinization and retrogradation processes.	3

	Level 1:	0
	Level 2:	3
Outcome 6.1. DOK Frequency	Level 3:	8
	Level 4:	1

Outcome 6.2. Nutritional Analysis: Apply concepts of nutrition science to determine the effects of recipes and food combinations on customer health.	4
6.2.1. Analyze recommended dietary guidelines, and apply the five food-group categories to balance food selection.	4
6.2.2. Analyze the nutritional challenges of meeting special dietary needs, and identify suitable ingredient substitutes.	4
6.2.3. Determine the nutritional value of foods using ingredient lists and food labels.	4
6.2.4. Develop standardized recipes that preserve nutrients during cooking and promote healthy eating habits.	4

	Level 1:	0
	Level 2:	0
Outcome 6.2. DOK Frequency	Level 3:	0
	Level 4:	4

Outcome 6.3. Research for Recipe Development: Apply principles of food composition and chemistry, nutrition science and innovation processes to research and develop marketable new recipes.	4
6.3.1. Conduct a sensory evaluation of the food product.	4
6.3.2. Explain how product availability, cost, product quality, nutrition science, allergies and intolerances affect the food innovation process.	3
6.3.3. Analyze trends to identify opportunities for food innovation.	3
6.3.4. Determine the nutritional value of food products.	3
6.3.5. Develop new food concepts.	4
6.3.6. Evaluate operational considerations, and recommend new food recipes.	4
6.3.7. Conduct test market.	4

	Level 1:	0
	Level 2:	0
Outcome 6.3. DOK Frequency	**Level 3:**	3
	Level 4:	4

Outcome 6.4. Menu Development: Apply principles of food science, nutritional analysis and human behavior to plan and design menus.	4
6.4.1. Analyze sociocultural trends, food habits, preferences and nutritional guidelines to identify menu options.	3
6.4.2. Select menu items consistent with defined brand and operational capabilities.	4
6.4.3. Balance the nutritional value of food pairings.	4
6.4.4. Determine menu price points and menu prices.	4
6.4.5. Design menus, menu item descriptions and nutritional disclosures.	4
6.4.6. Create menus for room service, special occasions and events.	4
6.4.7. Modify menus and recipes to adjust to food-chain supply issues (e.g., outbreaks, crop destruction, recalls, excess inventory).	4
6.4.8. Evaluate compliance with truth-in-menu laws as they relate to product and menu descriptions and nutritional claims.	3

	Level 1:	0
	Level 2:	0
Outcome 6.4. DOK Frequency	**Level 3:**	2
	Level 4:	6
	Level 1:	0
	Level 2:	3
Strand 6. DOK Frequency	**Level 3:**	14
	Level 4:	18

Strand 7: Foodservice Operations: Learners use foodservice management principles to achieve profit objectives and deliver customer experiences consistent with the brand.	
Outcome 7.1. Purchasing and Inventory Management: Plan and implement procedures and techniques to maintain food and beverage safety and quality, reduce costs and achieve organizational objectives during inventory acquisition, storage and use.	3
7.1.1. Determine how food and beverage purchasing decisions are influenced by food defense, security and supplier's agricultural and manufacturing practices.	3
7.1.2. Conduct make or buy analysis, and determine course of action.	3
7.1.3. Establish food specifications and prep lists.	3
7.1.4. Calculate unit costs, total costs and yield measures for standard recipes.	3

7.1.5. Calculate plate, buffet and salad bar requirements and costs.		3
7.1.6. Develop ingredient and portion control guides.		3
7.1.7. Determine sources of food loss, and select corrective procedures		4
7.1.8. Apply first-in first-out (FIFO) inventory control method to store and use food products.		3
7.1.9. Identify sustainability considerations in purchasing food and nonfood products.		3
7.1.10. Develop and implement food and nonfood waste-reduction management program.		4
Outcome 7.1. DOK Frequency	**Level 1:**	0
	Level 2:	0
	Level 3:	8
	Level 4:	2
Outcome 7.2. Kitchen Management and Distribution: Design, implement, and manage distribution processes to achieve quality standards, expedite workflow and sustain customer satisfaction at a reasonable cost, using continuous-improvement techniques.		4
7.2.1. Develop and communicate quality check processes and procedures (e.g., line checks, par stops, restaurant logs, unit inspections).		4
7.2.2. Forecast and schedule food production.		4
7.2.3. Coordinate meal distribution based on meal type, service categories and available transportation mechanisms.		4
7.2.4. Select packaging, and prepare food product for distribution.		4
Outcome 7.2. DOK Frequency	**Level 1:**	0
	Level 2:	0
	Level 3:	0
	Level 4:	4
Outcome 7.3. Dining Room Operations: Manage dining room staff, operations and systems to achieve organizational objectives.		3
7.3.1. Strategically interact with customers and staff.		3
7.3.2. Determine the customer dynamics occurring during different shifts, and assess their impact on operations.		3
7.3.3. Integrate online reservations and orders into culinary and restaurant management systems.		3
7.3.4. Establish and implement processes to manage table turns, wait lines and table assignments.		4
7.3.5. Establish and implement processes to facilitate interaction between the different service teams.		4
7.3.6. Identify types of table service.		2

7.3.7. Provide table and beverage service.		3
7.3.8. Maintain eating areas, meeting spaces and serving stations.		3
7.3.9. Describe the procedures foodservice establishments use to manage liability risks associated with alcohol consumption.		2
Outcome 7.3. DOK Frequency	Level 1:	0
	Level 2:	2
	Level 3:	5
	Level 4:	2
Strand 7. DOK Frequency	Level 1:	0
	Level 2:	2
	Level 3:	15
	Level 4:	9
Strand 8: Lodging Operations: Learners use principles of lodging to achieve profit objectives and deliver customer experiences consistent with the brand.		
Outcome 8.1. Lodging Fundamentals: Analyze the lodging industry to understand its classifications, service levels, divisions and role and responsibilities.		2
8.1.1. Explain the components of the lodging "product" and the role of services in providing the product.		2
8.1.2. Analyze the effect of cultural, historical and sociological developments and trends on lodging services.		3
8.1.3. Describe the classifications of lodging accommodations and room types.		2
8.1.4. Differentiate service levels and features by accommodation types and classifications.		2
8.1.5. Identify common divisions, or functional areas of lodging establishments; and explain their responsibilities, activities and interactions.		2
8.1.6. Describe the role of hotel management companies and the use of management contracts.		2
8.1.7. Analyze the role that physical facilities, property location and destination features have on customer appeal and guest mix.		3
8.1.8. Identify complementary business partnerships that support lodging services.		2
8.1.9. Explain lodging market segments.		2
Outcome 8.1. DOK Frequency	Level 1:	0
	Level 2:	7
	Level 3:	2
	Level 4:	0

Outcome 8.2. Guest Operations: Apply guest experience-management principles and knowledge of the guest life cycle and guest management systems to service lodging guests consistently to meet or exceed brand and customer expectations.	3
8.2.1. Identify the factors that impact the customer experience throughout the guest life cycle.	2
8.2.2. Analyze the effect of guest services, concierge and guest relations on the lodging guest's experience.	3
8.2.3. Book direct and indirect individual room reservations, and block group reservations.	3
8.2.4. Confirm, modify, and cancel reservations.	3
8.2.5. Resolve reservation issues.	3
8.2.6. Describe check-in and check-out processes available to lodging customers.	3
8.2.7. Check in and orient guests to the lodging property.	3
8.2.8. Determine services to offer arriving guests.	3
8.2.9. Process guest requests, and complete front-desk transactions.	3
8.2.10. Follow front-desk procedures to maintain guest safety and security.	3
8.2.11. Process guest departures and late-guest checkouts, and provide services to departing guests.	3
8.2.12. Maintain up-to-date guest room status using the Property Management System.	3

	Level 1:	0
Outcome 8.2. DOK Frequency	**Level 2:**	1
	Level 3:	11
	Level 4:	0

Outcome 8.3. Housekeeping Operations: Maintain guest rooms consistent with brand and quality standards, and manage housekeeping services to meet organizational standards.	3
8.3.1. Explain flow and cycle of linens.	2
8.3.2. Determine whether guest rooms and public areas meet quality standards.	3
8.3.3. Select lodging cleaning supplies, equipment and processes based on the situation.	3
8.3.4. Determine whether room conditions warrant facilities management involvement.	3
8.3.5. Prepare, clean, monitor, and stock rooms and assigned areas.	3
8.3.6. Remove stains from hotel surfaces and linens.	3
8.3.7. Maintain rooms and public areas.	3
8.3.8. Create, implement, and monitor a housekeeping plan.	3

8.3.9. Create and monitor performance and productivity standards for all cleaning areas.	3
8.3.10. Develop a green cleaning program.	3

Outcome 8.3. DOK Frequency	**Level 1:**	0
	Level 2:	1
	Level 3:	9
	Level 4:	0

Outcome 8.4. Facilities Maintenance: Develop and monitor standards for hotel operations.	4
8.4.1. Assess quality of facilities and guest rooms.	3
8.4.2. Schedule preventive maintenance, repair and renovation.	4
8.4.3. Develop a cleaning and maintenance program for carpets, window treatments and furniture.	4
8.4.4. Develop and implement a waste redirection and recycling plan for materials, equipment and furnishings.	4
8.4.5. Create and implement strategies for guest use of energy and water.	4
8.4.6. Establish a schedule for grounds maintenance and landscaping care.	4

Outcome 8.4. DOK Frequency	**Level 1:**	0
	Level 2:	0
	Level 3:	1
	Level 4:	5

Outcome 8.5. Property Accounting: Manage, track, record, and evaluate financial transactions to enable achievement of organizational goals.	3
8.5.1. Identify uniform systems of accounts relevant to the lodging segment.	2
8.5.2. Check cashiers in and out, and verify banks at shift end.	3
8.5.3. Track and assess guests' credit availability and usage.	3
8.5.4. Process advance deposits on reservations.	3
8.5.5. Calculate and analyze revenue per available room (RevPAR).	3
8.5.6. Describe types of lodging taxes paid by guests and the uses of those taxes.	2
8.5.7. Forecast rooms and occupancy rates, and manage yield.	4
8.5.8. Complete a night audit, reconcile accounting issues, and produce reports.	3
8.5.9. Analyze room rates and departmental allocations.	4

		Level 1:	0
	Outcome 8.5. DOK Frequency	Level 2:	2
		Level 3:	5
		Level 4:	2

Outcome 8.6. Property Sales: Support property sales activities to facilitate achievement of financial and operational goals.	3
8.6.1. Describe meeting products and services, and calculate time and usage requirements for function rooms.	2
8.6.2. Identify lodging sales opportunities.	3
8.6.3. Evaluate property sales capacity and opportunities, and research potential clients.	3
8.6.4. Select room distribution management techniques, strategies and payment models.	4
8.6.5. Develop and use a property fact book.	3
8.6.6. Prepare a sales kit.	3
8.6.7. Recommend types of food functions and types of food-and-beverage services.	3
8.6.8. Determine programs and amenities to offer guests.	3
8.6.9. Distinguish between a letter of agreement and a contract, and complete a letter of agreement.	2
8.6.10. Coordinate client services.	3
8.6.11. Classify, maintain, and manage key accounts.	3

		Level 1:	0
	Outcome 8.6. DOK Frequency	Level 2:	2
		Level 3:	8
		Level 4:	1

Outcome 8.7. Property Management: Manage lodging properties to achieve organizational objectives.	4
8.7.1. Explain how demographic and psychographic information is used to determine lodging property characteristics, features, prices and group or event negotiation strategies.	3
8.7.2. Explain the role and components of property management systems, and describe their importance in maintaining accurate guest room status and accounts.	3
8.7.3. Create and monitor standards for front-office operations.	4
8.7.4. Create and maintain standards and procedures for general housekeeping operations.	4
8.7.5. Coordinate amenities and services across multiple property outlets.	4

		Level 1:	0
Outcome 8.7. DOK Frequency		Level 2:	0
		Level 3:	2
		Level 4:	3
Strand 8. DOK Frequency		Level 1:	0
		Level 2:	14
		Level 3:	42
		Level 4:	13

Strand 9: Travel and Tourism Operations: Learners conduct geopolitical, environmental and ethnographic analyses; and apply principles of sales and marketing, event design and customer service to create unique experiences that attract tourists and visitors.

Outcome 9.1. Travel and Tourism Fundamentals: Examine the scope of organizations that make up the travel and tourism industry, their roles, current trends, challenges and strategies.	2
9.1.1 Compare the similarities and differences of the major types of destinations (e.g., ethnic, cultural, natural, recreational, seasonal).	2
9.1.2. Describe types of business and leisure users of travel and tourism services and their motivations to travel.	2
9.1.3. Describe types of tours.	2
9.1.4. Identify destination attractions, types and options.	2
9.1.5. Identify types and roles of businesses and organizations that market and promote tourism.	2
9.1.6. Describe the scope of the convention and meetings industry and the characteristics that determine meeting or event appeal.	2
9.1.7. Identify tourism challenges, opportunities and trends.	2
9.1.8. Describe the importance of contracted services to travel and tourism organizations.	2

		Level 1:	0
Outcome 9.1. DOK Frequency		Level 2:	8
		Level 3:	0
		Level 4:	0

Outcome 9.2. Tourism Geography: Analyze sociological, cultural, historical and environmental factors that make a destination unique and appealing to visitors.	3
9.2.1. Identify local attractions and events of interest to travelers.	3
9.2.2. Identify key travel destinations in major geographical regions and countries.	3

9.2.3. Describe ways that a region's climate, natural features, and attractions affect tourism.	3
9.2.4. Assess the impact of natural features and attractions on economic development and growth.	3
9.2.5. Explain the social and cultural elements of a region or country and their impact on travel and tourism.	3
9.2.6. Evaluate the impact of geographical, psychological and sociological factors on travel, customs and health issues.	3
9.2.7. Analyze the environmental impact of tourism and strategies designed to prolong the attractiveness of the tourism location.	3
9.2.8. Explain tourism's impact on an area's transportation systems, safety and security.	3

	Level 1:	0
	Level 2:	0
Outcome 9.2. DOK Frequency	Level 3:	8
	Level 4:	0

Outcome 9.3. Travel Services and Operations: Plan and coordinate travel activities, leveraging knowledge of state, national and global travel destinations to achieve tourist objectives.	3
9.3.1. Select transportation modes and booking considerations.	3
9.3.2. Select accommodation options by their classification, rating and booking considerations.	3
9.3.3. Research, select and recommend attractions, events and entertainment relevant to the individual or group profile.	3
9.3.4. Develop itineraries to fit individual and group traveler profiles and expectations.	3
9.3.5. Utilize Global Distribution System (GDS) to fulfill travel requests.	3
9.3.6. Manage pre- and post-booking travel processes.	3
9.3.7. Identify travel and tour plans to coordinate with vendors.	3
9.3.8. Establish payment plans and fee structures for travel and tour packages.	3
9.3.9. Prepare and organize tours.	3
9.3.10. Develop travel and tour packages to offer targeted audiences.	4

	Level 1:	0
	Level 2:	0
Outcome 9.3. DOK Frequency	Level 3:	9
	Level 4:	1

Outcome 9.4. Travel and Tourism Promotion: Develop and implement processes, policies and techniques to guide promotional activities for defined goal achievement.	4

9.4.1. Determine promotional messages for targeted travel and tourism audience.	4
9.4.2. Select promotional channels to best communicate with targeted travel and tourism audience.	4
9.4.3. Select and use social media to promote travel and tourism.	3
9.4.4. Develop travel literature to support travel packages and sales strategies.	4
9.4.5. Determine and update website's content.	4
9.4.6. Determine affinity marketing strategies.	4
9.4.7. Select sales-promotion materials for use in promoting travel and tourism.	3
9.4.8. Create and use marketing calendars.	3
9.4.9. Arrange promotional displays for tours and travel services.	3
9.4.10. Develop and foster media relationships and community partnerships.	4
9.4.11. Plan and conduct familiarization (FAM) tour.	3
Outcome 9.4. DOK Frequency **Level 1:**	0
Level 2:	0
Level 3:	5
Level 4:	6
Outcome 9.5. Event Planning: Analyze risks, identify needs, and develop strategies to achieve meeting, exposition, event or convention (MEEC) goals.	4
9.5.1. Define event concept using situation and feasibility analysis.	4
9.5.2. Conduct pre-event research on event history, brand image and risks.	3
9.5.3. Develop a sustainability plan to ensure event continuity.	4
9.5.4. Develop scope of work and assign responsibilities.	3
9.5.5. Select strategies to prevent or manage event risks and costs.	4
9.5.6. Determine stakeholder groups or individuals who can affect or are affected by the achievement of event objectives.	3
9.5.7. Set attendance and participation goals and deadlines for sponsorships, vendors and participants.	3
9.5.8. Determine budget and timeline specifications.	4
9.5.9. Develop and distribute request for proposals to select venue, vendors, performers and auxiliary services.	3
9.5.10. Develop the major components of an event plan that consider critical elements of a successful event.	3
9.5.11. Develop contingency plan.	4
9.5.12. Determine required contracts, licenses, permits and intellectual-property use restrictions for event.	3
9.5.13. Create an event breakdown and timeline.	4

9.5.14. Create sponsorship package, and solicit event sponsors.		4
Outcome 9.5. DOK Frequency	Level 1:	0
	Level 2:	0
	Level 3:	7
	Level 4:	7
Outcome 9.6. Event Design: Devise and organize a meeting, exposition, event or convention (MEEC) that achieves defined goals.		4
9.6.1. Structure the event, and create production schedules and call sheets, media plan and event specification guides.		4
9.6.2. Define the event registration and evaluation processes.		4
9.6.3. Analyze proposals; and select site, performers and auxiliary service providers.		4
9.6.4. Determine event-hosted merchandise and product sale requirements.		4
9.6.5. Develop facilities plan and functional site specifications.		4
9.6.6. Design and document site layouts and logistical plans.		4
9.6.7. Determine and coordinate the design of event-related activities and materials.		4
9.6.8. Develop on-site communication plan, and identify signage and A/V needs.		4
9.6.9. Develop participant packages that include negotiated hotel room block rates and negotiated tour packages to attractions and amenities.		4
9.6.10. Determine event decor and amenities.		4
9.6.11. Develop guest transportation plans.		4
9.6.12. Identify required guest services, and develop cost-effective options.		4
9.6.13. Develop alternative staffing models.		4
Outcome 9.6. DOK Frequency	Level 1:	0
	Level 2:	0
	Level 3:	0
	Level 4:	13
Outcome 9.7. Event Set-up, Execution and Evaluation: Set up and execute a meeting, event, exposition or convention (MEEC) to meet client expectations; and evaluate event success.		3
9.7.1. Use facilities plan and functional site specifications.		3
9.7.2. Implement guest transportation plans.		3
9.7.3. Secure required guest services.		3
9.7.4. Implement alternative staffing models.		3
9.7.5. Determine conference room and banquet room needs and setup requirements, and complete specification sheets.		3
9.7.6. Secure required resources using in-house or outsourced services.		3

9.7.7. Set up and tear down rooms according to requirements, and store materials and equipment.		3
9.7.8. Manage event logistics, operations and service providers.		3
9.7.9. Conduct post-event assessment.		3
9.7.10. Recommend improvements for future events.		3
	Level 1:	0
	Level 2:	0
Outcome 9.7. DOK Frequency	**Level 3:**	10
	Level 4:	0
	Level 1:	0
	Level 2:	9
Strand 9. DOK Frequency	**Level 3:**	42
	Level 4:	30
	Level 1:	0
	Level 2:	80
Career Field Hospitality and Tourism. DOK Frequency	**Level 3:**	251
	Level 4:	95