

Subject	Chapter 130. Career and Technical Education, Subchapter I. Hospitality and Tourism
Course Title	§130.252. Principles of Hospitality and Tourism (One Credit), Adopted 2015.
<p>(a) General Requirements. This course is recommended for students in Grades 9-12. Students shall be awarded one credit for successful completion of this course.</p>	
<p>(b) Introduction.</p>	
<p>(1) Career and technical education instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.</p> <p>(2) The Hospitality and Tourism Career Cluster focuses on the management, marketing, and operations of restaurants and other food/beverage services, lodging, attractions, recreation events, and travel-related services.</p> <p>(3) Principles of Hospitality and Tourism introduces students to an industry that encompasses lodging, travel and tourism, recreation, amusements, attractions, and food/beverage operations. Students learn knowledge and skills focusing on communication, time management, and customer service that meet industry standards. Students will explore the history of the hospitality and tourism industry and examine characteristics needed for success in that industry.</p> <p>(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.</p> <p>(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.</p>	

(c) Knowledge and Skills.		
Knowledge and Skill Statement	Student Expectation	Breakout
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(A) write effectively using standard English and correct grammar	(i) write effectively using standard English
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(A) write effectively using standard English and correct grammar	(ii) write effectively using correct grammar
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(B) use a variety of credible resources	(i) use a variety of credible resources
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(C) recognize appropriate professional documents used in the hospitality and tourism industry	(i) recognize appropriate professional documents used in the hospitality and tourism industry
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(D) calculate accurate measurements, numerical concepts such as percentages, and estimations	(i) calculate accurate measurements
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(D) calculate accurate measurements, numerical concepts such as percentages, and estimations	(ii) calculate numerical concepts

Knowledge and Skill Statement	Student Expectation	Breakout
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(D) calculate accurate measurements, numerical concepts such as percentages, and estimations	(iii) calculate estimations
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(E) understand how scientific principles are used in the hospitality and tourism industry	(i) understand how scientific principles are used in the hospitality and tourism industry
(2) The student uses verbal and nonverbal communication to provide a positive experience for guests and employees. The student is expected to:	(A) develop and execute formal and informal presentations	(i) develop formal presentations
(2) The student uses verbal and nonverbal communication to provide a positive experience for guests and employees. The student is expected to:	(A) develop and execute formal and informal presentations	(ii) develop informal presentations
(2) The student uses verbal and nonverbal communication to provide a positive experience for guests and employees. The student is expected to:	(A) develop and execute formal and informal presentations	(iii) execute formal presentations
(2) The student uses verbal and nonverbal communication to provide a positive experience for guests and employees. The student is expected to:	(A) develop and execute formal and informal presentations	(iv) execute informal presentations
(2) The student uses verbal and nonverbal communication to provide a positive experience for guests and employees. The student is expected to:	(B) practice customer service skills	(i) practice customer service skills

Knowledge and Skill Statement	Student Expectation	Breakout
(3) The student understands that personal success depends on personal effort. The student is expected to:	(A) demonstrate self-responsibility and self-management	(i) demonstrate self-responsibility
(3) The student understands that personal success depends on personal effort. The student is expected to:	(A) demonstrate self-responsibility and self-management	(ii) demonstrate self-management
(3) The student understands that personal success depends on personal effort. The student is expected to:	(B) explain the characteristics of personal values, ethics, and fundamental principles	(i) explain the characteristics of personal values
(3) The student understands that personal success depends on personal effort. The student is expected to:	(B) explain the characteristics of personal values, ethics, and fundamental principles	(ii) explain the characteristics of ethics
(3) The student understands that personal success depends on personal effort. The student is expected to:	(B) explain the characteristics of personal values, ethics, and fundamental principles	(iii) explain the characteristics of fundamental principles
(3) The student understands that personal success depends on personal effort. The student is expected to:	(C) display positive attitudes and good work habits	(i) display positive attitudes
(3) The student understands that personal success depends on personal effort. The student is expected to:	(C) display positive attitudes and good work habits	(ii) display good work habits

Knowledge and Skill Statement	Student Expectation	Breakout
(3) The student understands that personal success depends on personal effort. The student is expected to:	(D) develop strategies for achieving accuracy	(i) develop strategies for achieving accuracy
(3) The student understands that personal success depends on personal effort. The student is expected to:	(E) develop organizational skills	(i) develop organizational skills
(4) The student develops an understanding of time management, decision making, and prioritization. The student is expected to:	(A) identify and apply effective practices for managing time	(i) identify effective practices for managing time
(4) The student develops an understanding of time management, decision making, and prioritization. The student is expected to:	(A) identify and apply effective practices for managing time	(ii) apply effective practices for managing time
(4) The student develops an understanding of time management, decision making, and prioritization. The student is expected to:	(B) analyze the benefits of balancing career and home life	(i) analyze the benefits of balancing career and home life
(4) The student develops an understanding of time management, decision making, and prioritization. The student is expected to:	(C) learn and apply steps in the decision-making process	(i) learn steps in the decision-making process
(4) The student develops an understanding of time management, decision making, and prioritization. The student is expected to:	(C) learn and apply steps in the decision-making process	(ii) apply steps in the decision-making process

Knowledge and Skill Statement	Student Expectation	Breakout
(4) The student develops an understanding of time management, decision making, and prioritization. The student is expected to:	(D) work independently	(i) work independently
(5) The student researches, analyzes, and explores lifestyle and career goals. The student is expected to:	(A) prioritize career goals and ways to achieve those goals in the hospitality and tourism industry	(i) prioritize career goals in the hospitality and tourism industry
(5) The student researches, analyzes, and explores lifestyle and career goals. The student is expected to:	(A) prioritize career goals and ways to achieve those goals in the hospitality and tourism industry	(ii) prioritize ways to achieve [career] goals in the hospitality and tourism industry
(5) The student researches, analyzes, and explores lifestyle and career goals. The student is expected to:	(B) compare and contrast education or training and certifications needed for careers in the hospitality and tourism industry	(i) compare and contrast education or training needed for careers in the hospitality and tourism industry
(5) The student researches, analyzes, and explores lifestyle and career goals. The student is expected to:	(B) compare and contrast education or training and certifications needed for careers in the hospitality and tourism industry	(ii) compare and contrast certifications needed for careers in the hospitality and tourism industry
(5) The student researches, analyzes, and explores lifestyle and career goals. The student is expected to:	(C) examine related community service opportunities	(i) examine related community service opportunities
(5) The student researches, analyzes, and explores lifestyle and career goals. The student is expected to:	(D) describe the components and importance of a career portfolio	(i) describe the components of a career portfolio
(5) The student researches, analyzes, and explores lifestyle and career goals. The student is expected to:	(D) describe the components and importance of a career portfolio	(ii) describe the importance of a career portfolio
(6) The student uses technology to gather information. The student is expected to:	(A) understand the need for computer applications to perform workplace tasks	(i) understand the need for computer applications to perform workplace tasks

Knowledge and Skill Statement	Student Expectation	Breakout
(6) The student uses technology to gather information. The student is expected to:	(B) recognize that types of computerized systems are used to manage operations and guest services in the hospitality and tourism industry	(i) recognize that types of computerized systems are used to manage operations in the hospitality and tourism industry
(6) The student uses technology to gather information. The student is expected to:	(B) recognize that types of computerized systems are used to manage operations and guest services in the hospitality and tourism industry	(ii) recognize that types of computerized systems are used to manage guest services in the hospitality and tourism industry
(6) The student uses technology to gather information. The student is expected to:	(C) discuss why computerized systems are used in operations and guest services in the hospitality and tourism industry	(i) discuss why computerized systems are used in operations in the hospitality and tourism industry
(6) The student uses technology to gather information. The student is expected to:	(C) discuss why computerized systems are used in operations and guest services in the hospitality and tourism industry	(ii) discuss why computerized systems are used in guest services in the hospitality and tourism industry
(7) The student demonstrates leadership, citizenship, and teamwork skills required for success. The student is expected to:	(A) develop team-building skills	(i) develop team-building skills
(7) The student demonstrates leadership, citizenship, and teamwork skills required for success. The student is expected to:	(B) develop decision-making and problem-solving skills	(i) develop decision-making skills
(7) The student demonstrates leadership, citizenship, and teamwork skills required for success. The student is expected to:	(B) develop decision-making and problem-solving skills	(ii) develop problem-solving skills

Knowledge and Skill Statement	Student Expectation	Breakout
(7) The student demonstrates leadership, citizenship, and teamwork skills required for success. The student is expected to:	(C) conduct and participate in effective meetings	(i) conduct effective meetings
(7) The student demonstrates leadership, citizenship, and teamwork skills required for success. The student is expected to:	(C) conduct and participate in effective meetings	(ii) participate in effective meetings
(7) The student demonstrates leadership, citizenship, and teamwork skills required for success. The student is expected to:	(D) identify leadership and teamwork qualities that create a pleasant working atmosphere	(i) identify leadership qualities that create a pleasant working atmosphere
(7) The student demonstrates leadership, citizenship, and teamwork skills required for success. The student is expected to:	(D) identify leadership and teamwork qualities that create a pleasant working atmosphere	(ii) identify teamwork qualities that create a pleasant working atmosphere
(7) The student demonstrates leadership, citizenship, and teamwork skills required for success. The student is expected to:	(E) identify community service activities related to the hospitality and tourism industry	(i) identify community service activities related to the hospitality and tourism industry
(8) The student explains how resources (employees, guests, and property) are managed to minimize losses or liabilities in the hospitality and tourism industry. The student is expected to:	(A) identify and explain job safety and security practices	(i) identify job safety practices

Knowledge and Skill Statement	Student Expectation	Breakout
(8) The student explains how resources (employees, guests, and property) are managed to minimize losses or liabilities in the hospitality and tourism industry. The student is expected to:	(A) identify and explain job safety and security practices	(ii) identify security practices
(8) The student explains how resources (employees, guests, and property) are managed to minimize losses or liabilities in the hospitality and tourism industry. The student is expected to:	(A) identify and explain job safety and security practices	(iii) explain job safety practices
(8) The student explains how resources (employees, guests, and property) are managed to minimize losses or liabilities in the hospitality and tourism industry. The student is expected to:	(A) identify and explain job safety and security practices	(iv) explain job security practices
(8) The student explains how resources (employees, guests, and property) are managed to minimize losses or liabilities in the hospitality and tourism industry. The student is expected to:	(B) recognize and implement the basics of sanitation	(i) recognize the basics of sanitation
(8) The student explains how resources (employees, guests, and property) are managed to minimize losses or liabilities in the hospitality and tourism industry. The student is expected to:	(B) recognize and implement the basics of sanitation	(ii) implement the basics of sanitation
(8) The student explains how resources (employees, guests, and property) are managed to minimize losses or liabilities in the hospitality and tourism industry. The student is expected to:	(C) understand and demonstrate procedures for cleaning, sanitizing, and storing equipment and tools	(i) understand procedures for cleaning equipment

Knowledge and Skill Statement	Student Expectation	Breakout
(8) The student explains how resources (employees, guests, and property) are managed to minimize losses or liabilities in the hospitality and tourism industry. The student is expected to:	(C) understand and demonstrate procedures for cleaning, sanitizing, and storing equipment and tools	(ii) understand procedures for sanitizing equipment
(8) The student explains how resources (employees, guests, and property) are managed to minimize losses or liabilities in the hospitality and tourism industry. The student is expected to:	(C) understand and demonstrate procedures for cleaning, sanitizing, and storing equipment and tools	(iii) understand procedures for storing equipment
(8) The student explains how resources (employees, guests, and property) are managed to minimize losses or liabilities in the hospitality and tourism industry. The student is expected to:	(C) understand and demonstrate procedures for cleaning, sanitizing, and storing equipment and tools	(iv) understand procedures for cleaning tools
(8) The student explains how resources (employees, guests, and property) are managed to minimize losses or liabilities in the hospitality and tourism industry. The student is expected to:	(C) understand and demonstrate procedures for cleaning, sanitizing, and storing equipment and tools	(v) understand procedures for sanitizing tools
(8) The student explains how resources (employees, guests, and property) are managed to minimize losses or liabilities in the hospitality and tourism industry. The student is expected to:	(C) understand and demonstrate procedures for cleaning, sanitizing, and storing equipment and tools	(vi) understand procedures for storing tools
(8) The student explains how resources (employees, guests, and property) are managed to minimize losses or liabilities in the hospitality and tourism industry. The student is expected to:	(C) understand and demonstrate procedures for cleaning, sanitizing, and storing equipment and tools	(vii) demonstrate procedures for cleaning equipment

Knowledge and Skill Statement	Student Expectation	Breakout
(8) The student explains how resources (employees, guests, and property) are managed to minimize losses or liabilities in the hospitality and tourism industry. The student is expected to:	(C) understand and demonstrate procedures for cleaning, sanitizing, and storing equipment and tools	(viii) demonstrate procedures for sanitizing equipment
(8) The student explains how resources (employees, guests, and property) are managed to minimize losses or liabilities in the hospitality and tourism industry. The student is expected to:	(C) understand and demonstrate procedures for cleaning, sanitizing, and storing equipment and tools	(ix) demonstrate procedures for storing equipment
(8) The student explains how resources (employees, guests, and property) are managed to minimize losses or liabilities in the hospitality and tourism industry. The student is expected to:	(C) understand and demonstrate procedures for cleaning, sanitizing, and storing equipment and tools	(x) demonstrate procedures for cleaning tools
(8) The student explains how resources (employees, guests, and property) are managed to minimize losses or liabilities in the hospitality and tourism industry. The student is expected to:	(C) understand and demonstrate procedures for cleaning, sanitizing, and storing equipment and tools	(xi) demonstrate procedures for sanitizing tools
(8) The student explains how resources (employees, guests, and property) are managed to minimize losses or liabilities in the hospitality and tourism industry. The student is expected to:	(C) understand and demonstrate procedures for cleaning, sanitizing, and storing equipment and tools	(xii) demonstrate procedures for storing tools
(8) The student explains how resources (employees, guests, and property) are managed to minimize losses or liabilities in the hospitality and tourism industry. The student is expected to:	(D) determine how environmental issues and trends affect the hospitality and tourism industry	(i) determine how environmental issues affect the hospitality and tourism industry

Knowledge and Skill Statement	Student Expectation	Breakout
(8) The student explains how resources (employees, guests, and property) are managed to minimize losses or liabilities in the hospitality and tourism industry. The student is expected to:	(D) determine how environmental issues and trends affect the hospitality and tourism industry	(iii) determine how trends affect the hospitality and tourism industry
(9) The student explores the history of the hospitality and tourism industry. The student is expected to:	(A) examine the varied operations required within the hospitality and tourism industry	(i) examine the varied operations required within the hospitality and tourism industry
(9) The student explores the history of the hospitality and tourism industry. The student is expected to:	(B) understand the job qualifications for various careers in the hospitality and tourism industry	(i) understand the job qualifications for various careers in the hospitality and tourism industry
(9) The student explores the history of the hospitality and tourism industry. The student is expected to:	(C) differentiate amongst lodging, travel and tourism, recreation amusements, attractions and resorts, and food and beverage service	(i) differentiate amongst lodging, travel and tourism, recreation amusements, attractions and resorts, and food and beverage service
(10) The student demonstrates research skills applicable to the hospitality and tourism industry. The student is expected to:	(A) develop technical vocabulary of the hospitality and tourism industry	(i) develop technical vocabulary of the hospitality and tourism industry
(10) The student demonstrates research skills applicable to the hospitality and tourism industry. The student is expected to:	(B) design a customized product for the hospitality and tourism industry	(i) design a customized product for the hospitality and tourism industry
(10) The student demonstrates research skills applicable to the hospitality and tourism industry. The student is expected to:	(C) identify local and regional trends and issues in the hospitality and tourism industry	(i) identify local trends in the hospitality and tourism industry

Knowledge and Skill Statement	Student Expectation	Breakout
(10) The student demonstrates research skills applicable to the hospitality and tourism industry. The student is expected to:	(C) identify local and regional trends and issues in the hospitality and tourism industry	(ii) identify local issues in the hospitality and tourism industry
(10) The student demonstrates research skills applicable to the hospitality and tourism industry. The student is expected to:	(C) identify local and regional trends and issues in the hospitality and tourism industry	(iii) identify regional trends the hospitality and tourism industry
(10) The student demonstrates research skills applicable to the hospitality and tourism industry. The student is expected to:	(C) identify local and regional trends and issues in the hospitality and tourism industry	(iv) identify regional issues in the hospitality and tourism industry
(11) The student understands the importance of customer service. The student is expected to:	(A) determine ways to provide quality customer service	(i) determine ways to provide quality customer service
(11) The student understands the importance of customer service. The student is expected to:	(B) analyze how guests are affected by employee attitude, appearance, and actions	(i) analyze how guests are affected by employee attitude
(11) The student understands the importance of customer service. The student is expected to:	(B) analyze how guests are affected by employee attitude, appearance, and actions	(ii) analyze how guests are affected by employee appearance
(11) The student understands the importance of customer service. The student is expected to:	(B) analyze how guests are affected by employee attitude, appearance, and actions	(iii) analyze how guests are affected by employee actions
(11) The student understands the importance of customer service. The student is expected to:	(C) examine different types of service across the industry	(i) examine different types of service across the industry

Subject	Chapter 130. Career and Technical Education, Subchapter I. Hospitality and Tourism
Course Title	§130.253. Introduction to Culinary Arts (One Credit), Adopted 2015.
<p>(a) General Requirements. This course is recommended for students in Grades 9 and 10. Recommended prerequisite: Principles of Hospitality and Tourism. Students shall be awarded one credit for successful completion of this course.</p>	
<p>(b) Introduction.</p>	
<p>(1) Career and technical education instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.</p> <p>(2) The Hospitality and Tourism Career Cluster focuses on the management, marketing, and operations of restaurants and other food/beverage services, lodging, attractions, recreation events, and travel-related services.</p> <p>(3) Introduction to Culinary Arts will emphasize the principles of planning, organizing, staffing, directing, and controlling the management of a variety of food service operations. The course will provide insight into the operation of a well-run restaurant. Introduction to Culinary Arts will provide insight into food production skills, various levels of industry management, and hospitality skills. This is an entry level course for students interested in pursuing a career in the food service industry. This course is offered as a classroom and laboratory-based course.</p> <p>(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.</p> <p>(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.</p>	

(c) Knowledge and Skills.		
Knowledge and Skill Statement	Student Expectation	Breakout
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(A) model effective oral and written communication	(i) model effective oral communication
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(A) model effective oral and written communication	(ii) model effective written communication
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(B) practice professional grooming and hygiene standards	(i) practice professional grooming
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(B) practice professional grooming and hygiene standards	(ii) practice professional hygiene standards
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(C) exercise punctuality and time-management skills	(i) exercise punctuality
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(C) exercise punctuality and time management skills	(ii) exercise time management skills
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(D) demonstrate self-respect and respect for others	(i) demonstrate self-respect

Knowledge and Skill Statement	Student Expectation	Breakout
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(D) demonstrate self-respect and respect for others	(ii) demonstrate respect for others
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(E) demonstrate effective teamwork and leadership	(i) demonstrate effective teamwork
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(E) demonstrate effective teamwork and leadership	(ii) demonstrate effective leadership
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(F) employ initiative, adaptability, and problem-solving techniques in practical applications	(i) employ initiative in practical applications
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(F) employ initiative, adaptability and problem-solving techniques in practical applications	(ii) employ adaptability in practical applications
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(F) employ initiative, adaptability and problem-solving techniques in practical applications	(iii) employ problem-solving techniques in practical applications
(2) The student gains academic knowledge and skills required to pursue the full range of career and postsecondary education opportunities within the restaurant food service industry. The student is expected to:	(A) organize oral and written information	(i) organize oral information

Knowledge and Skill Statement	Student Expectation	Breakout
(2) The student gains academic knowledge and skills required to pursue the full range of career and postsecondary education opportunities within the restaurant food service industry. The student is expected to:	(A) organize oral and written information	(ii) organize written information
(2) The student gains academic knowledge and skills required to pursue the full range of career and postsecondary education opportunities within the restaurant food service industry. The student is expected to:	(B) compose a variety of written documents such as menus, presentations, and advertisements	(i) compose a variety of written documents
(2) The student gains academic knowledge and skills required to pursue the full range of career and postsecondary education opportunities within the restaurant food service industry. The student is expected to:	(C) calculate numerical concepts such as weights, measurements, and percentages	(i) calculate numerical concepts
(2) The student gains academic knowledge and skills required to pursue the full range of career and postsecondary education opportunities within the restaurant food service industry. The student is expected to:	(D) identify how scientific principles are used in the food service industry	(i) identify how scientific principles are used in the food service industry
(2) The student gains academic knowledge and skills required to pursue the full range of career and postsecondary education opportunities within the restaurant food service industry. The student is expected to:	(E) use mathematics and science knowledge and skills to produce quality food products	(i) use mathematics knowledge to produce quality food products

Knowledge and Skill Statement	Student Expectation	Breakout
(2) The student gains academic knowledge and skills required to pursue the full range of career and postsecondary education opportunities within the restaurant food service industry. The student is expected to:	(E) use mathematics and science knowledge and skills to produce quality food products	(ii) use mathematics skills to produce quality food products
(2) The student gains academic knowledge and skills required to pursue the full range of career and postsecondary education opportunities within the restaurant food service industry. The student is expected to:	(E) use mathematics and science knowledge and skills to produce quality food products	(iii) use science knowledge to produce quality food products
(2) The student gains academic knowledge and skills required to pursue the full range of career and postsecondary education opportunities within the restaurant food service industry. The student is expected to:	(E) use mathematics and science knowledge and skills to produce quality food products	(iv) use science skills to produce quality food products
(3) The student uses verbal and nonverbal communication skills to create, express, and interpret information to establish a positive work environment. The student is expected to:	(A) develop and deliver presentations	(i) develop presentations
(3) The student uses verbal and nonverbal communication skills to create, express, and interpret information to establish a positive work environment. The student is expected to:	(A) develop and deliver presentations	(ii) deliver presentations

Knowledge and Skill Statement	Student Expectation	Breakout
(3) The student uses verbal and nonverbal communication skills to create, express, and interpret information to establish a positive work environment. The student is expected to:	(B) identify various marketing strategies used by the food service industry such as traditional and innovative marketing strategies	(i) identify various marketing strategies used by the food service industry
(3) The student uses verbal and nonverbal communication skills to create, express, and interpret information to establish a positive work environment. The student is expected to:	(C) demonstrate proper techniques for answering restaurant phones	(i) demonstrate proper techniques for answering restaurant phones
(3) The student uses verbal and nonverbal communication skills to create, express, and interpret information to establish a positive work environment. The student is expected to:	(D) relate interpersonal communications such as verbal and nonverbal cues to enhance communication with coworkers, employers, customers, and clients	(i) relate interpersonal communications to enhance communication with coworkers
(3) The student uses verbal and nonverbal communication skills to create, express, and interpret information to establish a positive work environment. The student is expected to:	(D) relate interpersonal communications such as verbal and nonverbal cues to enhance communication with coworkers, employers, customers, and clients	(ii) relate interpersonal communications to enhance communication with employers
(3) The student uses verbal and nonverbal communication skills to create, express, and interpret information to establish a positive work environment. The student is expected to:	(D) relate interpersonal communications such as verbal and nonverbal cues to enhance communication with coworkers, employers, customers, and clients	(iii) relate interpersonal communications to enhance communication with customers
(3) The student uses verbal and nonverbal communication skills to create, express, and interpret information to establish a positive work environment. The student is expected to:	(D) relate interpersonal communications such as verbal and nonverbal cues to enhance communication with coworkers, employers, customers, and clients	(iv) relate interpersonal communications to enhance communication with clients

Knowledge and Skill Statement	Student Expectation	Breakout
(3) The student uses verbal and nonverbal communication skills to create, express, and interpret information to establish a positive work environment. The student is expected to:	(E) demonstrate active listening skills to obtain and clarify information	(i) demonstrate active listening skills to obtain information
(3) The student uses verbal and nonverbal communication skills to create, express, and interpret information to establish a positive work environment. The student is expected to:	(E) demonstrate active listening skills to obtain and clarify information	(ii) demonstrate active listening skills to clarify information
(4) The student solves problems using critical thinking, innovation, and creativity independently and in teams. The student is expected to:	(A) generate creative ideas to solve problems by brainstorming possible solutions	(i) generate creative ideas to solve problems by brainstorming possible solutions
(4) The student solves problems using critical thinking, innovation, and creativity independently and in teams. The student is expected to:	(B) employ critical-thinking and interpersonal skills to resolve conflicts with individuals such as coworkers, customers, clients, and employers	(i) employ critical-thinking skills to resolve conflicts with individuals
(4) The student solves problems using critical thinking, innovation, and creativity independently and in teams. The student is expected to:	(B) employ critical-thinking and interpersonal skills to resolve conflicts with individuals such as coworkers, customers, clients, and employers	(ii) employ interpersonal skills to resolve conflicts with individuals
(5) The student uses information technology tools specific to restaurant management to access, manage, integrate, and interpret information. The student is expected to:	(A) use information technology tools and applications to perform workplace responsibilities	(i) use information technology tools to perform workplace responsibilities

Knowledge and Skill Statement	Student Expectation	Breakout
(5) The student uses information technology tools specific to restaurant management to access, manage, integrate, and interpret information. The student is expected to:	(A) use information technology tools and applications to perform workplace responsibilities	(ii) use information technology applications to perform workplace responsibilities
(5) The student uses information technology tools specific to restaurant management to access, manage, integrate, and interpret information. The student is expected to:	(B) demonstrate knowledge and use of point-of-sale systems	(i) demonstrate knowledge of point-of-sale systems
(5) The student uses information technology tools specific to restaurant management to access, manage, integrate, and interpret information. The student is expected to:	(B) demonstrate knowledge and use of point-of-sale systems	(ii) demonstrate use of point-of-sale systems
(5) The student uses information technology tools specific to restaurant management to access, manage, integrate, and interpret information. The student is expected to:	(C) evaluate Internet resources for information	(i) evaluate Internet resources for information
(6) The student understands roles within teams, work units, departments, organizations, and the larger environment of the food service industry. The student is expected to:	(A) explain the different types and functions of kitchen, front-of-the-house, and support roles	(i) explain the different types of kitchen roles
(6) The student understands roles within teams, work units, departments, organizations, and the larger environment of the food service industry. The student is expected to:	(A) explain the different types and functions of kitchen, front-of-the-house, and support roles	(ii) explain the different types of front-of-the-house roles

Knowledge and Skill Statement	Student Expectation	Breakout
(6) The student understands roles within teams, work units, departments, organizations, and the larger environment of the food service industry. The student is expected to:	(A) explain the different types and functions of kitchen, front-of-the-house, and support roles	(iii) explain the different types of support roles
(6) The student understands roles within teams, work units, departments, organizations, and the larger environment of the food service industry. The student is expected to:	(A) explain the different types and functions of kitchen, front-of-the-house, and support roles	(iv) explain the different functions of kitchen roles
(6) The student understands roles within teams, work units, departments, organizations, and the larger environment of the food service industry. The student is expected to:	(A) explain the different types and functions of kitchen, front-of-the-house, and support roles	(v) explain the different functions of front-of-the-house roles
(6) The student understands roles within teams, work units, departments, organizations, and the larger environment of the food service industry. The student is expected to:	(A) explain the different types and functions of kitchen, front-of-the-house, and support roles	(vi) explain the different functions of support roles
(6) The student understands roles within teams, work units, departments, organizations, and the larger environment of the food service industry. The student is expected to:	(B) investigate quality-control standards and practices	(i) investigate quality-control standards
(6) The student understands roles within teams, work units, departments, organizations, and the larger environment of the food service industry. The student is expected to:	(B) investigate quality-control standards and practices	(ii) investigate quality-control practices

Knowledge and Skill Statement	Student Expectation	Breakout
(6) The student understands roles within teams, work units, departments, organizations, and the larger environment of the food service industry. The student is expected to:	(C) differentiate between various styles of restaurant services such as table, buffet, fast food, fast casual, and quick service	(i) differentiate between various styles of restaurant services
(6) The student understands roles within teams, work units, departments, organizations, and the larger environment of the food service industry. The student is expected to:	(D) illustrate various place settings using proper placement of dining utensils	(i) illustrate various place settings using proper placement of dining utensils
(6) The student understands roles within teams, work units, departments, organizations, and the larger environment of the food service industry. The student is expected to:	(E) demonstrate the proper service techniques in food service operations	(i) demonstrate the proper service techniques in food service operations
(7) The student understands the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance. The student is expected to:	(A) assess workplace conditions with regard to safety and health	(i) assess workplace conditions with regard to safety
(7) The student understands the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance. The student is expected to:	(A) assess workplace conditions with regards to safety and health	(ii) assess workplace conditions with regard to health

Knowledge and Skill Statement	Student Expectation	Breakout
(7) The student understands the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance. The student is expected to:	(B) analyze potential effects caused by common chemicals and hazardous materials	(i) analyze potential effects caused by common chemicals
(7) The student understands the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance. The student is expected to:	(B) analyze potential effects caused by common chemicals and hazardous materials	(ii) analyze potential effects caused by hazardous materials
(7) The student understands the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance. The student is expected to:	(C) demonstrate first aid and cardiopulmonary resuscitation skills	(i) demonstrate first aid skills
(7) The student understands the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance. The student is expected to:	(C) demonstrate first aid and cardiopulmonary resuscitation skills	(ii) demonstrate cardiopulmonary resuscitation skills
(7) The student understands the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance. The student is expected to:	(D) apply safety and sanitation standards common to the workplace	(i) apply safety standards common to the workplace

Knowledge and Skill Statement	Student Expectation	Breakout
(7) The student understands the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance. The student is expected to:	(D) apply safety and sanitation standards common to the workplace	(ii) apply sanitation standards common to the workplace
(7) The student understands the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance. The student is expected to:	(E) research sources of food-borne illness and determine ways to prevent them	(i) research sources of food-borne illness
(7) The student understands the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance. The student is expected to:	(E) research sources of food-borne illness and determine ways to prevent them	(ii) determine ways to prevent [food-borne illness]
(7) The student understands the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance. The student is expected to:	(F) determine professional attire and personal hygiene for restaurant employees	(i) determine professional attire for restaurant employees
(7) The student understands the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance. The student is expected to:	(F) determine professional attire and personal hygiene for restaurant employees	(ii) determine personal hygiene for restaurant employees

Knowledge and Skill Statement	Student Expectation	Breakout
(7) The student understands the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance. The student is expected to:	(G) prepare for a state or national food sanitation certification or other appropriate certifications	(i) prepare for a state or national food sanitation certification or other appropriate certifications
(8) The student uses leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives. The student is expected to:	(A) apply team-building skills	(i) apply team-building skills
(8) The student uses leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives. The student is expected to:	(B) apply decision-making and problem-solving skills	(i) apply decision-making skills
(8) The student uses leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives. The student is expected to:	(B) apply decision-making and problem-solving skills	(ii) apply problem-solving skills
(8) The student uses leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives. The student is expected to:	(C) determine leadership and teamwork qualities to aid in creating a pleasant working atmosphere	(i) determine leadership qualities to aid in creating a pleasant working atmosphere
(8) The student uses leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives. The student is expected to:	(C) determine leadership and teamwork qualities to aid in creating a pleasant working atmosphere	(ii) determine teamwork qualities to aid in creating a pleasant working atmosphere
(8) The student uses leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives. The student is expected to:	(D) participate in community leadership and teamwork opportunities to enhance professional skills	(i) participate in community leadership opportunities to enhance professional skills

Knowledge and Skill Statement	Student Expectation	Breakout
(8) The student uses leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives. The student is expected to:	(D) participate in community leadership and teamwork opportunities to enhance professional skills	(ii) participate in teamwork opportunities to enhance professional skills
(9) The student knows and understands the importance of professional ethics and legal responsibilities within the food service industry. The student is expected to:	(A) demonstrate ethical reasoning in a variety of workplace situations in order to make decisions	(i) demonstrate ethical reasoning in a variety of workplace situations in order to make decisions
(9) The student knows and understands the importance of professional ethics and legal responsibilities within the food service industry. The student is expected to:	(B) interpret and explain written organizational policies and procedures to help employees perform their jobs	(i) interpret written organizational policies and procedures to help employees perform their jobs
(9) The student knows and understands the importance of professional ethics and legal responsibilities within the food service industry. The student is expected to:	(B) interpret and explain written organizational policies and procedures to help employees perform their jobs	(ii) explain written organizational policies and procedures to help employees perform their jobs
(9) The student knows and understands the importance of professional ethics and legal responsibilities within the food service industry. The student is expected to:	(C) develop guidelines for professional conduct	(i) develop guidelines for professional conduct
(10) The student demonstrates an understanding that personal success depends on personal effort. The student is expected to:	(A) demonstrate a proactive understanding of self-responsibility and self-management	(i) demonstrate a proactive understanding of self-responsibility
(10) The student demonstrates an understanding that personal success depends on personal effort. The student is expected to:	(A) demonstrate a proactive understanding of self-responsibility and self-management	(ii) demonstrate a proactive understanding of self-management

Knowledge and Skill Statement	Student Expectation	Breakout
(10) The student demonstrates an understanding that personal success depends on personal effort. The student is expected to:	(B) identify behaviors needed to be employable and maintain employment such as positive work ethics and positive personal qualities	(i) identify behaviors needed to be employable
(10) The student demonstrates an understanding that personal success depends on personal effort. The student is expected to:	(B) identify behaviors needed to be employable and maintain employment such as positive work ethics and positive personal qualities	(ii) identify behaviors needed to maintain employment
(10) The student demonstrates an understanding that personal success depends on personal effort. The student is expected to:	(C) identify and evaluate the effects of exercise, nutritional dietary habits, and emotional factors such as stress, fatigue, or anxiety on job performance	(i) identify the effects of exercise on job performance
(10) The student demonstrates an understanding that personal success depends on personal effort. The student is expected to:	(C) identify and evaluate the effects of exercise, nutritional dietary habits, and emotional factors such as stress, fatigue, or anxiety on job performance	(ii) identify the effects of nutritional dietary habits on job performance
(10) The student demonstrates an understanding that personal success depends on personal effort. The student is expected to:	(C) identify and evaluate the effects of exercise, nutritional dietary habits, and emotional factors such as stress, fatigue, or anxiety on job performance	(iii) identify the effects of emotional factors on job performance
(10) The student demonstrates an understanding that personal success depends on personal effort. The student is expected to:	(C) identify and evaluate the effects of exercise, nutritional dietary habits, and emotional factors such as stress, fatigue, or anxiety on job performance	(iv) evaluate the effects of exercise on job performance
(10) The student demonstrates an understanding that personal success depends on personal effort. The student is expected to:	(C) identify and evaluate the effects of exercise, nutritional dietary habits, and emotional factors such as stress, fatigue, or anxiety on job performance	(v) evaluate the effects of nutritional dietary habits on job performance

Knowledge and Skill Statement	Student Expectation	Breakout
(10) The student demonstrates an understanding that personal success depends on personal effort. The student is expected to:	(C) identify and evaluate the effects of exercise, nutritional dietary habits, and emotional factors such as stress, fatigue, or anxiety on job performance	(vi) evaluate the effects of emotional factors on job performance
(10) The student demonstrates an understanding that personal success depends on personal effort. The student is expected to:	(D) implement stress-management techniques	(i) implement stress-management techniques
(10) The student demonstrates an understanding that personal success depends on personal effort. The student is expected to:	(E) follow directions and procedures independently	(i) follow directions independently
(10) The student demonstrates an understanding that personal success depends on personal effort. The student is expected to:	(E) follow directions and procedures independently	(ii) follow procedures independently
(11) The student develops principles in time management, decision making, effective communication, and prioritization. The student is expected to:	(A) apply effective practices for managing time and energy	(i) apply effective practices managing time
(11) The student develops principles in time management, decision making, effective communication, and prioritization. The student is expected to:	(A) apply effective practices for managing time and energy	(ii) apply effective practices for managing energy
(11) The student develops principles in time management, decision making, effective communication, and prioritization. The student is expected to:	(B) analyze various steps in the career decision-making process	(i) analyze various steps in the career decision-making process

Knowledge and Skill Statement	Student Expectation	Breakout
(11) The student develops principles in time management, decision making, effective communication, and prioritization. The student is expected to:	(C) discuss the importance of balancing a career, family, and leisure activities	(i) discuss the importance of balancing a career, family, and leisure activities
(12) The student knows and understands the importance of employability skills. The student is expected to:	(A) demonstrate skills related to seeking employment in the food service industry	(i) demonstrate skills related to seeking employment in the food service industry
(12) The student knows and understands the importance of employability skills. The student is expected to:	(B) identify the required training and educational requirements that lead toward appropriate career goals	(i) identify the required training that lead[s] toward appropriate career goals
(12) The student knows and understands the importance of employability skills. The student is expected to:	(B) identify the required training and educational requirements that lead toward appropriate career goals	(ii) identify the educational requirements that lead toward appropriate career goals
(12) The student knows and understands the importance of employability skills. The student is expected to:	(C) select educational and work history highlights to include in a career portfolio	(i) select educational highlights to include in a career portfolio
(12) The student knows and understands the importance of employability skills. The student is expected to:	(C) select educational and work history highlights to include in a career portfolio	(ii) select work history highlights to include in a career portfolio
(12) The student knows and understands the importance of employability skills. The student is expected to:	(D) create and update a personal career portfolio	(i) create a personal career portfolio

Knowledge and Skill Statement	Student Expectation	Breakout
(12) The student knows and understands the importance of employability skills. The student is expected to:	(D) create and update a personal career portfolio	(ii) update a personal career portfolio
(12) The student knows and understands the importance of employability skills. The student is expected to:	(E) recognize required employment forms and their functions such as I-9, work visa, W-4, and licensures to meet employment requirements	(i) recognize required employment forms
(12) The student knows and understands the importance of employability skills. The student is expected to:	(E) recognize required employment forms and their functions such as I-9, work visa, W-4, and licensures to meet employment requirements	(ii) recognize the functions [of required employment forms] to meet employment requirements
(12) The student knows and understands the importance of employability skills. The student is expected to:	(F) research the local and regional labor workforce market to determine opportunities for advancement	(i) research the local labor workforce market to determine opportunities for advancement
(12) The student knows and understands the importance of employability skills. The student is expected to:	(F) research the local and regional labor workforce market to determine opportunities for advancement	(ii) research the regional labor workforce market to determine opportunities for advancement
(12) The student knows and understands the importance of employability skills. The student is expected to:	(G) investigate professional development training opportunities to keep current on relevant trends and information within the industry	(i) investigate professional development training opportunities to keep current on relevant trends within the industry
(12) The student knows and understands the importance of employability skills. The student is expected to:	(G) investigate professional development training opportunities to keep current on relevant trends and information within the industry	(ii) investigate professional development training opportunities to keep current on relevant information within the industry

Knowledge and Skill Statement	Student Expectation	Breakout
(12) The student knows and understands the importance of employability skills. The student is expected to:	(H) recognize entrepreneurship opportunities	(i) recognize entrepreneurship opportunities
(13) The student understands the use of technical knowledge and skills required to pursue careers in the restaurant food service industry, including knowledge of design, operation, and maintenance of technological systems. The student is expected to:	(A) define job-specific technical vocabulary	(i) define job-specific technical vocabulary
(13) The student understands the use of technical knowledge and skills required to pursue careers in the restaurant food service industry, including knowledge of design, operation, and maintenance of technological systems. The student is expected to:	(B) analyze customer comments to formulate improvements in services and products and training of staff	(i) analyze customer comments to formulate improvements in services
(13) The student understands the use of technical knowledge and skills required to pursue careers in the restaurant food service industry, including knowledge of design, operation, and maintenance of technological systems. The student is expected to:	(B) analyze customer comments to formulate improvements in services and products and training of staff	(ii) analyze customer comments to formulate improvements in products
(13) The student understands the use of technical knowledge and skills required to pursue careers in the restaurant food service industry, including knowledge of design, operation, and maintenance of technological systems. The student is expected to:	(B) analyze customer comments to formulate improvements in services and products and training of staff	(iii) analyze customer comments to formulate improvements in training of staff

Knowledge and Skill Statement	Student Expectation	Breakout
(13) The student understands the use of technical knowledge and skills required to pursue careers in the restaurant food service industry, including knowledge of design, operation, and maintenance of technological systems. The student is expected to:	(C) detail ways to achieve high rates of customer satisfaction	(i) detail ways to achieve high rates of customer satisfaction
(13) The student understands the use of technical knowledge and skills required to pursue careers in the restaurant food service industry, including knowledge of design, operation, and maintenance of technological systems. The student is expected to:	(D) use different types of payment options to facilitate customer payments for services	(i) use different types of payment options to facilitate customer payments for services
(13) The student understands the use of technical knowledge and skills required to pursue careers in the restaurant food service industry, including knowledge of design, operation, and maintenance of technological systems. The student is expected to:	(E) demonstrate technical skills used in producing quality food service	(i) demonstrate technical skills used in producing quality food service
(14) The student understands factors that affect the food service industry. The student is expected to:	(A) outline the history and growth of the food service industry	(i) outline the history of the food service industry
(14) The student understands factors that affect the food service industry. The student is expected to:	(A) outline the history and growth of the food service industry	(ii) outline the growth of the food service industry
(14) The student understands factors that affect the food service industry. The student is expected to:	(B) identify an entrepreneur who has made significant contributions to the food service industry	(i) identify an entrepreneur who has made significant contributions to the food service industry
(14) The student understands factors that affect the food service industry. The student is expected to:	(C) explain cultural globalization and its influence on food	(i) explain cultural globalization

Knowledge and Skill Statement	Student Expectation	Breakout
(14) The student understands factors that affect the food service industry. The student is expected to:	(C) explain cultural globalization and its influence on food	(ii) explain [the] influence [of cultural globalization] on food
(15) The student evaluates and determines equipment, ingredients, and procedures in a professional food setting. The student is expected to:	(A) identify the role of mise en place	(i) identify the role of mise en place
(15) The student evaluates and determines equipment, ingredients, and procedures in a professional food setting. The student is expected to:	(B) identify and use large and small equipment in the professional food service setting	(i) identify large equipment in the professional food service setting
(15) The student evaluates and determines equipment, ingredients, and procedures in a professional food setting. The student is expected to:	(B) identify and use large and small equipment in the professional food service setting	(ii) use large equipment in the professional food service setting
(13) The student evaluates and determines equipment, ingredients, and procedures in a professional food setting. The student is expected to:	(B) identify and use large and small equipment in the professional food service setting	(iii) identify small equipment in the professional food service setting
(13) The student evaluates and determines equipment, ingredients, and procedures in a professional food setting. The student is expected to:	(B) identify and use large and small equipment in the professional food service setting	(iv) use small equipment in the professional food service setting
(13) The student evaluates and determines equipment, ingredients, and procedures in a professional food setting. The student is expected to:	(C) identify the types of knives and proper usage in a commercial kitchen	(i) identify the types of knives in a commercial kitchen

Knowledge and Skill Statement	Student Expectation	Breakout
(13) The student evaluates and determines equipment, ingredients, and procedures in a professional food setting. The student is expected to:	(C) identify the types of knives and proper usage in a commercial kitchen	(ii) identify proper usage [of knives] in a commercial kitchen
(13) The student evaluates and determines equipment, ingredients, and procedures in a professional food setting. The student is expected to:	(D) demonstrate proper knife safety, handling, cleaning, and storage	(i) demonstrate proper knife safety
(13) The student evaluates and determines equipment, ingredients, and procedures in a professional food setting. The student is expected to:	(D) demonstrate proper knife safety, handling, cleaning, and storage	(ii) demonstrate proper knife handling
(13) The student evaluates and determines equipment, ingredients, and procedures in a professional food setting. The student is expected to:	(D) demonstrate proper knife safety, handling, cleaning, and storage	(iii) demonstrates proper knife cleaning
(13) The student evaluates and determines equipment, ingredients, and procedures in a professional food setting. The student is expected to:	(D) demonstrate proper knife safety, handling, cleaning, and storage	(iv) demonstrates proper knife storage
(13) The student evaluates and determines equipment, ingredients, and procedures in a professional food setting. The student is expected to:	(E) differentiate between different types of produce and identify factors such as grading, purchasing, storage, and usage	(i) differentiate between different types of produce
(13) The student evaluates and determines equipment, ingredients, and procedures in a professional food setting. The student is expected to:	(E) differentiate between different types of produce and identify factors such as grading, purchasing, storage, and usage	(ii) identify factors [of different types of produce]

Knowledge and Skill Statement	Student Expectation	Breakout
(13) The student evaluates and determines equipment, ingredients, and procedures in a professional food setting. The student is expected to:	(F) differentiate between dry goods and identify factors such as purchasing and storage	(i) differentiate between dry goods
(13) The student evaluates and determines equipment, ingredients, and procedures in a professional food setting. The student is expected to:	(F) differentiate between dry goods and identify factors such as purchasing and storage	(ii) identify factors [of dry goods]
(13) The student evaluates and determines equipment, ingredients, and procedures in a professional food setting. The student is expected to:	(G) differentiate between proteins and identify factors such as types, grades, purchasing, and storage	(i) differentiate between proteins
(13) The student evaluates and determines equipment, ingredients, and procedures in a professional food setting. The student is expected to:	(G) differentiate between proteins and identify factors such as types, grades, purchasing, and storage	(ii) identify factors [of proteins]
(13) The student evaluates and determines equipment, ingredients, and procedures in a professional food setting. The student is expected to:	(H) describe the methods of cooking, including dry heat, moist heat, and combination heat	(i) describe the methods of cooking, including dry heat
(13) The student evaluates and determines equipment, ingredients, and procedures in a professional food setting. The student is expected to:	(H) describe the methods of cooking, including dry heat, moist heat, and combination heat	(ii) describe the methods of cooking, including moist heat
(13) The student evaluates and determines equipment, ingredients, and procedures in a professional food setting. The student is expected to:	(H) describe the methods of cooking, including dry heat, moist heat, and combination heat	(iii) describe the methods of cooking, including combination heat

Knowledge and Skill Statement	Student Expectation	Breakout
(13) The student evaluates and determines equipment, ingredients, and procedures in a professional food setting. The student is expected to:	(I) differentiate between common baking methods and identify common ingredients used in baking	(i) differentiate between common baking methods
(13) The student evaluates and determines equipment, ingredients, and procedures in a professional food setting. The student is expected to:	(I) differentiate between common baking methods and identify common ingredients used in baking	(ii) identify common ingredients used in baking

Subject	Chapter 130. Career and Technical Education, Subchapter I. Hospitality and Tourism
Course Title	§130.254. Culinary Arts (Two Credits), Adopted 2015.
<p>(a) General Requirements. This course is recommended for students in Grades 10-12. Recommended prerequisites: Principles of Hospitality and Tourism and Introduction to Culinary Arts. Students shall be awarded two credits for successful completion of this course.</p>	
<p>(b) Introduction.</p>	
<p>(1) Career and technical education instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.</p> <p>(2) The Hospitality and Tourism Career Cluster focuses on the management, marketing, and operations of restaurants and other food/beverage services, lodging, attractions, recreation events, and travel-related services.</p> <p>(3) Culinary Arts begins with the fundamentals and principles of the art of cooking and the science of baking and includes management and production skills and techniques. Students can pursue a national sanitation certification or other appropriate industry certifications. This course is offered as a laboratory-based course.</p> <p>(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.</p> <p>(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.</p>	

(c) Knowledge and Skills.		
Knowledge and Skill Statement	Student Expectation	Breakout
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(A) model effective oral and written communication	(i) model effective oral communication
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(A) model effective oral and written communication	(ii) model effective written communication
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(B) practice professional grooming and hygiene standards	(i) practice professional grooming
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(B) practice professional grooming and hygiene standards	(ii) practice professional hygiene standards
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(C) exercise punctuality and time-management skills	(i) exercise punctuality
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(C) exercise punctuality and time-management skills	(ii) exercise time management skills

Knowledge and Skill Statement	Student Expectation	Breakout
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(D) demonstrate self-respect and respect for others	(i) demonstrate self-respect
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(D) demonstrate self-respect and respect for others	(ii) demonstrate respect for others
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(E) demonstrate effective teamwork and leadership	(i) demonstrate effective teamwork
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(E) demonstrate effective teamwork and leadership	(ii) demonstrate effective leadership
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(F) employ initiative, adaptability, and problem-solving techniques in practical applications	(i) employ initiative in practical applications
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(F) employ initiative, adaptability, and problem-solving techniques in practical applications	(ii) employ adaptability in practical applications
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(F) employ initiative, adaptability, and problem-solving techniques in practical applications	(iii) employ problem-solving techniques in practical applications

Knowledge and Skill Statement	Student Expectation	Breakout
(2) The student applies advanced reading, writing, mathematics, and science skills for the food service industry. The student is expected to:	(A) compose industry appropriate documents such as purchasing specifications and purchase orders	(i) compose industry appropriate documents
(2) The student applies advanced reading, writing, mathematics, and science skills for the food service industry. The student is expected to:	(B) comprehend a variety of texts such as operations and training manuals	(i) comprehend a variety of texts
(2)The student applies advanced reading, writing, mathematics, and science skills for the food service industry. The student is expected to:	(C) calculate numerical concepts such as percentages and estimations in practical situations, including weight and measures	(i) calculate numerical concepts
(2)The student applies advanced reading, writing, mathematics, and science skills for the food service industry. The student is expected to:	(D) understand scientific principles used in culinary arts	(i) understand scientific principles used in culinary arts
(2)The student applies advanced reading, writing, mathematics, and science skills for the food service industry. The student is expected to:	(E) read and comprehend standardized recipes	(i) read and comprehend standardized recipes
(2)The student applies advanced reading, writing, mathematics, and science skills for the food service industry. The student is expected to:	(F) write and convert standardized recipes	(i) write standardized recipes
(2)The student applies advanced reading, writing, mathematics, and science skills for the food service industry. The student is expected to:	(F) write and convert standardized recipes	(ii) convert standardized recipes

Knowledge and Skill Statement	Student Expectation	Breakout
(2)The student applies advanced reading, writing, mathematics, and science skills for the food service industry. The student is expected to:	(G) calculate and manage food costs	(i) calculate food costs
(2)The student applies advanced reading, writing, mathematics, and science skills for the food service industry. The student is expected to:	(G) calculate and manage food costs	(ii) manage food costs
(3)The student integrates listening, writing, and speaking skills using verbal and nonverbal communication to enhance operations, guest satisfaction, and professional development. The student is expected to:	(A) create formal or informal presentations	(i) create formal or informal presentations
(3)The student integrates listening, writing, and speaking skills using verbal and nonverbal communication to enhance operations, guest satisfaction, and professional development. The student is expected to:	(B) properly answer business phones	(i) properly answer business phones
(3)The student integrates listening, writing, and speaking skills using verbal and nonverbal communication to enhance operations, guest satisfaction, and professional development. The student is expected to:	(C) write instructions for a specific restaurant for a culinary procedure or the use of a piece of equipment	(i) write instructions for a specific restaurant for culinary procedure or the use of a piece of equipment

Knowledge and Skill Statement	Student Expectation	Breakout
(3)The student integrates listening, writing, and speaking skills using verbal and nonverbal communication to enhance operations, guest satisfaction, and professional development. The student is expected to:	(D) attend and participate in an industry-focused staff meeting	(i) attend an industry-focused staff meeting
(3)The student integrates listening, writing, and speaking skills using verbal and nonverbal communication to enhance operations, guest satisfaction, and professional development. The student is expected to:	(D) attend and participate in an industry-focused staff meeting	(ii) participate in an industry-focused staff meeting
(4) The student demonstrates an understanding that personal success depends on personal effort. The student is expected to:	(A) demonstrate a proactive understanding of self-responsibility and self-management	(i) demonstrate a proactive understanding of self-responsibility
(4) The student demonstrates an understanding that personal success depends on personal effort. The student is expected to:	(A) demonstrate a proactive understanding of self-responsibility and self-management	(ii) demonstrate a proactive understanding of self-management
(4) The student demonstrates an understanding that personal success depends on personal effort. The student is expected to:	(B) explain the characteristics of personal values and principles	(i) explain the characteristics of personal values
(4) The student demonstrates an understanding that personal success depends on personal effort. The student is expected to:	(B) explain the characteristics of personal values and principles	(ii) explain the characteristics of personal principles

Knowledge and Skill Statement	Student Expectation	Breakout
(4) The student demonstrates an understanding that personal success depends on personal effort. The student is expected to:	(C) demonstrate positive attitudes and work habits	(i) demonstrate positive attitudes
(4) The student demonstrates an understanding that personal success depends on personal effort. The student is expected to:	(C) demonstrate positive attitudes and work habits	(ii) demonstrate positive work habits
(4) The student demonstrates an understanding that personal success depends on personal effort. The student is expected to:	(D) demonstrate exemplary appearance and personal hygiene	(i) demonstrate exemplary appearance
(4) The student demonstrates an understanding that personal success depends on personal effort. The student is expected to:	(D) demonstrate exemplary appearance and personal hygiene	(ii) demonstrate exemplary personal hygiene
(4) The student demonstrates an understanding that personal success depends on personal effort. The student is expected to:	(E) identify and manage the effects of exercise, dietary habits, and emotional factors such as stress, fatigue, or anxiety on job performance	(i) identify the effects of exercise on job performance
(4) The student demonstrates an understanding that personal success depends on personal effort. The student is expected to:	(E) identify and manage the effects of exercise, dietary habits and emotional factors such as stress, fatigue, or anxiety on job performance	(ii) identify the effects of dietary habits on job performance
(4) The student demonstrates an understanding that personal success depends on personal effort. The student is expected to:	(E) identify and manage the effects of exercise, dietary habits and emotional factors such as stress, fatigue, or anxiety on job performance	(iii) identify the effects of emotional factors on job performance

Knowledge and Skill Statement	Student Expectation	Breakout
(4) The student demonstrates an understanding that personal success depends on personal effort. The student is expected to:	(E) identify and manage the effects of exercise, dietary habits and emotional factors such as stress, fatigue, or anxiety on job performance	(iv) manage the effects of exercise on job performance
(4) The student demonstrates an understanding that personal success depends on personal effort. The student is expected to:	(E) identify and manage the effects of exercise, dietary habits and emotional factors such as stress, fatigue, or anxiety on job performance	(v) manage the effects of dietary habits on job performance
(4) The student demonstrates an understanding that personal success depends on personal effort. The student is expected to:	(E) identify and manage the effects of exercise, dietary habits and emotional factors such as stress, fatigue, or anxiety on job performance	(vi) manage the effects of emotional factors on job performance
(5) The student develops principles in time management, decision making, effective communication, and prioritization. The student is expected to:	(A) apply effective practices for managing time and energy	(i) apply effective practices for managing time
(5) The student develops principles in time management, decision making, effective communication, and prioritization. The student is expected to:	(A) apply effective practices for managing time and energy	(ii) apply effective practices for managing energy
(5) The student develops principles in time management, decision making, effective communication, and prioritization. The student is expected to:	(B) analyze various steps in the decision-making process	(i) analyze various steps in the decision-making process

Knowledge and Skill Statement	Student Expectation	Breakout
(6) The student researches, analyzes, and explores lifestyle and career goals. The student examines jobs available in the food service industry and accesses career opportunities. The student is expected to:	(A) research the major job duties and qualifications for various positions in the food service industry to facilitate selection of career choices in culinary arts	(i) research the major job duties for various positions in the food service industry to facilitate selection of career choices in culinary arts
(6) The student researches, analyzes, and explores lifestyle and career goals. The student examines jobs available in the food service industry and accesses career opportunities. The student is expected to:	(A) research the major job duties and qualifications for various positions in the food service industry to facilitate selection of career choices in culinary arts	(ii) research the qualifications for various positions in the food service industry to facilitate selection of career choices in culinary arts
(6) The student researches, analyzes, and explores lifestyle and career goals. The student examines jobs available in the food service industry and accesses career opportunities. The student is expected to:	(B) update a personal career portfolio	(i) update a personal career portfolio
(6) The student researches, analyzes, and explores lifestyle and career goals. The student examines jobs available in the food service industry and accesses career opportunities. The student is expected to:	(C) demonstrate proper interview techniques	(i) demonstrate proper interview techniques
(6) The student researches, analyzes, and explores lifestyle and career goals. The student examines jobs available in the food service industry and accesses career opportunities. The student is expected to:	(D) establish personal short- and long-term goals	(i) establish personal short-term goals
(6) The student researches, analyzes, and explores lifestyle and career goals. The student examines jobs available in the food service industry and accesses career opportunities. The student is expected to:	(D) establish personal short- and long-term goals	(ii) establish personal long-term goals

Knowledge and Skill Statement	Student Expectation	Breakout
(7) The student understands factors that affect the food service industry. The student is expected to:	(A) research how historical and current trends in society affect the food service industry	(i) research how historical trends in society affect the food service industry
(7) The student understands factors that affect the food service industry. The student is expected to:	(A) research how historical and current trends in society affect the food service industry	(ii) research how current trends in society affect the food service industry
(7) The student understands factors that affect the food service industry. The student is expected to:	(B) identify global cultures and traditions related to food	(i) identify global cultures
(7) The student understands factors that affect the food service industry. The student is expected to:	(B) identify global cultures and traditions related to food	(ii) identify global traditions related to food
(7) The student understands factors that affect the food service industry. The student is expected to:	(C) research famous chefs from history	(i) research famous chefs from history
(7) The student understands factors that affect the food service industry. The student is expected to:	(D) summarize historical entrepreneurs who influenced food service in the United States	(i) summarize historical entrepreneurs who influenced food service in the United States
(8) The student evaluates and determines equipment, ingredients, and procedures used in a professional food setting. The student is expected to:	(A) identify and demonstrate the role of mise en place in the professional food service setting	(i) identify the role of mise en place in the professional food service setting
(8) The student evaluates and determines equipment, ingredients, and procedures used in a professional food setting. The student is expected to:	(A) identify and demonstrate the role of mise en place in the professional food service setting	(ii) demonstrate the role of mise en place in the professional food service setting

Knowledge and Skill Statement	Student Expectation	Breakout
(8) The student evaluates and determines equipment, ingredients, and procedures used in a professional food setting. The student is expected to:	(B) identify and use large and small equipment in a commercial kitchen	(i) identify large equipment in the commercial kitchen
(8) The student evaluates and determines equipment, ingredients, and procedures used in a professional food setting. The student is expected to:	(B) identify and use large and small equipment in a commercial kitchen	(ii) identify small equipment in the commercial kitchen
(8) The student evaluates and determines equipment, ingredients, and procedures used in a professional food setting. The student is expected to:	(B) identify and use large and small equipment in a commercial kitchen	(iii) use large equipment in the commercial kitchen
(8) The student evaluates and determines equipment, ingredients, and procedures used in a professional food setting. The student is expected to:	(B) identify and use large and small equipment in a commercial kitchen	(iv) use small equipment in the commercial kitchen
(8) The student evaluates and determines equipment, ingredients, and procedures used in a professional food setting. The student is expected to:	(C) develop and practice food production and presentation techniques	(i) develop food production techniques
(8) The student evaluates and determines equipment, ingredients, and procedures used in a professional food setting. The student is expected to:	(C) develop and practice food production and presentation techniques	(ii) develop food presentation techniques
(8) The student evaluates and determines equipment, ingredients, and procedures used in a professional food setting. The student is expected to:	(C) develop and practice food production and presentation techniques	(iii) practice food production techniques

Knowledge and Skill Statement	Student Expectation	Breakout
(8) The student evaluates and determines equipment, ingredients, and procedures used in a professional food setting. The student is expected to:	(C) develop and practice food production and presentation techniques	(iv) practice food presentation techniques
(8) The student evaluates and determines equipment, ingredients, and procedures used in a professional food setting. The student is expected to:	(D) identify and use the appropriate application of moist, dry, and combination cookery methods	(i) identify the appropriate application of moist cookery methods
(8) The student evaluates and determines equipment, ingredients, and procedures used in a professional food setting. The student is expected to:	(D) identify and use the appropriate application of moist, dry, and combination cookery methods	(ii) identify the appropriate application of dry cookery methods
(8) The student evaluates and determines equipment, ingredients, and procedures used in a professional food setting. The student is expected to:	(D) identify and use the appropriate application of moist, dry, and combination cookery methods	(iii) identify the appropriate application of combination cookery methods
(8) The student evaluates and determines equipment, ingredients, and procedures used in a professional food setting. The student is expected to:	(D) identify and use the appropriate application of moist, dry, and combination cookery methods	(iv) use the appropriate application of moist cookery methods
(8) The student evaluates and determines equipment, ingredients, and procedures used in a professional food setting. The student is expected to:	(D) identify and use the appropriate application of moist, dry, and combination cookery methods	(v) use the appropriate application of dry cookery methods
(8) The student evaluates and determines equipment, ingredients, and procedures used in a professional food setting. The student is expected to:	(D) identify and use the appropriate application of moist, dry, and combination cookery methods	(vi) use the appropriate application of combination cookery methods

Knowledge and Skill Statement	Student Expectation	Breakout
(8) The student evaluates and determines equipment, ingredients, and procedures used in a professional food setting. The student is expected to:	(E) demonstrate the preparation skills of items commonly prepared in food service operations such as breakfast cookery, salads and dressings, soups and sandwiches, stocks and sauces, appetizers, seafood, poultry, meat, pastas and grains, and fruits and vegetables	(i) demonstrate the preparation skills of items commonly prepared in food service operations
(8) The student evaluates and determines equipment, ingredients, and procedures used in a professional food setting. The student is expected to:	(F) demonstrate baking techniques such as yeast breads and rolls, quick breads, and desserts	(i) demonstrate baking techniques
(9) The student understands the various food service operations such as quick service, fast casual, casual, fine dining, institutional, and beverage service. The student is expected to:	(A) explain quality customer service	(i) explain quality customer service
(9) The student understands the various food service operations such as quick service, fast casual, casual, fine dining, institutional, and beverage service. The student is expected to:	(B) demonstrate types of table setting, dining, and service skills	(i) demonstrate types of table setting
(9) The student understands the various food service operations such as quick service, fast casual, casual, fine dining, institutional, and beverage service. The student is expected to:	(B) demonstrate types of table setting, dining, and service skills	(ii) demonstrate types of dining

Knowledge and Skill Statement	Student Expectation	Breakout
(9) The student understands the various food service operations such as quick service, fast casual, casual, fine dining, institutional, and beverage service. The student is expected to:	(B) demonstrate types of table setting, dining, and service skills	(iii) demonstrate types of service skills
(9) The student understands the various food service operations such as quick service, fast casual, casual, fine dining, institutional, and beverage service. The student is expected to:	(C) differentiate between service styles	(i) differentiate between service styles
(9) The student understands the various food service operations such as quick service, fast casual, casual, fine dining, institutional, and beverage service. The student is expected to:	(D) compare and contrast the roles of the front of the house and the back of the house in the various food service operations	(i) compare and contrast the roles of the front of the house and the back of the house in the various food service operations
(10) The student uses technology and computer applications to manage food service operations. The student is expected to:	(A) use technology tools appropriate for the industry	(i) use technology tools appropriate for the industry
(10) The student uses technology and computer applications to manage food service operations. The student is expected to:	(B) operate technology applications to perform workplace tasks	(i) operate technology applications to perform workplace tasks
(10) The student uses technology and computer applications to manage food service operations. The student is expected to:	(C) explain and use point-of-sale systems in various food service operations	(i) explain point-of-sales systems in various food service operations

Knowledge and Skill Statement	Student Expectation	Breakout
(10) The student uses technology and computer applications to manage food service operations. The student is expected to:	(C) explain and use point-of-sale systems in various food service operations	(ii) use point-of-sales systems in various food service operations
(10) The student uses technology and computer applications to manage food service operations. The student is expected to:	(D) demonstrate knowledge in computer programs used for food management	(i) demonstrate knowledge in computer programs used for food management
(10) The student uses technology and computer applications to manage food service operations. The student is expected to:	(E) evaluate information sources for culinary arts	(i) evaluate information sources for culinary arts
(10) The student uses technology and computer applications to manage food service operations. The student is expected to:	(F) interpret data such as spreadsheets, databases, and sales reports	(i) interpret data
(11) The student demonstrates leadership, citizenship, and teamwork skills required for success. The student is expected to:	(A) apply team-building skills	(i) apply team-building skills
(11) The student demonstrates leadership, citizenship, and teamwork skills required for success. The student is expected to:	(B) apply decision-making and problem-solving skills	(i) apply decision-making skills
(11) The student demonstrates leadership, citizenship, and teamwork skills required for success. The student is expected to:	(B) apply decision-making and problem-solving skills	(ii) apply problem solving skills

Knowledge and Skill Statement	Student Expectation	Breakout
(11) The student demonstrates leadership, citizenship, and teamwork skills required for success. The student is expected to:	(C) determine leadership and teamwork qualities in creating a pleasant working atmosphere	(i) determine leadership qualities in creating a pleasant working atmosphere
(11) The student demonstrates leadership, citizenship, and teamwork skills required for success. The student is expected to:	(C) determine leadership and teamwork qualities in creating a pleasant working atmosphere	(ii) determine teamwork qualities in creating a pleasant working atmosphere
(11) The student demonstrates leadership, citizenship, and teamwork skills required for success. The student is expected to:	(D) participate in community leadership and teamwork opportunities to enhance professional skills	(i) participate in community leadership opportunities to enhance professional skills
(11) The student demonstrates leadership, citizenship, and teamwork skills required for success. The student is expected to:	(D) participate in community leadership and teamwork opportunities to enhance professional skills	(ii) participate in teamwork opportunities to enhance professional skills
(12) The student explains how employees, guests, and property are protected to minimize losses or liabilities. The student is expected to:	(A) determine the basics of safety in culinary arts	(i) determine the basics of safety in culinary arts
(12) The student explains how employees, guests, and property are protected to minimize losses or liabilities. The student is expected to:	(B) assess workplace conditions and identify safety hazards	(i) assess workplace conditions
(12) The student explains how employees, guests, and property are protected to minimize losses or liabilities. The student is expected to:	(B) assess workplace conditions and identify safety hazards	(ii) identify safety hazards

Knowledge and Skill Statement	Student Expectation	Breakout
(12) The student explains how employees, guests, and property are protected to minimize losses or liabilities. The student is expected to:	(C) determine the basics of sanitation in a professional kitchen	(i) determine the basics of sanitation in a professional kitchen
(12) The student explains how employees, guests, and property are protected to minimize losses or liabilities. The student is expected to:	(D) determine proper receiving, storage, and distribution techniques	(i) determine proper receiving techniques
(12) The student explains how employees, guests, and property are protected to minimize losses or liabilities. The student is expected to:	(D) determine proper receiving, storage, and distribution techniques	(ii) determine proper storing techniques
(12) The student explains how employees, guests, and property are protected to minimize losses or liabilities. The student is expected to:	(D) determine proper receiving, storage, and distribution techniques	(iii) determine proper distribution techniques
(12) The student explains how employees, guests, and property are protected to minimize losses or liabilities. The student is expected to:	(E) demonstrate proper cleaning of equipment and maintenance in the commercial kitchen	(i) demonstrate proper cleaning of equipment in the commercial kitchen
(12) The student explains how employees, guests, and property are protected to minimize losses or liabilities. The student is expected to:	(E) demonstrate proper cleaning of equipment and maintenance in the commercial kitchen	(ii) demonstrate proper maintenance in the commercial kitchen
(12) The student explains how employees, guests, and property are protected to minimize losses or liabilities. The student is expected to:	(F) assess food hazards and determine ways to prevent food hazards	(i) assess food hazards

Knowledge and Skill Statement	Student Expectation	Breakout
(12) The student explains how employees, guests, and property are protected to minimize losses or liabilities. The student is expected to:	(F) assess food hazards and determine ways to prevent food hazards	(ii) determine ways to prevent food hazards
(12) The student explains how employees, guests, and property are protected to minimize losses or liabilities. The student is expected to:	(G) prepare for a state or national food sanitation certification or other appropriate certifications	(i) prepare for a state or national food sanitation certification or other appropriate certifications
(13) The student recognizes and models work ethics and legal responsibilities. The student is expected to:	(A) understand and comply with laws and regulations specific to the food service industry	(i) understand and comply with laws specific to the food service industry
(13) The student recognizes and models work ethics and legal responsibilities. The student is expected to:	(A) understand and comply with laws and regulations specific to the food service industry	(ii) understand and comply with regulations specific to the food service industry
(13) The student recognizes and models work ethics and legal responsibilities. The student is expected to:	(B) demonstrate a positive work ethic	(i) demonstrate a positive work ethic

Subject	Chapter 130. Career and Technical Education, Subchapter I. Hospitality and Tourism
Course Title	§130.255. Advanced Culinary Arts (Two Credits), Adopted 2015.
(a) General Requirements. This course is recommended for students in Grades 10-12. Prerequisite: Culinary Arts. Students shall be awarded two credits for successful completion of this course.	
(b) Introduction.	
<p>(1) Career and technical education instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.</p> <p>(2) The Hospitality and Tourism Career Cluster focuses on the management, marketing, and operations of restaurants and other food/beverage services, lodging, attractions, recreation events, and travel-related services.</p> <p>(3) Advanced Culinary Arts will extend content and enhance skills introduced in Culinary Arts by in-depth instruction of industry-driven standards in order to prepare students for success in higher education, certifications, and/or immediate employment.</p> <p>(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.</p> <p>(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.</p>	

(c) Knowledge and Skills.		
Knowledge and Skill Statement	Student Expectation	Breakout
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(A) model effective oral and written communication □	(i) model effective oral communication
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(A) model effective oral and written communication	(ii) model effective written communication
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(B) practice professional grooming and hygiene standards	(i) practice professional grooming
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(B) practice professional grooming and hygiene standards	(ii) practice professional hygiene standards
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(C) exercise punctuality and time-management skills	(i) exercise punctuality
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(C) exercise punctuality and time-management skills	(ii) exercise time-management skills

Knowledge and Skill Statement	Student Expectation	Breakout
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(D) demonstrate self-respect and respect for others	(i) demonstrate self-respect
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(D) demonstrate self-respect and respect for others	(ii) demonstrate respect for others
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(E) demonstrate effective team work and leadership	(i) demonstrate effective team work
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(E) demonstrate effective team work and leadership	(ii) demonstrate effective leadership
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(F) employ initiative, adaptability, and problem-solving techniques in practical applications	(i) employ initiative in practical applications
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(F) employ initiative, adaptability, and problem-solving techniques in practical applications	(ii) employ adaptability in practical applications
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(F) employ initiative, adaptability, and problem-solving techniques in practical applications	(iii) employ problem-solving techniques in practical applications

Knowledge and Skill Statement	Student Expectation	Breakout
(2) The student researches, analyzes, and designs a path to achieve career goals. The student examines jobs available in the food service industry and accesses career opportunities. The student is expected to:	(A) demonstrate major duties and qualifications for all staff and managerial positions to facilitate selection of career choices in the foodservice industry	(i) demonstrate major duties for all staff positions to facilitate selection of career choices in the food service industry
(2) The student researches, analyzes, and designs a path to achieve career goals. The student examines jobs available in the food service industry and accesses career opportunities. The student is expected to:	(A) demonstrate major duties and qualifications for all staff and managerial positions to facilitate selection of career choices in the food service industry	(ii) demonstrate major duties for all managerial positions to facilitate selection of career choices in the food service industry
(2) The student researches, analyzes, and designs a path to achieve career goals. The student examines jobs available in the food service industry and accesses career opportunities. The student is expected to:	(A) demonstrate major duties and qualifications for all staff and managerial positions to facilitate selection of career choices in the food service industry	(iii) demonstrate qualifications for all staff positions to facilitate selection of career choices in the food service industry
(2) The student researches, analyzes, and designs a path to achieve career goals. The student examines jobs available in the food service industry and accesses career opportunities. The student is expected to:	(A) demonstrate major duties and qualifications for all staff and managerial positions to facilitate selection of career choices in the food service industry	(iv) demonstrate qualifications for all managerial positions to facilitate selection of career choices in the food service industry
(2) The student researches, analyzes, and designs a path to achieve career goals. The student examines jobs available in the food service industry and accesses career opportunities. The student is expected to:	(B) model proper interview techniques	(i) model proper interview techniques

Knowledge and Skill Statement	Student Expectation	Breakout
(2) The student researches, analyzes, and designs a path to achieve career goals. The student examines jobs available in the food service industry and accesses career opportunities. The student is expected to:	(C) critique personal and short-term goals	(i) critique personal goals
(2) The student researches, analyzes, and designs a path to achieve career goals. The student examines jobs available in the food service industry and accesses career opportunities. The student is expected to:	(C) critique personal and short-term goals	(ii) critique short-term goals
(2) The student researches, analyzes, and designs a path to achieve career goals. The student examines jobs available in the food service industry and accesses career opportunities. The student is expected to:	(D) create and update a career portfolio	(i) create a career portfolio
(2) The student researches, analyzes, and designs a path to achieve career goals. The student examines jobs available in the food service industry and accesses career opportunities. The student is expected to:	(D) create and update a career portfolio	(ii) update a career portfolio
(3) The student explains how employees, guests, and property are protected to minimize losses or liabilities. The student is expected to:	(A) determine the basics of safety in culinary arts	(i) determine the basics of safety in culinary arts

Knowledge and Skill Statement	Student Expectation	Breakout
(3) The student explains how employees, guests, and property are protected to minimize losses or liabilities. The student is expected to:	(B) assess workplace conditions and identify safety hazards	(i) assess workplace conditions
(3) The student explains how employees, guests, and property are protected to minimize losses or liabilities. The student is expected to:	(B) assess workplace conditions and identify safety hazards	(ii) identify safety hazards
(3) The student explains how employees, guests, and property are protected to minimize losses or liabilities. The student is expected to:	(C) determine the basics of sanitation in a professional kitchen	(i) determine the basics of sanitation in a professional kitchen
(3) The student explains how employees, guests, and property are protected to minimize losses or liabilities. The student is expected to:	(D) determine proper receiving, storage, and distribution techniques	(i) determine proper receiving techniques
(3) The student explains how employees, guests, and property are protected to minimize losses or liabilities. The student is expected to:	(D) determine proper receiving, storage, and distribution techniques	(ii) determine proper storage techniques
(3) The student explains how employees, guests, and property are protected to minimize losses or liabilities. The student is expected to:	(D) determine proper receiving, storage, and distribution techniques	(iii) determine proper distribution techniques
(3) The student explains how employees, guests, and property are protected to minimize losses or liabilities. The student is expected to:	(E) explain and demonstrate proper cleaning of equipment and maintenance of the commercial kitchen	(i) explain proper cleaning of equipment

Knowledge and Skill Statement	Student Expectation	Breakout
(3) The student explains how employees, guests, and property are protected to minimize losses or liabilities. The student is expected to:	(E) explain and demonstrate proper cleaning of equipment and maintenance of the commercial kitchen	(ii) demonstrate proper cleaning of equipment
(3) The student explains how employees, guests, and property are protected to minimize losses or liabilities. The student is expected to:	(E) explain and demonstrate proper cleaning of equipment and maintenance of the commercial kitchen	(iii) explain proper maintenance of the commercial kitchen
(3) The student explains how employees, guests, and property are protected to minimize losses or liabilities. The student is expected to:	(E) explain and demonstrate proper cleaning of equipment and maintenance of the commercial kitchen	(iv) demonstrate proper maintenance of the commercial kitchen
(3) The student explains how employees, guests, and property are protected to minimize losses or liabilities. The student is expected to:	(F) assess food hazards and determine ways to prevent food hazards	(i) assess food hazards
(3) The student explains how employees, guests, and property are protected to minimize losses or liabilities. The student is expected to:	(F) assess food hazards and determine ways to prevent food hazards	(ii) determine ways to prevent food hazards
(3) The student explains how employees, guests, and property are protected to minimize losses or liabilities. The student is expected to:	(G) prepare for a state or national food sanitation certification or other appropriate certifications	(i) prepare for a state or national food sanitation certification or other appropriate certifications
(4) The student evaluates global cuisines, including the culture, history, and indigenous ingredients to create international recipes. The student is expected to:	(A) replicate advanced moist and dry cooking techniques from global cuisines such as American regional, Latin American, European, Mediterranean, Middle Eastern, and Asian	(i) replicate advanced moist cooking techniques from global cuisines

Knowledge and Skill Statement	Student Expectation	Breakout
(4) The student evaluates global cuisines, including the culture, history, and indigenous ingredients to create international recipes. The student is expected to:	(A) replicate advanced moist and dry cooking techniques from global cuisines such as American regional, Latin American, European, Mediterranean, Middle Eastern, and Asian	(ii) replicate advanced dry cooking techniques from global cuisines
(4) The student evaluates global cuisines, including the culture, history, and indigenous ingredients to create international recipes. The student is expected to:	(B) synthesize indigenous ingredients from global cuisine to create innovative dishes	(i) synthesize indigenous ingredients from global cuisine to create innovative dishes
(4) The student evaluates global cuisines, including the culture, history, and indigenous ingredients to create international recipes. The student is expected to:	(C) justify the connection of flavor, texture, visual appeal, taste, and customer satisfaction on product development	(i) justify the connection of flavor, texture, visual appeal, taste, and customer satisfaction on product development
(5) The student demonstrates an understanding of sustainability in the restaurant industry and its local and global effect. The student is expected to:	(A) evaluate practices for water and energy conservation across the food service industry	(i) evaluate practices for water conservation across the food service industry
(5) The student demonstrates an understanding of sustainability in the restaurant industry and its local and global effect. The student is expected to:	(A) evaluate practices for water and energy conservation across the food service industry	(ii) evaluate practices for energy conservation across the food service industry
(5) The student demonstrates an understanding of sustainability in the restaurant industry and its local and global effect. The student is expected to:	(B) identify waste management options to promote sustainability	(i) identify waste management options to promote sustainability

Knowledge and Skill Statement	Student Expectation	Breakout
(5) The student demonstrates an understanding of sustainability in the restaurant industry and its local and global effect. The student is expected to:	(C) evaluate current sustainable food practices	(i) evaluate current sustainable food practices
(6) The student demonstrates comprehensive protein product knowledge as it relates to flavor, texture, visual appeal, taste, and customer satisfaction and establishes quality standards. The student is expected to:	(A) assess grading and classifications	(i) assess grading
(6) The student demonstrates comprehensive protein product knowledge as it relates to flavor, texture, visual appeal, taste, and customer satisfaction and establishes quality standards. The student is expected to:	(A) assess grading and classifications	(ii) assess classifications
(6) The student demonstrates comprehensive protein product knowledge as it relates to flavor, texture, visual appeal, taste, and customer satisfaction and establishes quality standards. The student is expected to:	(B) identify primal, sub-primal, and retail cuts	(i) identify primal cuts
(6) The student demonstrates comprehensive protein product knowledge as it relates to flavor, texture, visual appeal, taste, and customer satisfaction and establishes quality standards. The student is expected to:	(B) identify primal, sub-primal, and retail cuts	(ii) identify sub-primal cuts

Knowledge and Skill Statement	Student Expectation	Breakout
(6) The student demonstrates comprehensive protein product knowledge as it relates to flavor, texture, visual appeal, taste, and customer satisfaction and establishes quality standards. The student is expected to:	(B) identify primal, sub-primal, and retail cuts	(iii) identify retail cuts
(6) The student demonstrates comprehensive protein product knowledge as it relates to flavor, texture, visual appeal, taste, and customer satisfaction and establishes quality standards. The student is expected to:	(C) demonstrate fabrication techniques on proteins	(i) demonstrate fabrication techniques on proteins
(6) The student demonstrates comprehensive protein product knowledge as it relates to flavor, texture, visual appeal, taste, and customer satisfaction and establishes quality standards. The student is expected to:	(D) evaluate purchasing practices according to various food service operations	(i) evaluate purchasing practices according to various food service operations
(6) The student demonstrates comprehensive protein product knowledge as it relates to flavor, texture, visual appeal, taste, and customer satisfaction and establishes quality standards. The student is expected to:	(E) model appropriate cooking methods to proteins	(i) model appropriate cooking methods to proteins
(6) The student demonstrates comprehensive protein product knowledge as it relates to flavor, texture, visual appeal, taste, and customer satisfaction and establishes quality standards. The student is expected to:	(F) evaluate appropriate cooking methods in regard to various protein selections	(i) evaluate appropriate cooking methods in regard to various protein selections

Knowledge and Skill Statement	Student Expectation	Breakout
(7) The student demonstrates comprehensive fish and shellfish product knowledge as it relates to flavor, texture, visual appeal, taste, and customer satisfaction and establishes quality standards. The student is expected to:	(A) categorize classifications of fish and shellfish	(i) categorize classifications of fish
(7) The student demonstrates comprehensive fish and shellfish product knowledge as it relates to flavor, texture, visual appeal, taste, and customer satisfaction and establishes quality standards. The student is expected to:	(A) categorize classifications of fish and shellfish	(ii) categorize classifications of shellfish
(7) The student demonstrates comprehensive fish and shellfish product knowledge as it relates to flavor, texture, visual appeal, taste, and customer satisfaction and establishes quality standards. The student is expected to:	(B) evaluate factors that influence seafood purchasing such as freshness, flavor, sustainability, and market conditions	(i) evaluate factors that influence seafood purchasing
(7) The student demonstrates comprehensive fish and shellfish product knowledge as it relates to flavor, texture, visual appeal, taste, and customer satisfaction and establishes quality standards. The student is expected to:	(C) demonstrate the ability to clean and fabricate round, flat, fin fish, and shellfish	(i) demonstrate the ability to clean round fish
(7) The student demonstrates comprehensive fish and shellfish product knowledge as it relates to flavor, texture, visual appeal, taste, and customer satisfaction and establishes quality standards. The student is expected to:	(C) demonstrate the ability to clean and fabricate round, flat, fin fish, and shellfish	(ii) demonstrate the ability to clean flat fish

Knowledge and Skill Statement	Student Expectation	Breakout
(7) The student demonstrates comprehensive fish and shellfish product knowledge as it relates to flavor, texture, visual appeal, taste, and customer satisfaction and establishes quality standards. The student is expected to:	(C) demonstrate the ability to clean and fabricate round, flat, fin fish, and shellfish	(iii) demonstrate the ability to clean fin fish
(7) The student demonstrates comprehensive fish and shellfish product knowledge as it relates to flavor, texture, visual appeal, taste, and customer satisfaction and establishes quality standards. The student is expected to:	(C) demonstrate the ability to clean and fabricate round, flat, fin fish, and shellfish	(iv) demonstrate the ability to clean shellfish
(7) The student demonstrates comprehensive fish and shellfish product knowledge as it relates to flavor, texture, visual appeal, taste, and customer satisfaction and establishes quality standards. The student is expected to:	(C) demonstrate the ability to clean and fabricate round, flat, fin fish, and shellfish	(v) demonstrate the ability to fabricate round fish
(7) The student demonstrates comprehensive fish and shellfish product knowledge as it relates to flavor, texture, visual appeal, taste, and customer satisfaction and establishes quality standards. The student is expected to:	(C) demonstrate the ability to clean and fabricate round, flat, fin fish, and shellfish	(vi) demonstrate the ability to fabricate flat fish
(7) The student demonstrates comprehensive fish and shellfish product knowledge as it relates to flavor, texture, visual appeal, taste, and customer satisfaction and establishes quality standards. The student is expected to:	(C) demonstrate the ability to clean and fabricate round, flat, fin fish, and shellfish	(vii) demonstrate the ability to fabricate fin fish

Knowledge and Skill Statement	Student Expectation	Breakout
(7) The student demonstrates comprehensive fish and shellfish product knowledge as it relates to flavor, texture, visual appeal, taste, and customer satisfaction and establishes quality standards. The student is expected to:	(C) demonstrate the ability to clean and fabricate round, flat, fin fish, and shellfish	(viii) demonstrate the ability to fabricate shellfish
(7) The student demonstrates comprehensive fish and shellfish product knowledge as it relates to flavor, texture, visual appeal, taste, and customer satisfaction and establishes quality standards. The student is expected to:	(D) model appropriate cooking methods for fish and shellfish	(i) model appropriate cooking methods for fish
(7) The student demonstrates comprehensive fish and shellfish product knowledge as it relates to flavor, texture, visual appeal, taste, and customer satisfaction and establishes quality standards. The student is expected to:	(D) model appropriate cooking methods for fish and shellfish	(ii) model appropriate cooking methods for shellfish
(7) The student demonstrates comprehensive fish and shellfish product knowledge as it relates to flavor, texture, visual appeal, taste, and customer satisfaction and establishes quality standards. The student is expected to:	(E) evaluate the effects of cooking methods on product presentation	(i) evaluate the effects of cooking methods on product presentation
(8) The student demonstrates comprehensive knowledge of fruits, vegetables, grains, herbs, spices, and other dry goods as related to presentation, flavor, texture, visual appeal, taste, and customer satisfaction and establishes quality standards. The student is expected to:	(A) compare types of commonly available produce	(i) compare types of commonly available produce

Knowledge and Skill Statement	Student Expectation	Breakout
<p>(8) The student demonstrates comprehensive knowledge of fruits, vegetables, grains, herbs, spices, and other dry goods as related to presentation, flavor, texture, visual appeal, taste, and customer satisfaction and establishes quality standards. The student is expected to:</p>	<p>(B) identify factors contributing to cost and quality such as seasonality, market volatility, and transportation</p>	<p>(i) identify factors contributing to cost</p>
<p>(8) The student demonstrates comprehensive knowledge of fruits, vegetables, grains, herbs, spices, and other dry goods as related to presentation, flavor, texture, visual appeal, taste, and customer satisfaction and establishes quality standards. The student is expected to:</p>	<p>(B) identify factors contributing to cost and quality such as seasonality, market volatility, and transportation</p>	<p>(ii) identify factors contributing to quality</p>
<p>(8) The student demonstrates comprehensive knowledge of fruits, vegetables, grains, herbs, spices, and other dry goods as related to presentation, flavor, texture, visual appeal, taste, and customer satisfaction and establishes quality standards. The student is expected to:</p>	<p>(C) compare and contrast forms and use of produce such as fresh, frozen, canned, dried, and other classifications</p>	<p>(i) compare and contrast forms of produce</p>
<p>(8) The student demonstrates comprehensive knowledge of fruits, vegetables, grains, herbs, spices, and other dry goods as related to presentation, flavor, texture, visual appeal, taste, and customer satisfaction and establishes quality standards. The student is expected to:</p>	<p>(C) compare and contrast forms and use of produce such as fresh, frozen, canned, dried, and other classifications</p>	<p>(ii) compare and contrast use of produce</p>

Knowledge and Skill Statement	Student Expectation	Breakout
(8) The student demonstrates comprehensive knowledge of fruits, vegetables, grains, herbs, spices, and other dry goods as related to presentation, flavor, texture, visual appeal, taste, and customer satisfaction and establishes quality standards. The student is expected to:	(D) model appropriate cooking methods for produce	(i) model appropriate cooking methods for produce
(8) The student demonstrates comprehensive knowledge of fruits, vegetables, grains, herbs, spices, and other dry goods as related to presentation, flavor, texture, visual appeal, taste, and customer satisfaction and establishes quality standards. The student is expected to:	(E) evaluate the effects of cooking methods on produce	(i) evaluate the effects of cooking methods on produce
(9) The student understands advanced baking and pastry principles. The student is expected to:	(A) use professional food preparation equipment such as commercial-grade mixers, food processors, and measuring tools	(i) use professional food preparation equipment
(9) The student understands advanced baking and pastry principles. The student is expected to:	(B) apply proper measuring and scaling techniques	(i) apply proper measuring techniques
(9) The student understands advanced baking and pastry principles. The student is expected to:	(B) apply proper measuring and scaling techniques	(ii) apply proper scaling techniques
(9) The student understands advanced baking and pastry principles. The student is expected to:	(C) compose various plated desserts appropriate for various food service operations	(i) compose various plated desserts appropriate for various food service operations

Knowledge and Skill Statement	Student Expectation	Breakout
(10) The student demonstrates and practices the basic procedures for the production of yeast and quick bread products. The student is expected to:	(A) differentiate how various types of bread crusts are created through fermentation, proofing, baking temperatures, and humidity	(i) differentiate how various types of bread crusts are created through fermentation, proofing, baking temperatures, and humidity
(10) The student demonstrates and practices the basic procedures for the production of yeast and quick bread products. The student is expected to:	(B) prepare soft, hard, and artisanal breads through proper baking techniques	(i) prepare soft breads through proper baking techniques
(10) The student demonstrates and practices the basic procedures for the production of yeast and quick bread products. The student is expected to:	(B) prepare soft, hard, and artisanal breads through proper baking techniques	(ii) prepare hard breads through proper baking techniques
(10) The student demonstrates and practices the basic procedures for the production of yeast and quick bread products. The student is expected to:	(B) prepare soft, hard, and artisanal breads through proper baking techniques	(iii) prepare artisanal breads through proper baking techniques
(10) The student demonstrates and practices the basic procedures for the production of yeast and quick bread products. The student is expected to:	(C) differentiate among quick breads such as muffins, scones and biscuits	(i) differentiate among quick breads
(11) The student demonstrates and practices the basic procedures for the production of pastry crust, pastry dough, and cookie. The student is expected to:	(A) compare different types of pastry crusts and usage in pies and tarts	(i) compare different types of pastry crusts
(11) The student demonstrates and practices the basic procedures for the production of pastry crust, pastry dough, and cookie. The student is expected to:	(A) compare different types of pastry crusts and usage in pies and tarts	(ii) compare usage [of different types of pastry crusts] in pies

Knowledge and Skill Statement	Student Expectation	Breakout
(11) The student demonstrates and practices the basic procedures for the production of pastry crust, pastry dough, and cookie. The student is expected to:	(A) compare different types of pastry crusts and usage in pies and tarts	(iii) compare usage [of different types of pastry crusts] in tarts
(11) The student demonstrates and practices the basic procedures for the production of pastry crust, pastry dough, and cookie. The student is expected to:	(B) prepare pie fillings such as fruit, soft, and custard fillings	(i) prepare pie fillings
(11) The student demonstrates and practices the basic procedures for the production of pastry crust, pastry dough, and cookie. The student is expected to:	(C) prepare different types of pastry dough such as Pate a Choux, Pate Sucree, and laminated dough	(i) prepare different types of pastry dough
(11) The student demonstrates and practices the basic procedures for the production of pastry crust, pastry dough, and cookie. The student is expected to:	(D) differentiate between various cookie preparation methods	(i) differentiate between various cookie preparation methods
(11) The student demonstrates and practices the basic procedures for the production of pastry crust, pastry dough, and cookie. The student is expected to:	(E) determine the causes of crispness, moistness, chewiness, and the spread of cookies	(i) determine the causes of crispness of cookies
(11) The student demonstrates and practices the basic procedures for the production of pastry crust, pastry dough, and cookie. The student is expected to:	(E) determine the causes of crispness, moistness, chewiness, and the spread of cookies	(ii) determine the causes of moistness of cookies
(11) The student demonstrates and practices the basic procedures for the production of pastry crust, pastry dough, and cookie. The student is expected to:	(E) determine the causes of crispness, moistness, chewiness, and the spread of cookies	(iii) determine the causes of chewiness of cookies

Knowledge and Skill Statement	Student Expectation	Breakout
(11) The student demonstrates and practices the basic procedures for the production of pastry crust, pastry dough, and cookie. The student is expected to:	(E) determine the causes of crispness, moistness, chewiness, and the spread of cookies	(iv) determine the causes of the spread of cookies
(11) The student demonstrates and practices the basic procedures for the production of pastry crust, pastry dough, and cookie. The student is expected to:	(F) bake, cook, and store cookies properly	(i) bake cookies properly
(11) The student demonstrates and practices the basic procedures for the production of pastry crust, pastry dough, and cookie. The student is expected to:	(F) bake, cook, and store cookies properly	(ii) cook cookies properly
(11) The student demonstrates and practices the basic procedures for the production of pastry crust, pastry dough, and cookie. The student is expected to:	(F) bake, cook, and store cookies properly	(iii) store cookies properly
(12) The student demonstrates and practices the basic procedures for the production of cakes, frostings, fillings, and icings. The student is expected to:	(A) differentiate between cake preparation methods	(i) differentiate between cake preparation methods
(12) The student demonstrates and practices the basic procedures for the production of cakes, frostings, fillings, and icings. The student is expected to:	(B) differentiate the functions of icings and determine appropriate application	(i) differentiate the functions of icings

Knowledge and Skill Statement	Student Expectation	Breakout
(12) The student demonstrates and practices the basic procedures for the production of cakes, frostings, fillings, and icings. The student is expected to:	(B) differentiate the functions of icings and determine appropriate application	(ii) determine appropriate application [of icings]
(12) The student demonstrates and practices the basic procedures for the production of cakes, frostings, fillings, and icings. The student is expected to:	(C) assemble and ice simple layer cakes, sheet cakes, and cupcakes	(i) assemble simple layer cakes
(12) The student demonstrates and practices the basic procedures for the production of cakes, frostings, fillings, and icings. The student is expected to:	(C) assemble and ice simple layer cakes, sheet cakes, and cupcakes	(ii) assemble sheet cakes
(12) The student demonstrates and practices the basic procedures for the production of cakes, frostings, fillings, and icings. The student is expected to:	(C) assemble and ice simple layer cakes, sheet cakes, and cupcakes	(iii) assemble cupcakes
(12) The student demonstrates and practices the basic procedures for the production of cakes, frostings, fillings, and icings. The student is expected to:	(C) assemble and ice simple layer cakes, sheet cakes, and cupcakes	(iv) ice simple layer cakes
(12) The student demonstrates and practices the basic procedures for the production of cakes, frostings, fillings, and icings. The student is expected to:	(C) assemble and ice simple layer cakes, sheet cakes, and cupcakes	(v) ice sheet cakes

Knowledge and Skill Statement	Student Expectation	Breakout
(12) The student demonstrates and practices the basic procedures for the production of cakes, frostings, fillings, and icings. The student is expected to:	(C) assemble and ice simple layer cakes, sheet cakes, and cupcakes	(vi) ice cupcakes
(12) The student demonstrates and practices the basic procedures for the production of cakes, frostings, fillings, and icings. The student is expected to:	(D) demonstrate the ability to identify criteria for evaluation of cake products	(i) demonstrate the ability to identify criteria for evaluation of cake products
(12) The student demonstrates and practices the basic procedures for the production of cakes, frostings, fillings, and icings. The student is expected to:	(E) prepare various icings such as fondant, buttercreams, flat, royal, and glazes	(i) prepare various icings
(12) The student demonstrates and practices the basic procedures for the production of cakes, frostings, fillings, and icings. The student is expected to:	(F) perform basic piping skills with a parchment cone and pastry bag with tips	(i) perform basic piping skills with a parchment cone
(12) The student demonstrates and practices the basic procedures for the production of cakes, frostings, fillings, and icings. The student is expected to:	(F) perform basic piping skills with a parchment cone and pastry bag with tips	(ii) perform basic piping skills with a pastry bag with tips
(13) The student demonstrates and practices the basic procedures for the production of custards, creams, and mousse. The student is expected to:	(A) compose desserts such as ice creams, custards, mousse, and other desserts	(i) compose desserts

Knowledge and Skill Statement	Student Expectation	Breakout
(13) The student demonstrates and practices the basic procedures for the production of custards, creams, and mousse. The student is expected to:	(B) identify the roles of desserts such as ice creams, custards, mousse, and other desserts	(i) identify the roles of desserts
(14) The student demonstrates and practices the basic procedures for the production of chocolate, sugars, confections, and sauces. The student is expected to:	(A) differentiate between the types of advanced confections	(i) differentiate between the types of advanced confections
(14) The student demonstrates and practices the basic procedures for the production of chocolate, sugars, confections, and sauces. The student is expected to:	(B) model methods of preparation in each type of confection	(i) model methods of preparation in each type of confection
(14) The student demonstrates and practices the basic procedures for the production of chocolate, sugars, confections, and sauces. The student is expected to:	(C) use chocolate as a major ingredient in dessert or food production	(i) use chocolate as a major ingredient in dessert or food production
(14) The student demonstrates and practices the basic procedures for the production of chocolate, sugars, confections, and sauces. The student is expected to:	(D) temper chocolate	(i) temper chocolate
(14) The student demonstrates and practices the basic procedures for the production of chocolate, sugars, confections, and sauces. The student is expected to:	(E) use tempered chocolate in dessert preparation	(i) use tempered chocolate in dessert preparation

Knowledge and Skill Statement	Student Expectation	Breakout
(14) The student demonstrates and practices the basic procedures for the production of chocolate, sugars, confections, and sauces. The student is expected to:	(F) cook sugar syrups to various stages of hardness	(i) cook sugar syrups to various stages of hardness
(14) The student demonstrates and practices the basic procedures for the production of chocolate, sugars, confections, and sauces. The student is expected to:	(G) prepare dessert sauces such as custard, chocolate, caramel, fruit fillings, and coulis	(i) prepare dessert sauces
(14) The student demonstrates and practices the basic procedures for the production of chocolate, sugars, confections, and sauces. The student is expected to:	(H) serve attractively plated desserts with appropriate sauces and garnishes	(i) serve attractively plated desserts with appropriate sauces
(14) The student demonstrates and practices the basic procedures for the production of chocolate, sugars, confections, and sauces. The student is expected to:	(H) serve attractively plated desserts with appropriate sauces and garnishes	(ii) serve attractively plated desserts with appropriate garnishes
(15) The student evaluates nutrition concepts as they affect health and wellness, marketing, and menu planning. The student is expected to:	(A) analyze the role of carbohydrates, vitamins, minerals, proteins, and fats as they relate to food choices	(i) analyze the role of carbohydrates as they relate to food choices
(15) The student evaluates nutrition concepts as they affect health and wellness, marketing, and menu planning. The student is expected to:	(A) analyze the role of carbohydrates, vitamins, minerals, proteins, and fats as they relate to food choices	(ii) analyze the role of vitamins as they relate to food choices

Knowledge and Skill Statement	Student Expectation	Breakout
(15) The student evaluates nutrition concepts as they affect health and wellness, marketing, and menu planning. The student is expected to:	(A) analyze the role of carbohydrates, vitamins, minerals, proteins, and fats as they relate to food choices	(iii) analyze the role of minerals as they relate to food choices
(15) The student evaluates nutrition concepts as they affect health and wellness, marketing, and menu planning. The student is expected to:	(A) analyze the role of carbohydrates, vitamins, minerals, proteins, and fats as they relate to food choices	(iv) analyze the role of proteins as they relate to food choices
(15) The student evaluates nutrition concepts as they affect health and wellness, marketing, and menu planning. The student is expected to:	(A) analyze the role of carbohydrates, vitamins, minerals, proteins, and fats as they relate to food choices	(v) analyze the role of fats as they relate to food choices
(15) The student evaluates nutrition concepts as they affect health and wellness, marketing, and menu planning. The student is expected to:	(B) research and develop menus for populations with dietary requirements or restrictions	(i) research menus for populations with dietary requirements or restrictions
(15) The student evaluates nutrition concepts as they affect health and wellness, marketing, and menu planning. The student is expected to:	(B) research and develop menus for populations with dietary requirements or restrictions	(ii) develop menus for populations with dietary requirements or restrictions
(16) The student analyzes the components of cost controls in a food service operation and develops a plan to manage cost. The student is expected to:	(A) differentiate between the major costs in food service such as food, beverage, and labor costs	(i) differentiate between the major costs in food service
(16) The student analyzes the components of cost controls in a food service operation and develops a plan to manage cost. The student is expected to:	(B) validate the effect of controlling costs on the success of a food service operation	(i) validate the effect of controlling costs on the success of a food service operation

Knowledge and Skill Statement	Student Expectation	Breakout
(16) The student analyzes the components of cost controls in a food service operation and develops a plan to manage cost. The student is expected to:	(C) compare and contrast the concept of fixed costs, variable costs, and controllable costs	(i) compare and contrast the concept of fixed costs, variable costs, and controllable costs
(16) The student analyzes the components of cost controls in a food service operation and develops a plan to manage cost. The student is expected to:	(D) compare and contrast the relationship between inventory management and cost control in food service operations	(i) compare and contrast the relationship between inventory management and cost control in food service operations

Subject	Chapter 130. Career and Technical Education, Subchapter I. Hospitality and Tourism
Course Title	§130.256. Food Science (One Credit), Adopted 2015.
<p>(a) General Requirements. This course is recommended for students in Grades 11 and 12. Prerequisites: three units of science, including chemistry and biology. Recommended prerequisite: Principles of Hospitality and Tourism. Students must meet the 40% laboratory and fieldwork requirement. This course satisfies a high school science graduation requirement. Students shall be awarded one credit for successful completion of this course.</p>	
<p>(b) Introduction.</p>	
<p>(1) Career and technical education instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.</p> <p>(2) The Hospitality and Tourism Career Cluster focuses on the management, marketing, and operations of restaurants and other food/beverage services, lodging, attractions, recreation events, and travel-related services.</p> <p>(3) In Food Science students conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Food Science is the study of the nature of foods, the causes of deterioration, the principles underlying food processing, and the improvement of foods for the consuming public.</p> <p>(4) Science, as defined by the National Academy of Sciences, is the "use of evidence to construct testable explanations and predictions of natural phenomena, as well as the knowledge generated through this process." This vast body of changing and increasing knowledge is described by physical, mathematical, and conceptual models. Students should know that some questions are outside the realm of science because they deal with phenomena that are not scientifically testable.</p> <p>(5) Scientific inquiry is the planned and deliberate investigation of the natural world. Scientific methods of investigation are experimental, descriptive, or comparative. The method chosen should be appropriate to the question being asked.</p> <p>(6) Scientific decision making is a way of answering questions about the natural world. Students should be able to distinguish between scientific decision-making methods (scientific methods) and ethical and social decisions that involve science (the application of scientific information).</p> <p>(7) A system is a collection of cycles, structures, and processes that interact. All systems have basic properties that can be described in space, time, energy, and matter. Change and constancy occur in systems as patterns and can be observed, measured, and modeled. These patterns help to make predictions that can be scientifically tested. Students should analyze a system in terms of its components and how these components relate to each other, to the whole, and to the external environment.</p> <p>(8) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.</p> <p>(9) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.</p>	

(c) Knowledge and Skills.		
Knowledge and Skill Statement	Student Expectation	Breakout
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(A) apply interpersonal communication skills in business and industry settings	(i) apply interpersonal communication skills in business settings
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(A) apply interpersonal communication skills in business and industry settings	(ii) apply interpersonal communication skills in industry settings
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(B) explain and recognize the value of collaboration within the workplace	(i) explain the value of collaboration within the workplace
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(B) explain and recognize the value of collaboration within the workplace	(ii) recognize the value of collaboration within the workplace
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(C) examine the importance of time management to succeed in the workforce	(i) examine the importance of time management to succeed in the workforce
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(D) identify work ethics/professionalism in a job setting	(i) identify work ethics/professionalism in a job setting
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(E) develop problem-solving and critical-thinking skills	(i) develop problem-solving skills

Knowledge and Skill Statement	Student Expectation	Breakout
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(E) develop problem-solving and critical-thinking skills	(ii) develop critical-thinking skills
(2) The student, for at least 40% of instructional time, conducts laboratory and field investigations using safe, environmentally appropriate, and ethical practices. The student is expected to:	(A) demonstrate safe practices during laboratory and field investigations	(i) demonstrate safe practices during laboratory investigations
(2) The student, for at least 40% of instructional time, conducts laboratory and field investigations using safe, environmentally appropriate, and ethical practices. The student is expected to:	(A) demonstrate safe practices during laboratory and field investigations	(ii) demonstrate safe practices during field investigations
(2) The student, for at least 40% of instructional time, conducts laboratory and field investigations using safe, environmentally appropriate, and ethical practices. The student is expected to:	(B) demonstrate an understanding of the use and conservation of resources and the proper disposal or recycling of materials	(i) demonstrate an understanding of the use of resources
(2) The student, for at least 40% of instructional time, conducts laboratory and field investigations using safe, environmentally appropriate, and ethical practices. The student is expected to:	(B) demonstrate an understanding of the use and conservation of resources and the proper disposal or recycling of materials	(ii) demonstrate an understanding of the conservation of resources
(2) The student, for at least 40% of instructional time, conducts laboratory and field investigations using safe, environmentally appropriate, and ethical practices. The student is expected to:	(B) demonstrate an understanding of the use and conservation of resources and the proper disposal or recycling of materials	(iii) demonstrate an understanding of the proper disposal or recycling of materials

Knowledge and Skill Statement	Student Expectation	Breakout
(3) The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:	(A) know the definition of science and understand that it has limitations, as specified in subsection (b)(4) of this section	(i) know the definition of science, as specified in subsection (b)(4) [above]
(3) The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:	(A) know the definition of science and understand that it has limitations, as specified in subsection (b)(4) of this section	(ii) understand that [science] has limitations, as specified in subsection (b)(4) [above]
(3) The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:	(B) know that hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power that have been tested over a wide variety of conditions are incorporated into theories	(i) know that hypotheses are tentative statements that must be capable of being supported or not supported by observational evidence
(3) The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:	(B) know that hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power that have been tested over a wide variety of conditions are incorporated into theories	(ii) know that hypotheses are testable statements that must be capable of being supported or not supported by observational evidence
(3) The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:	(B) know that hypotheses are tentative and testable statements that must be capable of being supported or not supported by observational evidence. Hypotheses of durable explanatory power that have been tested over a wide variety of conditions are incorporated into theories	(iii) [know that] hypotheses of durable explanatory power which have been tested over a wide variety of conditions are incorporated into theories

Knowledge and Skill Statement	Student Expectation	Breakout
(3) The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:	(C) know scientific theories are based on natural and physical phenomena and are capable of being tested by multiple independent researchers. Unlike hypotheses, scientific theories are well-established and highly-reliable explanations, but they may be subject to change as new areas of science and new technologies are developed	(i) know [that] scientific theories are based on natural and physical phenomena
(3) The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:	(C) know scientific theories are based on natural and physical phenomena and are capable of being tested by multiple independent researchers. Unlike hypotheses, scientific theories are well-established and highly-reliable explanations, but they may be subject to change as new areas of science and new technologies are developed	(ii) know [that] scientific theories are capable of being tested by multiple independent researchers
(3) The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:	(C) know scientific theories are based on natural and physical phenomena and are capable of being tested by multiple independent researchers. Unlike hypotheses, scientific theories are well-established and highly-reliable explanations, but they may be subject to change as new areas of science and new technologies are developed	(iii) [know that] unlike hypotheses, scientific theories are well-established explanations
(3) The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:	(C) know scientific theories are based on natural and physical phenomena and are capable of being tested by multiple independent researchers. Unlike hypotheses, scientific theories are well-established and highly-reliable explanations, but they may be subject to change as new areas of science and new technologies are developed	(iv) [know that], unlike hypotheses, scientific theories are highly-reliable explanations

Knowledge and Skill Statement	Student Expectation	Breakout
(3) The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:	(C) know scientific theories are based on natural and physical phenomena and are capable of being tested by multiple independent researchers. Unlike hypotheses, scientific theories are well-established and highly-reliable explanations, but they may be subject to change as new areas of science and new technologies are developed	(v) [know that] scientific theories may be subject to change as new areas of science are developed
(3) The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:	(C) know scientific theories are based on natural and physical phenomena and are capable of being tested by multiple independent researchers. Unlike hypotheses, scientific theories are well-established and highly-reliable explanations, but they may be subject to change as new areas of science and new technologies are developed	(vi) [know that] scientific theories may be subject to change as new technologies are developed
(3) The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:	(D) distinguish between scientific hypotheses and scientific theories	(i) distinguish between scientific hypotheses and scientific theories
(3) The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:	(E) plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology	(i) plan descriptive investigations, including asking questions
(3) The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:	(E) plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology	(ii) plan descriptive investigations, including selecting equipment

Knowledge and Skill Statement	Student Expectation	Breakout
(3) The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:	(E) plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology	(iii) plan descriptive investigations, including selecting technology
(3) The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:	(E) plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology	(iv) implement descriptive investigations, including asking questions
(3) The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:	(E) plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology	(v) implement descriptive investigations, including selecting equipment
(3) The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:	(E) plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology	(vi) implement descriptive investigations, including selecting technology
(3) The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:	(E) plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology	(vii) plan comparative investigations, including asking questions
(3) The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:	(E) plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology	(viii) plan comparative investigations, including formulating testable hypotheses

Knowledge and Skill Statement	Student Expectation	Breakout
(3) The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:	(E) plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology	(ix) plan comparative investigations, including selecting equipment
(3) The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:	(E) plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology	(x) plan comparative investigations, including selecting technology
(3) The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:	(E) plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology	(xi) implement comparative investigations, including asking questions
(3) The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:	(E) plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology	(xii) implement comparative investigations, including formulating testable hypotheses
(3) The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:	(E) plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology	(xiii) implement comparative investigations, including selecting equipment
(3) The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:	(E) plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology	(xiv) implement comparative investigations, including selecting technology

Knowledge and Skill Statement	Student Expectation	Breakout
(3) The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:	(E) plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology	(xv) plan experimental investigations, including asking questions
(3) The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:	(E) plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology	(xvi) plan experimental investigations, including formulating testable hypotheses
(3) The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:	(E) plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology	(xvii) plan experimental investigations, including selecting equipment
(3) The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:	(E) plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology	(xviii) plan experimental investigations, including selecting technology
(3) The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:	(E) plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology	(xix) implement experimental investigations, including asking questions
(3) The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:	(E) plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology	(xx) implement experimental investigations, including formulating testable hypotheses

Knowledge and Skill Statement	Student Expectation	Breakout
(3) The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:	(E) plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology	(xxi) implement experimental investigations, including selecting equipment
(3) The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:	(E) plan and implement descriptive, comparative, and experimental investigations, including asking questions, formulating testable hypotheses, and selecting equipment and technology	(xxii) implement experimental investigations, including selecting technology
(3) The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:	(F) collect and organize qualitative and quantitative data and make measurements with accuracy and precision using tools such as calculators, spreadsheet software, data-collecting probes, computers, standard laboratory glassware, microscopes, various prepared slides, stereoscopes, metric rulers, electronic balances, gel electrophoresis apparatuses, micropipettors, hand lenses, Celsius thermometers, hot plates, lab notebooks or journals, timing devices, cameras, Petri dishes, lab incubators, dissection equipment, meter sticks, and models, diagrams, or samples of biological specimens or structures	(i) collect qualitative data with accuracy using tools

Knowledge and Skill Statement	Student Expectation	Breakout
<p>(3) The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:</p>	<p>(F) collect and organize qualitative and quantitative data and make measurements with accuracy and precision using tools such as calculators, spreadsheet software, data-collecting probes, computers, standard laboratory glassware, microscopes, various prepared slides, stereoscopes, metric rulers, electronic balances, gel electrophoresis apparatuses, micropipettors, hand lenses, Celsius thermometers, hot plates, lab notebooks or journals, timing devices, cameras, Petri dishes, lab incubators, dissection equipment, meter sticks, and models, diagrams, or samples of biological specimens or structures</p>	<p>(ii) collect quantitative data with accuracy using tools</p>
<p>(3) The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:</p>	<p>(F) collect and organize qualitative and quantitative data and make measurements with accuracy and precision using tools such as calculators, spreadsheet software, data-collecting probes, computers, standard laboratory glassware, microscopes, various prepared slides, stereoscopes, metric rulers, electronic balances, gel electrophoresis apparatuses, micropipettors, hand lenses, Celsius thermometers, hot plates, lab notebooks or journals, timing devices, cameras, Petri dishes, lab incubators, dissection equipment, meter sticks, and models, diagrams, or samples of biological specimens or structures</p>	<p>(iii) organize qualitative data with accuracy using tools</p>

Knowledge and Skill Statement	Student Expectation	Breakout
<p>(3) The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:</p>	<p>(F) collect and organize qualitative and quantitative data and make measurements with accuracy and precision using tools such as calculators, spreadsheet software, data-collecting probes, computers, standard laboratory glassware, microscopes, various prepared slides, stereoscopes, metric rulers, electronic balances, gel electrophoresis apparatuses, micropipettors, hand lenses, Celsius thermometers, hot plates, lab notebooks or journals, timing devices, cameras, Petri dishes, lab incubators, dissection equipment, meter sticks, and models, diagrams, or samples of biological specimens or structures</p>	<p>(iv) organize quantitative data with accuracy using tools</p>
<p>(3) The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:</p>	<p>(F) collect and organize qualitative and quantitative data and make measurements with accuracy and precision using tools such as calculators, spreadsheet software, data-collecting probes, computers, standard laboratory glassware, microscopes, various prepared slides, stereoscopes, metric rulers, electronic balances, gel electrophoresis apparatuses, micropipettors, hand lenses, Celsius thermometers, hot plates, lab notebooks or journals, timing devices, cameras, Petri dishes, lab incubators, dissection equipment, meter sticks, and models, diagrams, or samples of biological specimens or structures</p>	<p>(v) make measurements with accuracy using tools</p>

Knowledge and Skill Statement	Student Expectation	Breakout
<p>(3) The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:</p>	<p>(F) collect and organize qualitative and quantitative data and make measurements with accuracy and precision using tools such as calculators, spreadsheet software, data-collecting probes, computers, standard laboratory glassware, microscopes, various prepared slides, stereoscopes, metric rulers, electronic balances, gel electrophoresis apparatuses, micropipettors, hand lenses, Celsius thermometers, hot plates, lab notebooks or journals, timing devices, cameras, Petri dishes, lab incubators, dissection equipment, meter sticks, and models, diagrams, or samples of biological specimens or structures</p>	<p>(vi) collect qualitative data with precision using tools</p>
<p>(3) The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:</p>	<p>(F) collect and organize qualitative and quantitative data and make measurements with accuracy and precision using tools such as calculators, spreadsheet software, data-collecting probes, computers, standard laboratory glassware, microscopes, various prepared slides, stereoscopes, metric rulers, electronic balances, gel electrophoresis apparatuses, micropipettors, hand lenses, Celsius thermometers, hot plates, lab notebooks or journals, timing devices, cameras, Petri dishes, lab incubators, dissection equipment, meter sticks, and models, diagrams, or samples of biological specimens or structures</p>	<p>(vii) collect quantitative data with precision using tools</p>

Knowledge and Skill Statement	Student Expectation	Breakout
<p>(3) The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:</p>	<p>(F) collect and organize qualitative and quantitative data and make measurements with accuracy and precision using tools such as calculators, spreadsheet software, data-collecting probes, computers, standard laboratory glassware, microscopes, various prepared slides, stereoscopes, metric rulers, electronic balances, gel electrophoresis apparatuses, micropipettors, hand lenses, Celsius thermometers, hot plates, lab notebooks or journals, timing devices, cameras, Petri dishes, lab incubators, dissection equipment, meter sticks, and models, diagrams, or samples of biological specimens or structures</p>	<p>(viii) organize qualitative data with precision using tools</p>
<p>(3) The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:</p>	<p>(F) collect and organize qualitative and quantitative data and make measurements with accuracy and precision using tools such as calculators, spreadsheet software, data-collecting probes, computers, standard laboratory glassware, microscopes, various prepared slides, stereoscopes, metric rulers, electronic balances, gel electrophoresis apparatuses, micropipettors, hand lenses, Celsius thermometers, hot plates, lab notebooks or journals, timing devices, cameras, Petri dishes, lab incubators, dissection equipment, meter sticks, and models, diagrams, or samples of biological specimens or structures</p>	<p>(ix) organize quantitative data with precision using tools</p>

Knowledge and Skill Statement	Student Expectation	Breakout
(3) The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:	(F) collect and organize qualitative and quantitative data and make measurements with accuracy and precision using tools such as calculators, spreadsheet software, data-collecting probes, computers, standard laboratory glassware, microscopes, various prepared slides, stereoscopes, metric rulers, electronic balances, gel electrophoresis apparatuses, micropipettors, hand lenses, Celsius thermometers, hot plates, lab notebooks or journals, timing devices, cameras, Petri dishes, lab incubators, dissection equipment, meter sticks, and models, diagrams, or samples of biological specimens or structures	(x) make measurements with precision using tools
(3) The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:	(G) analyze, evaluate, make inferences, and predict trends from data	(i) analyze data
(3) The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:	(G) analyze, evaluate, make inferences, and predict trends from data	(ii) evaluate data
(3) The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:	(G) analyze, evaluate, make inferences, and predict trends from data	(iii) make inferences from data
(3) The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:	(G) analyze, evaluate, make inferences, and predict trends from data	(iv) predict trends from data

Knowledge and Skill Statement	Student Expectation	Breakout
(3) The student uses scientific methods and equipment during laboratory and field investigations. The student is expected to:	(H) communicate valid conclusions supported by the data through methods such as lab reports, labeled drawings, graphic organizers, journals, summaries, oral reports, and technology-based reports	(i) communicate valid conclusions supported by the data through methods
(4) The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:	(A) in all fields of science, analyze, evaluate, and critique scientific explanations by using empirical evidence, logical reasoning, and experimental and observational testing, including examining all sides of scientific evidence of those scientific explanations, so as to encourage critical thinking by the student	(i) in all fields of science, analyze scientific explanations by using empirical evidence
(4) The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:	(A) in all fields of science, analyze, evaluate, and critique scientific explanations by using empirical evidence, logical reasoning, and experimental and observational testing, including examining all sides of scientific evidence of those scientific explanations, so as to encourage critical thinking by the student	(ii) in all fields of science, analyze scientific explanations by using logical reasoning
(4) The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:	(A) in all fields of science, analyze, evaluate, and critique scientific explanations by using empirical evidence, logical reasoning, and experimental and observational testing, including examining all sides of scientific evidence of those scientific explanations, so as to encourage critical thinking by the student	(iii) in all fields of science, analyze scientific explanations by using experimental testing
(4) The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:	(A) in all fields of science, analyze, evaluate, and critique scientific explanations by using empirical evidence, logical reasoning, and experimental and observational testing, including examining all sides of scientific evidence of those scientific explanations, so as to encourage critical thinking by the student	(iv) in all fields of science, analyze scientific explanations by using observational testing

Knowledge and Skill Statement	Student Expectation	Breakout
(4) The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:	(A) in all fields of science, analyze, evaluate, and critique scientific explanations by using empirical evidence, logical reasoning, and experimental and observational testing, including examining all sides of scientific evidence of those scientific explanations, so as to encourage critical thinking by the student	(v) in all fields of science, analyze scientific explanations, including examining all sides of scientific evidence of those scientific explanations
(4) The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:	(A) in all fields of science, analyze, evaluate, and critique scientific explanations by using empirical evidence, logical reasoning, and experimental and observational testing, including examining all sides of scientific evidence of those scientific explanations, so as to encourage critical thinking by the student	(vi) in all fields of science, evaluate scientific explanations by using empirical evidence
(4) The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:	(A) in all fields of science, analyze, evaluate, and critique scientific explanations by using empirical evidence, logical reasoning, and experimental and observational testing, including examining all sides of scientific evidence of those scientific explanations, so as to encourage critical thinking by the student	(vii) in all fields of science, evaluate scientific explanations by using logical reasoning
(4) The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:	(A) in all fields of science, analyze, evaluate, and critique scientific explanations by using empirical evidence, logical reasoning, and experimental and observational testing, including examining all sides of scientific evidence of those scientific explanations, so as to encourage critical thinking by the student	(viii) in all fields of science, evaluate scientific explanations by using experimental testing

Knowledge and Skill Statement	Student Expectation	Breakout
(4) The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:	(A) in all fields of science, analyze, evaluate, and critique scientific explanations by using empirical evidence, logical reasoning, and experimental and observational testing, including examining all sides of scientific evidence of those scientific explanations, so as to encourage critical thinking by the student	(ix) in all fields of science, evaluate scientific explanations by using observational testing
(4) The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:	(A) in all fields of science, analyze, evaluate, and critique scientific explanations by using empirical evidence, logical reasoning, and experimental and observational testing, including examining all sides of scientific evidence of those scientific explanations, so as to encourage critical thinking by the student	(x) in all fields of science, evaluate scientific explanations, including examining all sides of scientific evidence of those scientific explanations
(4) The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:	(A) in all fields of science, analyze, evaluate, and critique scientific explanations by using empirical evidence, logical reasoning, and experimental and observational testing, including examining all sides of scientific evidence of those scientific explanations, so as to encourage critical thinking by the student	(xi) in all fields of science, critique scientific explanations by using empirical evidence
(4) The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:	(A) in all fields of science, analyze, evaluate, and critique scientific explanations by using empirical evidence, logical reasoning, and experimental and observational testing, including examining all sides of scientific evidence of those scientific explanations, so as to encourage critical thinking by the student	(xii) in all fields of science, critique scientific explanations by using logical reasoning

Knowledge and Skill Statement	Student Expectation	Breakout
(4) The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:	(A) in all fields of science, analyze, evaluate, and critique scientific explanations by using empirical evidence, logical reasoning, and experimental and observational testing, including examining all sides of scientific evidence of those scientific explanations, so as to encourage critical thinking by the student	(xiii) in all fields of science, critique scientific explanations by using experimental testing
(4) The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:	(A) in all fields of science, analyze, evaluate, and critique scientific explanations by using empirical evidence, logical reasoning, and experimental and observational testing, including examining all sides of scientific evidence of those scientific explanations, so as to encourage critical thinking by the student	(xiv) in all fields of science, critique scientific explanations by using observational testing
(4) The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:	(A) in all fields of science, analyze, evaluate, and critique scientific explanations by using empirical evidence, logical reasoning, and experimental and observational testing, including examining all sides of scientific evidence of those scientific explanations, so as to encourage critical thinking by the student	(xv) in all fields of science, critique scientific explanations, including examining all sides of scientific evidence of those scientific explanations
(4) The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:	(B) communicate and apply scientific information extracted from various sources such as current events, news reports, published journal articles, and marketing materials	(i) communicate scientific information extracted from various sources
(4) The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:	(B) communicate and apply scientific information extracted from various sources such as current events, news reports, published journal articles, and marketing materials	(ii) apply scientific information extracted from various sources

Knowledge and Skill Statement	Student Expectation	Breakout
(4) The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:	(C) draw inferences based on data related to promotional materials for products and services	(i) draw inferences based on data related to promotional materials for products
(4) The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:	(C) draw inferences based on data related to promotional materials for products and services	(ii) draw inferences based on data related to promotional materials for services
(4) The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:	(D) evaluate the impact of scientific research on society and the environment	(i) evaluate the impact of scientific research on society
(4) The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:	(D) evaluate the impact of scientific research on society and the environment	(ii) evaluate the impact of scientific research on the environment
(4) The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:	(E) evaluate models according to their limitations in representing biological objects or events	(i) evaluate models according to their limitations in representing biological objects or events
(4) The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:	(F) research and describe the history of biology and contributions of scientists	(i) research the history of biology

Knowledge and Skill Statement	Student Expectation	Breakout
(4) The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:	(F) research and describe the history of biology and contributions of scientists	(ii) research the contributions of scientists
(4) The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:	(F) research and describe the history of biology and contributions of scientists	(iii) describe the history of biology
(4) The student uses critical thinking, scientific reasoning, and problem solving to make informed decisions within and outside the classroom. The student is expected to:	(F) research and describe the history of biology and contributions of scientists	(iv) describe the contributions of scientists
(5) The student analyzes the role of acids and bases in the food sciences. The student is expected to:	(A) evaluate physical and chemical properties of acids and bases	(i) evaluate physical properties of acids
(5) The student analyzes the role of acids and bases in the food sciences. The student is expected to:	(A) evaluate physical and chemical properties of acids and bases	(ii) evaluate physical properties of bases
(5) The student analyzes the role of acids and bases in the food sciences. The student is expected to:	(A) evaluate physical and chemical properties of acids and bases	(iii) evaluate chemical properties of acids
(5) The student analyzes the role of acids and bases in the food sciences. The student is expected to:	(A) evaluate physical and chemical properties of acids and bases	(iv) evaluate chemical properties of bases
(5) The student analyzes the role of acids and bases in the food sciences. The student is expected to:	(B) analyze the relationship of pH to the properties, safety, and freshness of food	(i) analyze the relationship of pH to the properties of food

Knowledge and Skill Statement	Student Expectation	Breakout
(5) The student analyzes the role of acids and bases in the food sciences. The student is expected to:	(B) analyze the relationship of pH to the properties, safety, and freshness of food	(ii) analyze the relationship of pH to the safety of food
(5) The student analyzes the role of acids and bases in the food sciences. The student is expected to:	(B) analyze the relationship of pH to the properties, safety, and freshness of food	(iii) analyze the relationship of pH to the freshness of food
(6) The student evaluates the principles of microbiology and food safety practices. The student is expected to:	(A) investigate the properties of microorganisms that cause food spoilage	(i) investigate the properties of microorganisms that cause food spoilage
(6) The student evaluates the principles of microbiology and food safety practices. The student is expected to:	(B) compare food intoxication and food infection	(i) compare food intoxication and food infection
(6) The student evaluates the principles of microbiology and food safety practices. The student is expected to:	(C) examine methods to destroy or inactivate harmful pathogens in foods	(i) examine methods to destroy or inactivate harmful pathogens in foods
(6) The student evaluates the principles of microbiology and food safety practices. The student is expected to:	(D) compare beneficial and harmful microorganisms	(i) compare beneficial and harmful microorganisms
(6) The student evaluates the principles of microbiology and food safety practices. The student is expected to:	(E) analyze sanitary food-handling practices	(i) analyze sanitary food-handling practices
(6) The student evaluates the principles of microbiology and food safety practices. The student is expected to:	(F) prepare for a state or national food manager's sanitation certification or alternative credential within the field of food science technology	(i) prepare for a state or national food manager's sanitation certification or alternative credential within the field of food science technology
(7) The student examines the chemical properties of food. The student is expected to:	(A) describe elements, compounds, mixtures, and formulas related to food science	(i) describe elements related to food science

Knowledge and Skill Statement	Student Expectation	Breakout
(7) The student examines the chemical properties of food. The student is expected to:	(A) describe elements, compounds, mixtures, and formulas related to food science	(ii) describe compounds related to food science
(7) The student examines the chemical properties of food. The student is expected to:	(A) describe elements, compounds, mixtures, and formulas related to food science	(iii) describe mixtures related to food science
(7) The student examines the chemical properties of food. The student is expected to:	(A) describe elements, compounds, mixtures, and formulas related to food science	(iv) describe formulas related to food science
(7) The student examines the chemical properties of food. The student is expected to:	(B) compare heterogeneous and homogeneous mixtures	(i) compare heterogeneous and homogeneous mixtures
(7) The student examines the chemical properties of food. The student is expected to:	(C) use chemical symbols, formulas, and equations in food science	(i) use chemical symbols in food science
(7) The student examines the chemical properties of food. The student is expected to:	(C) use chemical symbols, formulas, and equations in food science	(ii) use chemical formulas in food science
(7) The student examines the chemical properties of food. The student is expected to:	(C) use chemical symbols, formulas, and equations in food science	(iii) use chemical equations in food science
(7) The student examines the chemical properties of food. The student is expected to:	(D) analyze chemical and physical changes in food	(i) analyze chemical changes in food
(7) The student examines the chemical properties of food. The student is expected to:	(D) analyze chemical and physical changes in food	(ii) analyze physical changes in food

Knowledge and Skill Statement	Student Expectation	Breakout
(8) The student analyzes solutions, colloids, solids, gels, foams, and emulsions in food science. The student is expected to:	(A) identify the solvent and solute in a given solution	(i) identify the solvent in a given solution
(8) The student analyzes solutions, colloids, solids, gels, foams, and emulsions in food science. The student is expected to:	(A) identify the solvent and solute in a given solution	(ii) identify the solute in a given solution
(8) The student analyzes solutions, colloids, solids, gels, foams, and emulsions in food science. The student is expected to:	(B) compare unsaturated, saturated, and supersaturated solutions, including boiling and freezing points	(i) compare unsaturated, saturated, and supersaturated solutions, including boiling points
(8) The student analyzes solutions, colloids, solids, gels, foams, and emulsions in food science. The student is expected to:	(B) compare unsaturated, saturated, and supersaturated solutions, including boiling and freezing points	(ii) compare unsaturated, saturated, and supersaturated solutions, including freezing points
(8) The student analyzes solutions, colloids, solids, gels, foams, and emulsions in food science. The student is expected to:	(C) calculate the concentration of a solution using mass percent	(i) calculate the concentration of a solution using mass percent
(8) The student analyzes solutions, colloids, solids, gels, foams, and emulsions in food science. The student is expected to:	(D) describe the properties of colloidal dispersions	(i) describe the properties of colloidal dispersions
(8) The student analyzes solutions, colloids, solids, gels, foams, and emulsions in food science. The student is expected to:	(E) investigate the relationships among the three parts of an emulsion	(i) investigate the relationships among the three parts of an emulsion

Knowledge and Skill Statement	Student Expectation	Breakout
(8) The student analyzes solutions, colloids, solids, gels, foams, and emulsions in food science. The student is expected to:	(F) create various food emulsions	(i) create various food emulsions
(9) The student analyzes the functions of enzymes in food science. The student is expected to:	(A) describe the role of enzymes as catalysts in chemical reactions of food	(i) describe the role of enzymes as catalysts in chemical reactions of food
(9) The student analyzes the functions of enzymes in food science. The student is expected to:	(B) explain the relationship between an enzyme and a substrate	(i) explain the relationship between an enzyme and a substrate
(9) The student analyzes the functions of enzymes in food science. The student is expected to:	(C) analyze the functions of enzymes in digestion, including the factors that influence enzyme activity	(i) analyze the functions of enzymes in digestion, including the factors that influence enzyme activity
(9) The student analyzes the functions of enzymes in food science. The student is expected to:	(D) analyze enzyme reactions in food preparation	(i) analyze enzyme reactions in food preparation
(10) The student evaluates the role of fermentation in food science. The student is expected to:	(A) analyze reasons food is fermented	(i) analyze reasons food is fermented
(10) The student evaluates the role of fermentation in food science. The student is expected to:	(B) assess the role of bacteria in food fermentation	(i) assess the role of bacteria in food fermentation
(10) The student evaluates the role of fermentation in food science. The student is expected to:	(C) prepare various fermented food products	(i) prepare various fermented food products
(11) The student assesses the reaction of leavening agents in baked products. The student is expected to:	(A) identify various leavening agents and describe their role	(i) identify various leavening agents

Knowledge and Skill Statement	Student Expectation	Breakout
(11) The student assesses the reaction of leavening agents in baked products. The student is expected to:	(A) identify various leavening agents and describe their role	(ii) describe the role of various leavening agents
(11) The student assesses the reaction of leavening agents in baked products. The student is expected to:	(B) analyze the role of acids as leavening agents	(i) analyze the role of acids as leavening agents
(11) The student assesses the reaction of leavening agents in baked products. The student is expected to:	(C) compare doughs and batters	(i) compare doughs and batters
(11) The student assesses the reaction of leavening agents in baked products. The student is expected to:	(D) conduct laboratory experiments with various leavening agents using the scientific processes	(i) conduct laboratory experiments with various leavening agents using the scientific processes
(11) The student assesses the reaction of leavening agents in baked products. The student is expected to:	(E) create baked products using various leavening agents	(i) create baked products using various leavening agents
(12) The student explores the roles of food additives. The student is expected to:	(A) evaluate the various types of food additives such as incidental, intentional, natural, and artificial	(i) evaluate the various types of food additives
(12) The student explores the roles of food additives. The student is expected to:	(B) investigate the various roles of food additives such as food preservation, nutritive value, and sensory characteristics	(i) investigate the various roles of food additives
(12) The student explores the roles of food additives. The student is expected to:	(C) research agencies involved in regulating food additives	(i) research agencies involved in regulating food additives
(13) The student analyzes the processes of energy production in food. The student is expected to:	(A) discuss molecular motion and temperature	(i) discuss molecular motion and temperature

Knowledge and Skill Statement	Student Expectation	Breakout
(13) The student analyzes the processes of energy production in food. The student is expected to:	(B) examine heat transfer processes such as conduction, convection, and radiation	(i) examine heat transfer processes
(13) The student analyzes the processes of energy production in food. The student is expected to:	(C) investigate the role of latent heat in phase changes in food production such as crystallization and condensation	(i) investigate the role of latent heat in phase changes in food production
(13) The student analyzes the processes of energy production in food. The student is expected to:	(D) analyze rates of reaction using various temperatures	(i) analyze rates of reaction using various temperatures
(14) The student evaluates the properties of carbohydrates in food and their effects on food production. The student is expected to:	(A) discuss photosynthesis	(i) discuss photosynthesis
(14) The student evaluates the properties of carbohydrates in food and their effects on food production. The student is expected to:	(B) identify the chemical structures of carbohydrates	(i) identify the chemical structures of carbohydrates
(14) The student evaluates the properties of carbohydrates in food and their effects on food production. The student is expected to:	(C) describe the functions of carbohydrates in food production such as a caramelizing agent, crystallizing agent, and thickening agent	(i) describe the functions of carbohydrates in food production
(14) The student evaluates the properties of carbohydrates in food and their effects on food production. The student is expected to:	(D) compare the structures of simple and complex carbohydrates and how these structures affect food production	(i) compare the structures of simple and complex carbohydrates
(14) The student evaluates the properties of carbohydrates in food and their effects on food production. The student is expected to:	(D) compare the structures of simple and complex carbohydrates and how these structures affect food production	(ii) compare how [the structures of simple and complex carbohydrates] affect food production

Knowledge and Skill Statement	Student Expectation	Breakout
(14) The student evaluates the properties of carbohydrates in food and their effects on food production. The student is expected to:	(E) describe various process such as gelatinization, retrogradation, and syneresis in food production	(i) describe various process in food production
(14) The student evaluates the properties of carbohydrates in food and their effects on food production. The student is expected to:	(F) create food products using simple and/or complex carbohydrates	(i) create food products using simple and/or complex carbohydrates
(15) The student evaluates the properties of fats in food and their effects on food production. The student is expected to:	(A) identify the chemical structure of saturated and unsaturated fats	(i) identify the chemical structure of saturated fats
(15) The student evaluates the properties of fats in food and their effects on food production. The student is expected to:	(A) identify the chemical structure of saturated and unsaturated fats	(ii) identify the chemical structure of unsaturated fats
(15) The student evaluates the properties of fats in food and their effects on food production. The student is expected to:	(B) compare the properties of saturated and unsaturated fats	(i) compare the properties of saturated and unsaturated fats
(15) The student evaluates the properties of fats in food and their effects on food production. The student is expected to:	(C) examine the functions of fats in food production	(i) examine the functions of fats in food production
(15) The student evaluates the properties of fats in food and their effects on food production. The student is expected to:	(D) explore methods for controlling fat oxidation	(i) explore methods for controlling fat oxidation

Knowledge and Skill Statement	Student Expectation	Breakout
(15) The student evaluates the properties of fats in food and their effects on food production. The student is expected to:	(E) analyze the effects of temperature on fats in food preparation	(i) analyze the effects of temperature on fats in food preparation
(15) The student evaluates the properties of fats in food and their effects on food production. The student is expected to:	(F) conduct laboratory experiments using the scientific processes to explore the functions of fats in food production	(i) conduct laboratory experiments using the scientific processes to explore the functions of fats in food production
(15) The student evaluates the properties of fats in food and their effects on food production. The student is expected to:	(G) create food products using saturated and unsaturated fats	(i) create food products using saturated fats
(15) The student evaluates the properties of fats in food and their effects on food production. The student is expected to:	(G) create food products using saturated and unsaturated fats	(ii) create food products using unsaturated fats
(16) The student evaluates the properties of proteins and their effects on food production. The student is expected to:	(A) explain the processes of protein denaturation and coagulation	(i) explain the process of protein denaturation
(16) The student evaluates the properties of proteins and their effects on food production. The student is expected to:	(A) explain the processes of protein denaturation and coagulation	(ii) explain the process of protein coagulation
(16) The student evaluates the properties of proteins and their effects on food production. The student is expected to:	(B) examine the functions of proteins in food productions such as emulsifiers, foams, and gluten formation	(i) examine the functions of proteins in food productions

Knowledge and Skill Statement	Student Expectation	Breakout
(16) The student evaluates the properties of proteins and their effects on food production. The student is expected to:	(C) analyze the effect of temperature on protein in food production and storage	(i) analyze the effect of temperature on protein in food production
(16) The student evaluates the properties of proteins and their effects on food production. The student is expected to:	(C) analyze the effect of temperature on protein in food production and storage	(ii) analyze the effect of temperature on protein in food storage
(16) The student evaluates the properties of proteins and their effects on food production. The student is expected to:	(D) explore moist and dry heat methods for preparing protein-rich foods	(i) explore moist methods for preparing protein-rich foods
(16) The student evaluates the properties of proteins and their effects on food production. The student is expected to:	(D) explore moist and dry heat methods for preparing protein-rich foods	(ii) explore dry heat methods for preparing protein-rich foods
(16) The student evaluates the properties of proteins and their effects on food production. The student is expected to:	(E) create food products using protein	(i) create food products using protein
(17) The student evaluates the properties of vitamins and minerals and their effects on food production. The student is expected to:	(A) discuss the functions of vitamins and minerals in food production	(i) discuss the functions of vitamins in food production
(17) The student evaluates the properties of vitamins and minerals and their effects on food production. The student is expected to:	(A) discuss the functions of vitamins and minerals in food production	(ii) discuss the functions of minerals in food production

Knowledge and Skill Statement	Student Expectation	Breakout
(17) The student evaluates the properties of vitamins and minerals and their effects on food production. The student is expected to:	(B) compare the effects of food production on water- and fat-soluble vitamins	(i) compare the effects of food production on water-soluble vitamins
(17) The student evaluates the properties of vitamins and minerals and their effects on food production. The student is expected to:	(B) compare the effects of food production on water- and fat-soluble vitamins	(ii) compare the effects of food production on fat-soluble vitamins
(17) The student evaluates the properties of vitamins and minerals and their effects on food production. The student is expected to:	(C) assess the interrelationships among vitamins and minerals in food production	(i) assess the interrelationships among vitamins and minerals in food production
(18) The student evaluates the properties of water and their effects on food production. The student is expected to:	(A) identify the properties of water	(i) identify the properties of water
(18) The student evaluates the properties of water and their effects on food production. The student is expected to:	(B) compare the effects of hard and soft water on food production	(i) compare the effects of hard and soft water on food production
(18) The student evaluates the properties of water and their effects on food production. The student is expected to:	(C) analyze the phases of water and their effects on food production	(i) analyze the phases of water on food production
(18) The student evaluates the properties of water and their effects on food production. The student is expected to:	(C) analyze the phases of water and their effects on food production	(ii) analyze the effects [of phases of water] on food production

Knowledge and Skill Statement	Student Expectation	Breakout
(18) The student evaluates the properties of water and their effects on food production. The student is expected to:	(D) explain the functions of water in food production such as a heat medium and a solvent and create a food product	(i) explain the functions of water in food production
(18) The student evaluates the properties of water and their effects on food production. The student is expected to:	(D) explain the functions of water in food production such as a heat medium and a solvent and create a food product	(ii) create a food product
(18) The student evaluates the properties of water and their effects on food production. The student is expected to:	(E) conduct laboratory experiments using the scientific processes to explore the functions of water in food productions	(i) conduct laboratory experiments using the scientific processes to explore the functions of water in food productions
(18) The student evaluates the properties of water and their effects on food production. The student is expected to:	(F) create food products using water as a heat medium or a solvent	(i) create food products using water as a heat medium or a solvent
(19) The student analyzes processes that destroy bacteria during food production. The student is expected to:	(A) examine the food irradiation process	(i) examine the food irradiation process
(19) The student analyzes processes that destroy bacteria during food production. The student is expected to:	(B) investigate the pasteurization process	(i) investigate the pasteurization process
(20) The student examines packaging and labeling guidelines. The student is expected to:	(A) research federal food packaging guidelines	(i) research federal food packaging guidelines
(20) The student examines packaging and labeling guidelines. The student is expected to:	(B) analyze components of appropriate commercial food containers	(i) analyze components of appropriate commercial food containers

Knowledge and Skill Statement	Student Expectation	Breakout
(20) The student examines packaging and labeling guidelines. The student is expected to:	(C) describe controlled-atmosphere packaging	(i) describe controlled-atmosphere packaging
(20) The student examines packaging and labeling guidelines. The student is expected to:	(D) describe information required on a food label	(i) describe information required on a food label
(21) The student analyzes food preservation processes. The student is expected to:	(A) describe reasons for food preservation	(i) describe reasons for food preservation
(21) The student analyzes food preservation processes. The student is expected to:	(B) compare methods of dehydration and create a food product using dehydration	(i) compare methods of dehydration
(21) The student analyzes food preservation processes. The student is expected to:	(B) compare methods of dehydration and create a food product using dehydration	(ii) create a food product using dehydration
(21) The student analyzes food preservation processes. The student is expected to:	(C) analyze various methods of personal and commercial food canning	(i) analyze various methods of personal food canning
(21) The student analyzes food preservation processes. The student is expected to:	(C) analyze various methods of personal and commercial food canning	(ii) analyze various methods of commercial food canning
(21) The student analyzes food preservation processes. The student is expected to:	(D) examine the various methods of personal and commercial food freezing	(i) examine the various methods of personal food freezing
(21) The student analyzes food preservation processes. The student is expected to:	(D) examine the various methods of personal and commercial food freezing	(ii) examine the various methods of commercial food freezing

Subject	Chapter 130. Career and Technical Education, Subchapter I. Hospitality and Tourism
Course Title	§130.257. Practicum in Culinary Arts (Two Credits), Adopted 2015.
<p>(a) General Requirements. This course is recommended for students in Grades 11 and 12. Prerequisite: Culinary Arts. Students shall be awarded two credits for successful completion of this course. A student may repeat this course once for credit provided that the student is experiencing different aspects of the industry and demonstrating proficiency in additional and more advanced knowledge and skills.</p>	
<p>(b) Introduction.</p>	
<p>(1) Career and technical education instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.</p> <p>(2) The Hospitality and Tourism Career Cluster focuses on the management, marketing, and operations of restaurants and other food/beverage services, lodging, attractions, recreation events, and travel-related services.</p> <p>(3) Practicum in Culinary Arts is a unique practicum that provides occupationally specific opportunities for students to participate in a learning experience that combines classroom instruction with actual business and industry career experiences. Practicum in Culinary Arts integrates academic and career and technical education; provides more interdisciplinary instruction; and supports strong partnerships among schools, businesses, and community institutions with the goal of preparing students with a variety of skills in a fast-changing workplace.</p> <p>(4) Students are taught employability skills to prepare for college and career success, which include job-specific skills applicable to their training plan, job interview techniques, communication skills, financial and budget activities, human relations, and portfolio development.</p> <p>(5) Instructions may be delivered through school-based laboratory training or through work-based delivery arrangement such as cooperative education, mentoring, and job shadowing.</p> <p>(6) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.</p> <p>(7) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.</p>	

(c) Knowledge and Skills.		
Knowledge and Skill Statement	Student Expectation	Breakout
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(A) model effective oral and written communication	(i) model effective oral communication
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(A) model effective oral and written communication	(ii) model effective written communication
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(B) practice professional grooming and hygiene standards	(i) practice professional grooming standards
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(B) practice professional grooming and hygiene standards	(ii) practice professional hygiene standards
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(C) exercise punctuality and time-management skills	(i) exercise punctuality
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(C) exercise punctuality and time-management skills	(ii) exercise time-management skills

Knowledge and Skill Statement	Student Expectation	Breakout
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(D) demonstrate self-respect and respect for others	(i) demonstrate self-respect
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(D) demonstrate self-respect and respect for others	(ii) demonstrate respect for others
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(E) demonstrate effective teamwork and leadership	(i) demonstrate effective teamwork
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(E) demonstrate effective teamwork and leadership	(ii) demonstrate effective leadership
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(F) employ initiative, adaptability, and problem-solving techniques in practical applications	(i) employ initiative in practical applications
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(F) employ initiative, adaptability, and problem-solving techniques in practical applications	(ii) employ adaptability in practical applications
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(F) employ initiative, adaptability, and problem-solving techniques in practical applications	(iii) employ problem-solving techniques in practical applications

Knowledge and Skill Statement	Student Expectation	Breakout
(2) The student uses employability skills to gain an entry-level job in a high-skill, high-wage, or high-demand field. The student is expected to:	(A) identify employment opportunities	(i) identify employment opportunities
(2) The student uses employability skills to gain an entry-level job in a high-skill, high-wage, or high-demand field. The student is expected to:	(B) demonstrate the application of essential workplace skills in the career acquisition process	(i) demonstrate the application of essential workplace skills in the career acquisition process
(2) The student uses employability skills to gain an entry-level job in a high-skill, high-wage, or high-demand field. The student is expected to:	(C) complete employment-related documents such as job applications, I-9 and W-4 forms, and job descriptions	(i) complete employment-related documents
(2) The student uses employability skills to gain an entry-level job in a high-skill, high-wage, or high-demand field. The student is expected to:	(D) demonstrate proper interview techniques in various situations	(i) demonstrate proper interview techniques in various situations
(3) The student develops skills for success in the workplace. The student is expected to:	(A) comprehend and model appropriate grooming and appearance for the workplace	(i) comprehend appropriate grooming for the workplace
(3) The student develops skills for success in the workplace. The student is expected to:	(A) comprehend and model appropriate grooming and appearance for the workplace	(ii) comprehend appropriate appearance for the workplace
(3) The student develops skills for success in the workplace. The student is expected to:	(A) comprehend and model appropriate grooming and appearance for the workplace	(iii) model appropriate grooming for the workplace
(3) The student develops skills for success in the workplace. The student is expected to:	(A) comprehend and model appropriate grooming and appearance for the workplace	(iv) model appropriate appearance for the workplace

Knowledge and Skill Statement	Student Expectation	Breakout
(3) The student develops skills for success in the workplace. The student is expected to:	(B) demonstrate dependability, punctuality, and initiative	(i) demonstrate dependability
(3) The student develops skills for success in the workplace. The student is expected to:	(B) demonstrate dependability, punctuality, and initiative	(ii) demonstrate punctuality
(3) The student develops skills for success in the workplace. The student is expected to:	(B) demonstrate dependability, punctuality, and initiative	(iii) demonstrate initiative
(3) The student develops skills for success in the workplace. The student is expected to:	(C) develop positive interpersonal skills, including respect for diversity	(i) develop positive interpersonal skills, including respect for diversity
(3) The student develops skills for success in the workplace. The student is expected to:	(D) demonstrate appropriate business and personal etiquette in the workplace	(i) demonstrate appropriate business etiquette in the workplace
(3) The student develops skills for success in the workplace. The student is expected to:	(D) demonstrate appropriate business and personal etiquette in the workplace	(ii) demonstrate appropriate personal etiquette in the workplace
(3) The student develops skills for success in the workplace. The student is expected to:	(E) exhibit productive work habits, ethical practices, and a positive attitude	(i) exhibit productive work habits
(3) The student develops skills for success in the workplace. The student is expected to:	(E) exhibit productive work habits, ethical practices, and a positive attitude	(ii) exhibit ethical practices
(3) The student develops skills for success in the workplace. The student is expected to:	(E) exhibit productive work habits, ethical practices, and a positive attitude	(iii) exhibit a positive attitude

Knowledge and Skill Statement	Student Expectation	Breakout
(3) The student develops skills for success in the workplace. The student is expected to:	(F) demonstrate knowledge of personal and occupational health and safety practices in the workplace	(i) demonstrate knowledge of personal health practices in the workplace
(3) The student develops skills for success in the workplace. The student is expected to:	(F) demonstrate knowledge of personal and occupational health and safety practices in the workplace	(ii) demonstrate knowledge of occupational health practices in the workplace
(3) The student develops skills for success in the workplace. The student is expected to:	(F) demonstrate knowledge of personal and occupational health and safety practices in the workplace	(iii) demonstrate knowledge of personal safety practices in the workplace
(3) The student develops skills for success in the workplace. The student is expected to:	(F) demonstrate knowledge of personal and occupational health and safety practices in the workplace	(iv) demonstrate knowledge of occupational safety practices in the workplace
(3) The student develops skills for success in the workplace. The student is expected to:	(G) demonstrate the ability to work with the other employees to support the organization and complete assigned tasks	(i) demonstrate the ability to work with the other employees to support the organization
(3) The student develops skills for success in the workplace. The student is expected to:	(G) demonstrate the ability to work with the other employees to support the organization and complete assigned tasks	(ii) demonstrate the ability to work with the other employees to complete assigned tasks
(3) The student develops skills for success in the workplace. The student is expected to:	(H) prioritize work to fulfill responsibilities and meet deadlines	(i) prioritize work to fulfill responsibilities

Knowledge and Skill Statement	Student Expectation	Breakout
(3) The student develops skills for success in the workplace. The student is expected to:	(H) prioritize work to fulfill responsibilities and meet deadlines	(ii) prioritize work to meet deadlines
(3) The student develops skills for success in the workplace. The student is expected to:	(I) evaluate the relationship of good physical and mental health to job success and personal achievement	(i) evaluate the relationship of good physical health to job success
(3) The student develops skills for success in the workplace. The student is expected to:	(I) evaluate the relationship of good physical and mental health to job success and personal achievement	(ii) evaluate the relationship of good mental health to job success
(3) The student develops skills for success in the workplace. The student is expected to:	(I) evaluate the relationship of good physical and mental health to job success and personal achievement	(iii) evaluate the relationship of good physical health to personal achievement
(3) The student develops skills for success in the workplace. The student is expected to:	(I) evaluate the relationship of good physical and mental health to job success and personal achievement	(iv) evaluate the relationship of good mental health to personal achievement
(3) The student develops skills for success in the workplace. The student is expected to:	(J) demonstrate effective verbal, non-verbal, written, and electronic communication skills	(i) demonstrate effective verbal communication skills
(3) The student develops skills for success in the workplace. The student is expected to:	(J) demonstrate effective verbal, non-verbal, written, and electronic communication skills	(ii) demonstrate effective non-verbal communication skills
(3) The student develops skills for success in the workplace. The student is expected to:	(J) demonstrate effective verbal, non-verbal, written, and electronic communication skills	(iii) demonstrate effective written communication skills

Knowledge and Skill Statement	Student Expectation	Breakout
(3) The student develops skills for success in the workplace. The student is expected to:	(J) demonstrate effective verbal, non-verbal, written, and electronic communication skills	(iv) demonstrate effective electronic communication skills
(3) The student develops skills for success in the workplace. The student is expected to:	(K) apply effective listening skills used in the workplace	(i) apply effective listening skills used in the workplace
(4) The student demonstrates work ethics, employer expectations, interaction with diverse populations, and communication skills in the workplace. The student is expected to:	(A) relate how personal integrity affects human relations on the job	(i) relate how personal integrity affects human relations on the job
(4) The student demonstrates work ethics, employer expectations, interaction with diverse populations, and communication skills in the workplace. The student is expected to:	(B) demonstrate characteristics of successful working relationships such as teamwork, conflict resolution, self-control, and the ability to accept criticism	(i) demonstrate characteristics of successful working relationships
(4) The student demonstrates work ethics, employer expectations, interaction with diverse populations, and communication skills in the workplace. The student is expected to:	(C) implement employer expectations	(i) implement employer expectations
(4) The student demonstrates work ethics, employer expectations, interaction with diverse populations, and communication skills in the workplace. The student is expected to:	(D) demonstrate respect for the rights of others	(i) demonstrate respect for the rights of others

Knowledge and Skill Statement	Student Expectation	Breakout
(4) The student demonstrates work ethics, employer expectations, interaction with diverse populations, and communication skills in the workplace. The student is expected to:	(E) demonstrate ethical standards	(i) demonstrate ethical standards
(4) The student demonstrates work ethics, employer expectations, interaction with diverse populations, and communication skills in the workplace. The student is expected to:	(F) comply with organizational policies	(i) comply with organizational policies
(5)The student applies academics and job-readiness skills. The student is expected to:	(A) apply mathematical skills to business transactions	(i) apply mathematical skills to business transactions
(5)The student applies academics and job-readiness skills. The student is expected to:	(B) develop a personal budget based on career choice	(i) develop a personal budget based on career choice
(5)The student applies academics and job-readiness skills. The student is expected to:	(C) interpret data from documents such as tables, charts, and graphs to estimate and find solutions to problems	(i) interpret data from documents to estimate and find solutions to problems
(5)The student applies academics and job-readiness skills. The student is expected to:	(D) organize and compose workplace documents	(i) organize workplace documents
(5)The student applies academics and job-readiness skills. The student is expected to:	(D) organize and compose workplace documents	(ii) compose workplace documents

Knowledge and Skill Statement	Student Expectation	Breakout
(6) The student applies ethical behavior standards and legal responsibilities within the workplace. The student is expected to:	(A) compare workplace policies reflecting various business establishments	(i) compare workplace policies reflecting various business establishments
(6) The student applies ethical behavior standards and legal responsibilities within the workplace. The student is expected to:	(B) apply responsible and ethical behavior	(i) apply responsible behavior
(6) The student applies ethical behavior standards and legal responsibilities within the workplace. The student is expected to:	(B) apply responsible and ethical behavior	(ii) apply ethical behavior
(6) The student applies ethical behavior standards and legal responsibilities within the workplace. The student is expected to:	(C) summarize provisions of the Fair Labor Standards Act	(i) summarize provisions of the Fair Labor Standards Act
(6) The student applies ethical behavior standards and legal responsibilities within the workplace. The student is expected to:	(D) describe the consequences of breach of confidentiality	(i) describe the consequences of breach of confidentiality
(6) The student applies ethical behavior standards and legal responsibilities within the workplace. The student is expected to:	(E) research and model laws related to culinary arts professions	(i) research laws related to culinary arts professions
(6) The student applies ethical behavior standards and legal responsibilities within the workplace. The student is expected to:	(E) research and model laws related to culinary arts professions	(ii) model laws related to culinary arts professions

Knowledge and Skill Statement	Student Expectation	Breakout
(7) The student applies the use of interpersonal skills to accomplish objectives. The student is expected to:	(A) identify and practice effective interpersonal and team-building skills involving situations with coworkers, managers, and customers	(i) identify effective interpersonal skills involving situations with coworkers
(7) The student applies the use of interpersonal skills to accomplish objectives. The student is expected to:	(A) identify and practice effective interpersonal and team-building skills involving situations with coworkers, managers, and customers	(ii) identify effective interpersonal skills involving situations with managers
(7) The student applies the use of interpersonal skills to accomplish objectives. The student is expected to:	(A) identify and practice effective interpersonal and team-building skills involving situations with coworkers, managers, and customers	(iii) identify effective interpersonal skills involving situations with customers
(7) The student applies the use of interpersonal skills to accomplish objectives. The student is expected to:	(A) identify and practice effective interpersonal and team-building skills involving situations with coworkers, managers, and customers	(iv) practice effective interpersonal skills involving situations with coworkers
(7) The student applies the use of interpersonal skills to accomplish objectives. The student is expected to:	(A) identify and practice effective interpersonal and team-building skills involving situations with coworkers, managers, and customers	(v) practice effective interpersonal skills involving situations with managers
(7) The student applies the use of interpersonal skills to accomplish objectives. The student is expected to:	(A) identify and practice effective interpersonal and team-building skills involving situations with coworkers, managers, and customers	(vi) practice effective interpersonal skills involving situations with customers
(7) The student applies the use of interpersonal skills to accomplish objectives. The student is expected to:	(A) identify and practice effective interpersonal and team-building skills involving situations with coworkers, managers, and customers	(vii) identify effective team-building skills involving situations with coworkers

Knowledge and Skill Statement	Student Expectation	Breakout
(7) The student applies the use of interpersonal skills to accomplish objectives. The student is expected to:	(A) identify and practice effective interpersonal and team-building skills involving situations with coworkers, managers, and customers	(viii) identify effective team-building skills involving situations with managers
(7) The student applies the use of interpersonal skills to accomplish objectives. The student is expected to:	(A) identify and practice effective interpersonal and team-building skills involving situations with coworkers, managers, and customers	(ix) identify effective teambuilding skills involving situations with customers
(7) The student applies the use of interpersonal skills to accomplish objectives. The student is expected to:	(A) identify and practice effective interpersonal and team-building skills involving situations with coworkers, managers, and customers	(x) practice effective team-building skills involving situations with coworkers
(7) The student applies the use of interpersonal skills to accomplish objectives. The student is expected to:	(A) identify and practice effective interpersonal and team-building skills involving situations with coworkers, managers, and customers	(xi) practice effective team-building skills involving situations with managers
(7) The student applies the use of interpersonal skills to accomplish objectives. The student is expected to:	(A) identify and practice effective interpersonal and team-building skills involving situations with coworkers, managers, and customers	(xii) practice effective team-building skills involving situations with customers
(7) The student applies the use of interpersonal skills to accomplish objectives. The student is expected to:	(B) apply leadership and career development skills through participation in activities such as career and technical student organizations	(i) apply leadership skills through participation in activities
(7) The student applies the use of interpersonal skills to accomplish objectives. The student is expected to:	(B) apply leadership and career development skills through participation in activities such as career and technical student organizations	(ii) apply career development skills through participation in activities

Knowledge and Skill Statement	Student Expectation	Breakout
(8) The student uses concepts and skills related to safety in the workplace. The student is expected:	(A) identify and apply safe working practices	(i) identify safe working practices
(8) The student uses concepts and skills related to safety in the workplace. The student is expected:	(A) identify and apply safe working practices	(ii) apply safe working practices
(8) The student uses concepts and skills related to safety in the workplace. The student is expected:	(B) solve problems related to unsafe work practices and attitudes	(i) solve problems related to unsafe work practices
(8) The student uses concepts and skills related to safety in the workplace. The student is expected:	(B) solve problems related to unsafe work practices and attitudes	(ii) solve problems related to unsafe work attitudes
(8) The student uses concepts and skills related to safety in the workplace. The student is expected:	(C) explain Occupational Safety and Health Administration regulations in the workplace	(i) explain Occupational Safety and Health Administration regulations in the workplace
(8) The student uses concepts and skills related to safety in the workplace. The student is expected:	(D) analyze health and wellness practices that influence job performance	(i) analyze health practices that influence job performance
(8) The student uses concepts and skills related to safety in the workplace. The student is expected:	(D) analyze health and wellness practices that influence job performance	(ii) analyze wellness practices that influence job performance
(8) The student uses concepts and skills related to safety in the workplace. The student is expected:	(E) prepare for a state or national food sanitation certification or other appropriate certification	(i) prepare for a state or national food sanitation certification or other appropriate certification

Knowledge and Skill Statement	Student Expectation	Breakout
(9) The student evaluates personal attitudes and work habits that support career retention and advancement. The student is expected to:	(A) analyze the future employment outlook in the occupational area	(i) analyze the future employment outlook in the occupational area
(9) The student evaluates personal attitudes and work habits that support career retention and advancement. The student is expected to:	(B) describe entrepreneurial opportunities in the area of culinary arts	(i) describe entrepreneurial opportunities in the area of culinary arts
(9) The student evaluates personal attitudes and work habits that support career retention and advancement. The student is expected to:	(C) evaluate nontraditional food service careers such as food photographer, food stylist, corporate research and development chef, food writer, and independent consultant	(i) evaluate nontraditional food service careers
(9) The student evaluates personal attitudes and work habits that support career retention and advancement. The student is expected to:	(D) identify all of the aspects of a specific career path including salary, skills level, and advancement opportunities	(i) identify all of the aspects of a specific career path including salary
(9) The student evaluates personal attitudes and work habits that support career retention and advancement. The student is expected to:	(D) identify all of the aspects of a specific career path including salary, skills level, and advancement opportunities	(ii) identify all of the aspects of a specific career path including skills level
(9) The student evaluates personal attitudes and work habits that support career retention and advancement. The student is expected to:	(D) identify all of the aspects of a specific career path including salary, skills level, and advancement opportunities	(iii) identify all of the aspects of a specific career path including advancement opportunities
(9) The student evaluates personal attitudes and work habits that support career retention and advancement. The student is expected to:	(E) evaluate strategies for career retention and advancement in response to the changing hospitality industry	(i) evaluate strategies for career retention in response to the changing hospitality industry

Knowledge and Skill Statement	Student Expectation	Breakout
(9) The student evaluates personal attitudes and work habits that support career retention and advancement. The student is expected to:	(E) evaluate strategies for career retention and advancement in response to the changing hospitality industry	(ii) evaluate strategies for career advancement in response to the changing hospitality industry
(9) The student evaluates personal attitudes and work habits that support career retention and advancement. The student is expected to:	(F) compare and contrast the rights and responsibilities of employers and employees	(i) compare and contrast the rights of employers and employees
(9) The student evaluates personal attitudes and work habits that support career retention and advancement. The student is expected to:	(F) compare and contrast the rights and responsibilities of employers and employees	(ii) compare and contrast the responsibilities of employers and employees
(9) The student evaluates personal attitudes and work habits that support career retention and advancement. The student is expected to:	(G) determine effective money management and financial planning techniques	(i) determine effective money management techniques
(9) The student evaluates personal attitudes and work habits that support career retention and advancement. The student is expected to:	(G) determine effective money management and financial planning techniques	(ii) determine effective financial planning techniques
(10) The student identifies skills and attributes necessary for professional advancement. The student is expected to:	(A) evaluate employment options, including salaries and benefits	(i) evaluate employment options, including salaries
(10) The student identifies skills and attributes necessary for professional advancement. The student is expected to:	(A) evaluate employment options, including salaries and benefits	(ii) evaluate employment options, including benefits

Knowledge and Skill Statement	Student Expectation	Breakout
(10) The student identifies skills and attributes necessary for professional advancement. The student is expected to:	(B) determine factors that affect career choices such as personal interests, abilities, priorities, and family responsibilities	(i) determine factors that affect career choices
(10) The student identifies skills and attributes necessary for professional advancement. The student is expected to:	(C) determine continuing education opportunities that enhance career advancement and promote lifelong learning	(i) determine continuing education opportunities that enhance career advancement
(10) The student identifies skills and attributes necessary for professional advancement. The student is expected to:	(C) determine continuing education opportunities that enhance career advancement and promote lifelong learning	(ii) determine continuing education opportunities that promote lifelong learning
(10) The student identifies skills and attributes necessary for professional advancement. The student is expected to:	(D) demonstrate effective methods to secure, maintain, and terminate employment	(i) demonstrate effective methods to secure employment
(10) The student identifies skills and attributes necessary for professional advancement. The student is expected to:	(D) demonstrate effective methods to secure, maintain, and terminate employment	(ii) demonstrate effective methods to maintain employment
(10) The student identifies skills and attributes necessary for professional advancement. The student is expected to:	(D) demonstrate effective methods to secure, maintain, and terminate employment	(iii) demonstrate effective methods terminate employment
(11) The student demonstrates proper culinary techniques and knowledge of the professional kitchen. The student is expected to:	(A) use large and small equipment in a commercial kitchen	(i) use large equipment in a commercial kitchen

Knowledge and Skill Statement	Student Expectation	Breakout
(11) The student demonstrates proper culinary techniques and knowledge of the professional kitchen. The student is expected to:	(A) use large and small equipment in a commercial kitchen	(ii) use small equipment in a commercial kitchen
(11) The student demonstrates proper culinary techniques and knowledge of the professional kitchen. The student is expected to:	(B) develop food production and presentation techniques	(i) develop food production techniques
(11) The student demonstrates proper culinary techniques and knowledge of the professional kitchen. The student is expected to:	(B) develop food production and presentation techniques	(ii) develop food presentation techniques
(11) The student demonstrates proper culinary techniques and knowledge of the professional kitchen. The student is expected to:	(C) demonstrate moist, dry, and combination cookery methods	(i) demonstrate moist cookery methods
(11) The student demonstrates proper culinary techniques and knowledge of the professional kitchen. The student is expected to:	(C) demonstrate moist, dry, and combination cookery methods	(ii) demonstrate dry cookery methods
(11) The student demonstrates proper culinary techniques and knowledge of the professional kitchen. The student is expected to:	(C) demonstrate moist, dry, and combination cookery methods	(iii) demonstrate combination cookery methods

Knowledge and Skill Statement	Student Expectation	Breakout
(11) The student demonstrates proper culinary techniques and knowledge of the professional kitchen. The student is expected to:	(D) demonstrate food preparation skills used in commercial food service preparations such as breakfast cookery, salads and dressings, soups and sandwiches, stocks and sauces, appetizers, seafood, poultry cookery, meat cookery, pastas and grains, and fruits and vegetables	(i) demonstrate food preparation skills used in commercial food service preparations
(11) The student demonstrates proper culinary techniques and knowledge of the professional kitchen. The student is expected to:	(E) demonstrate baking techniques such as yeast breads and rolls, quick breads, and desserts	(i) demonstrate baking techniques
(11) The student demonstrates proper culinary techniques and knowledge of the professional kitchen. The student is expected to:	(F) demonstrate proper receiving and storage techniques	(i) demonstrate proper receiving techniques
(11) The student demonstrates proper culinary techniques and knowledge of the professional kitchen. The student is expected to:	(F) demonstrate proper receiving and storage techniques	(ii) demonstrate proper storage techniques
(11) The student demonstrates proper culinary techniques and knowledge of the professional kitchen. The student is expected to:	(G) demonstrate proper cleaning of equipment and maintenance of the commercial kitchen	(i) demonstrate proper cleaning of equipment
(11) The student demonstrates proper culinary techniques and knowledge of the professional kitchen. The student is expected to:	(G) demonstrate proper cleaning of equipment and maintenance of the commercial kitchen	(ii) demonstrate proper maintenance of the commercial kitchen

Knowledge and Skill Statement	Student Expectation	Breakout
(11) The student demonstrates proper culinary techniques and knowledge of the professional kitchen. The student is expected to:	(H) compare and contrast the pairing of cuisine and service styles in food service operations	(i) compare and contrast the pairing of cuisine in food service operations
(11) The student demonstrates proper culinary techniques and knowledge of the professional kitchen. The student is expected to:	(H) compare and contrast the pairing of cuisine and service styles in food service operations	(ii) compare and contrast the service styles in food service operations
(12) The student determines how successful marketing impacts a food service operation. The student is expected to:	(A) explain marketing, product, service, presentation, and communication mixes	(i) explain marketing mixes
(12) The student determines how successful marketing impacts a food service operation. The student is expected to:	(A) explain marketing, product, service, presentation, and communication mixes	(ii) explain product mixes
(12) The student determines how successful marketing impacts a food service operation. The student is expected to:	(A) explain marketing, product, service, presentation, and communication mixes	(iii) explain service mixes
(12) The student determines how successful marketing impacts a food service operation. The student is expected to:	(A) explain marketing, product, service, presentation, and communication mixes	(iv) explain presentation mixes
(12) The student determines how successful marketing impacts a food service operation. The student is expected to:	(A) explain marketing, product, service, presentation, and communication mixes	(v) explain communication mixes

Knowledge and Skill Statement	Student Expectation	Breakout
(12) The student determines how successful marketing impacts a food service operation. The student is expected to:	(B) generate a marketing plan for multiple food service operations	(i) generate a marketing plan for multiple food service operations
(12) The student determines how successful marketing impacts a food service operation. The student is expected to:	(C) evaluate the marketing plans based on various demographics	(i) evaluate the marketing plans based on various demographics
(12) The student determines how successful marketing impacts a food service operation. The student is expected to:	(D) conduct market analysis and predict impact on current economy	(i) conduct market analysis
(12) The student determines how successful marketing impacts a food service operation. The student is expected to:	(D) conduct market analysis and predict impact on current economy	(ii) predict impact on current economy
(12) The student determines how successful marketing impacts a food service operation. The student is expected to:	(E) identify marketing communication formats across multiple platforms	(i) identify marketing communication formats across multiple platforms
(12) The student determines how successful marketing impacts a food service operation. The student is expected to:	(F) design the menu as a marketing tool	(i) design the menu as a marketing tool

Knowledge and Skill Statement	Student Expectation	Breakout
(13) The student documents technical knowledge and skills. The student is expected to:	(A) complete a professional career portfolio to include items such as an updated resume, documentation of technical skill competencies, licensures or certifications, recognitions, awards and scholarships, community service hours, participation in student and professional organizations, abstract of key points of the practicum, and practicum supervisor evaluations	(i) complete a professional career portfolio
(13) The student documents technical knowledge and skills. The student is expected to:	(B) present the portfolio to interested stakeholders	(i) present the portfolio to interested stakeholders

Subject	Chapter 130. Career and Technical Education, Subchapter I. Hospitality and Tourism
Course Title	§130.258. Travel and Tourism Management (One Credit), Adopted 2015.
<p>(a) General Requirements. This course is recommended for students in Grades 10-12. Recommended prerequisite: Principles of Hospitality and Tourism. Students shall be awarded one credit for successful completion of this course.</p>	
<p>(b) Introduction.</p>	
<p>(1) Career and technical education instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.</p> <p>(2) The Hospitality and Tourism Career Cluster focuses on the management, marketing, and operations of restaurants and other food/beverage services, lodging, attractions, recreation events and travel-related services.</p> <p>(3) Travel and Tourism Management incorporates management principles and procedures of the travel and tourism industry as well as destination geography, airlines, international travel, cruising, travel by rail, lodging, recreation, amusements, attractions, and resorts. Employment qualifications and opportunities are also included in this course.</p> <p>(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.</p> <p>(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.</p>	

(c) Knowledge and Skills.		
Knowledge and Skill Statement	Student Expectation	Breakout
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(A) formulate and organize oral and written information	(i) formulate oral information
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(A) formulate and organize oral and written information	(ii) formulate written information
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(A) formulate and organize oral and written information	(iii) organize oral information
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(A) formulate and organize oral and written information	(iv) organize written information
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(B) compose a variety of written documents used in travel and tourism such as itineraries, thank you letters, presentations, and advertisements	(i) compose a variety of written documents used in travel and tourism
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(C) differentiate and deliver different types of presentations such as informative, instructional, persuasive, and decision making	(i) differentiate different types of presentations

Knowledge and Skill Statement	Student Expectation	Breakout
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(C) differentiate and deliver different types of presentations such as informative, instructional, persuasive, and decision making	(ii) deliver different types of presentations
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(D) calculate basic math and percentages	(i) calculate basic math
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(D) calculate basic math and percentages	(ii) calculate percentages
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(E) investigate geography and factors that affect the travel and tourism industry	(i) investigate geography
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(E) investigate geography and factors that affect the travel and tourism industry	(ii) investigate factors that affect the travel and tourism industry
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(F) summarize how to use the state of the economy to plan products and services	(i) summarize how to use the state of the economy to plan products
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(F) summarize how to use the state of the economy to plan products and services	(ii) summarize how to use the state of the economy to plan services

Knowledge and Skill Statement	Student Expectation	Breakout
(2) The student uses oral and written communication skills in creating, expressing, and interpreting information and ideas, including technical terminology and information. The student is expected to:	(A) select and employ verbal skills when obtaining and conveying information	(i) select verbal skills when obtaining information
(2) The student uses oral and written communication skills in creating, expressing, and interpreting information and ideas, including technical terminology and information. The student is expected to:	(A) select and employ verbal skills when obtaining and conveying information	(ii) select verbal skills when conveying information
(2) The student uses oral and written communication skills in creating, expressing, and interpreting information and ideas, including technical terminology and information. The student is expected to:	(A) select and employ verbal skills when obtaining and conveying information	(iii) employ verbal skills when obtaining information
(2) The student uses oral and written communication skills in creating, expressing, and interpreting information and ideas, including technical terminology and information. The student is expected to:	(A) select and employ verbal skills when obtaining and conveying information	(iv) employ verbal skills when conveying information
(2) The student uses oral and written communication skills in creating, expressing, and interpreting information and ideas, including technical terminology and information. The student is expected to:	(B) use verbal and nonverbal communication skills effectively with diverse constituents	(i) use verbal communication skills effectively with diverse constituents
(2) The student uses oral and written communication skills in creating, expressing, and interpreting information and ideas, including technical terminology and information. The student is expected to:	(B) use verbal and nonverbal communication skills effectively with diverse constituents	(ii) use nonverbal communication skills effectively with diverse constituents

Knowledge and Skill Statement	Student Expectation	Breakout
(2) The student uses oral and written communication skills in creating, expressing, and interpreting information and ideas, including technical terminology and information. The student is expected to:	(C) develop and deliver presentations using appropriate technology such as to engage, inform, and persuade audiences	(i) develop presentations using appropriate technology
(2) The student uses oral and written communication skills in creating, expressing, and interpreting information and ideas, including technical terminology and information. The student is expected to:	(C) develop and deliver presentations using appropriate technology such as to engage, inform, and persuade audiences	(ii) deliver presentations using appropriate technology
(3) The student solves problems independently and in teams using critical-thinking skills. The student is expected to:	(A) generate creative ideas by brainstorming possible solutions	(i) generate creative ideas by brainstorming possible solutions
(3) The student solves problems independently and in teams using critical-thinking skills. The student is expected to:	(B) guide individuals through the process of making informed travel decisions	(i) guide individuals through the process of making informed travel decisions
(3) The student solves problems independently and in teams using critical-thinking skills. The student is expected to:	(C) interpret and use industry standards for principles of budgeting and forecasting to maximize profit and growth	(i) interpret industry standards for principles of budgeting to maximize profit
(3) The student solves problems independently and in teams using critical-thinking skills. The student is expected to:	(C) interpret and use industry standards for principles of budgeting and forecasting to maximize profit and growth	(ii) interpret industry standards for principles of budgeting to maximize growth

Knowledge and Skill Statement	Student Expectation	Breakout
(3) The student solves problems independently and in teams using critical-thinking skills. The student is expected to:	(C) interpret and use industry standards for principles of budgeting and forecasting to maximize profit and growth	(iii) interpret industry standards for principles of forecasting to maximize profit
(3) The student solves problems independently and in teams using critical-thinking skills. The student is expected to:	(C) interpret and use industry standards for principles of budgeting and forecasting to maximize profit and growth	(iv) interpret industry standards for principles of forecasting to maximize growth
(3) The student solves problems independently and in teams using critical-thinking skills. The student is expected to:	(C) interpret and use industry standards for principles of budgeting and forecasting to maximize profit and growth	(v) use industry standards for principles of budgeting to maximize profit
(3) The student solves problems independently and in teams using critical-thinking skills. The student is expected to:	(C) interpret and use industry standards for principles of budgeting and forecasting to maximize profit and growth	(vi) use industry standards for principles of budgeting to maximize growth
(3) The student solves problems independently and in teams using critical-thinking skills. The student is expected to:	(C) interpret and use industry standards for principles of budgeting and forecasting to maximize profit and growth	(vii) use industry standards for principles of forecasting to maximize profit
(3) The student solves problems independently and in teams using critical-thinking skills. The student is expected to:	(C) interpret and use industry standards for principles of budgeting and forecasting to maximize profit and growth	(viii) use industry standards for principles of forecasting to maximize growth
(3) The student solves problems independently and in teams using critical-thinking skills. The student is expected to:	(D) analyze customer comments to formulate improvements in services and products	(i) analyze customer comments to formulate improvements in services

Knowledge and Skill Statement	Student Expectation	Breakout
(3) The student solves problems independently and in teams using critical-thinking skills. The student is expected to:	(D) analyze customer comments to formulate improvements in services and products	(ii) analyze customer comments to formulate improvements in products
(4) The student uses information technology tools specific to the travel and tourism industry to access, manage, integrate, and create information. The student is expected to:	(A) operate and use technological applications to communicate within a workplace and perform a task	(i) operate technological applications to communicate within a workplace
(4) The student uses information technology tools specific to the travel and tourism industry to access, manage, integrate, and create information. The student is expected to:	(A) operate and use technological applications to communicate within a workplace and perform a task	(ii) use technological applications to communicate within a workplace
(4) The student uses information technology tools specific to the travel and tourism industry to access, manage, integrate, and create information. The student is expected to:	(A) operate and use technological applications to communicate within a workplace and perform a task	(iii) operate technological applications to perform a task
(4) The student uses information technology tools specific to the travel and tourism industry to access, manage, integrate, and create information. The student is expected to:	(A) operate and use technological applications to communicate within a workplace and perform a task	(iv) use technological applications to perform a task
(4) The student uses information technology tools specific to the travel and tourism industry to access, manage, integrate, and create information. The student is expected to:	(B) distinguish among the different modes of travel such as airline, cruise line, road travel, and rail	(i) distinguish among the different modes of travel

Knowledge and Skill Statement	Student Expectation	Breakout
(4) The student uses information technology tools specific to the travel and tourism industry to access, manage, integrate, and create information. The student is expected to:	(C) differentiate among recreation such as amusement, attractions, and resort venues	(i) differentiate among recreation
(4) The student uses information technology tools specific to the travel and tourism industry to access, manage, integrate, and create information. The student is expected to:	(D) research travel arrangement systems used for booking reservations	(i) research travel arrangement systems used for booking reservations
(4) The student uses information technology tools specific to the travel and tourism industry to access, manage, integrate, and create information. The student is expected to:	(E) create basic multimedia publications	(i) create basic multimedia publications
(5) The student understands roles within teams, work units, departments, organizations, inter-organization systems, and the larger environment of the travel and tourism industry. The student is expected to:	(A) explain the functions and interactions of various departments within a travel and tourism business	(i) explain the functions of various departments within a travel and tourism business
(5) The student understands roles within teams, work units, departments, organizations, inter-organization systems, and the larger environment of the travel and tourism industry. The student is expected to:	(A) explain the functions and interactions of various departments within a travel and tourism business	(ii) explain the interactions of various departments within a travel and tourism business
(5) The student understands roles within teams, work units, departments, organizations, inter-organization systems, and the larger environment of the travel and tourism industry. The student is expected to:	(B) research quality-control systems and practices	(i) research quality-control systems

Knowledge and Skill Statement	Student Expectation	Breakout
(5) The student understands roles within teams, work units, departments, organizations, inter-organization systems, and the larger environment of the travel and tourism industry. The student is expected to:	(B) research quality-control systems and practices	(ii) research quality-control practices
(5) The student understands roles within teams, work units, departments, organizations, inter-organization systems, and the larger environment of the travel and tourism industry. The student is expected to:	(C) develop plans to accomplish organizational goals	(i) develop plans to accomplish organizational goals
(5) The student understands roles within teams, work units, departments, organizations, inter-organization systems, and the larger environment of the travel and tourism industry. The student is expected to:	(D) formulate collaborative plans with other related industries such as lodging, food and beverage service, and transportation agencies to provide an all-inclusive product for the customer	(i) formulate collaborative plans with other related industries to provide an all-inclusive product for the customer
(6) The student understands the importance of health, safety, and environmental systems in the travel and tourism industry and their importance to organizational performance and regulatory compliance. The student is expected to:	(A) identify hazards common to workplaces such as safety, health, and environmental hazards	(i) identify hazards common to workplaces
(6) The student understands the importance of health, safety, and environmental systems in the travel and tourism industry and their importance to organizational performance and regulatory compliance. The student is expected to:	(B) use industry standards to implement safety precautions to maintain a safe worksite	(i) use industry standards to implement safety precautions to maintain a safe worksite

Knowledge and Skill Statement	Student Expectation	Breakout
(6) The student understands the importance of health, safety, and environmental systems in the travel and tourism industry and their importance to organizational performance and regulatory compliance. The student is expected to:	(C) research and relate first aid and cardiopulmonary resuscitation skills	(i) research first aid skills
(6) The student understands the importance of health, safety, and environmental systems in the travel and tourism industry and their importance to organizational performance and regulatory compliance. The student is expected to:	(C) research and relate first aid and cardiopulmonary resuscitation skills	(ii) research cardiopulmonary resuscitation skills
(6) The student understands the importance of health, safety, and environmental systems in the travel and tourism industry and their importance to organizational performance and regulatory compliance. The student is expected to:	(C) research and relate first aid and cardiopulmonary resuscitation skills	(iii) relate first aid skills
(6) The student understands the importance of health, safety, and environmental systems in the travel and tourism industry and their importance to organizational performance and regulatory compliance. The student is expected to:	(C) research and relate first aid and cardiopulmonary resuscitation skills	(iv) relate cardiopulmonary resuscitation skills
(6) The student understands the importance of health, safety, and environmental systems in the travel and tourism industry and their importance to organizational performance and regulatory compliance. The student is expected to:	(D) describe environmental procedures that ensure a facility is in compliance with health codes	(i) describe environmental procedures that ensure a facility is in compliance with health codes

Knowledge and Skill Statement	Student Expectation	Breakout
(6) The student understands the importance of health, safety, and environmental systems in the travel and tourism industry and their importance to organizational performance and regulatory compliance. The student is expected to:	(E) describe how to train others for emergency situations	(i) describe how to train others for emergency situations
(6) The student understands the importance of health, safety, and environmental systems in the travel and tourism industry and their importance to organizational performance and regulatory compliance. The student is expected to:	(F) analyze potential effects caused by common chemicals and hazardous materials	(i) analyze potential effects caused by common chemicals materials
(6) The student understands the importance of health, safety, and environmental systems in the travel and tourism industry and their importance to organizational performance and regulatory compliance. The student is expected to:	(F) analyze potential effects caused by common chemicals and hazardous materials	(ii) analyze potential effects caused by common hazardous materials
(6) The student understands the importance of health, safety, and environmental systems in the travel and tourism industry and their importance to organizational performance and regulatory compliance. The student is expected to:	(G) compare and contrast security measures to protect the guests, staff, and property	(i) compare and contrast security measures to protect the guests
(6) The student understands the importance of health, safety, and environmental systems in the travel and tourism industry and their importance to organizational performance and regulatory compliance. The student is expected to:	(G) compare and contrast security measures to protect the guests, staff, and property	(ii) compare and contrast security measures to protect the staff

Knowledge and Skill Statement	Student Expectation	Breakout
(6) The student understands the importance of health, safety, and environmental systems in the travel and tourism industry and their importance to organizational performance and regulatory compliance. The student is expected to:	(G) compare and contrast security measures to protect the guests, staff, and property	(iii) compare and contrast security measures to protect the property
(7) The student uses leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives. The student is expected to:	(A) apply team-building skills	(i) apply team-building skills
(7) The student uses leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives. The student is expected to:	(B) apply decision-making and problem-solving skills	(i) apply decision-making skills
(7) The student uses leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives. The student is expected to:	(B) apply decision-making and problem-solving skills	(ii) apply problem-solving skills
(7) The student uses leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives. The student is expected to:	(C) apply teamwork qualities in creating a pleasant work environment	(i) apply teamwork qualities in creating a pleasant work environment

Knowledge and Skill Statement	Student Expectation	Breakout
(7) The student uses leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives. The student is expected to:	(D) determine the impact of cultural diversity on teamwork	(i) determine the impact of cultural diversity on teamwork
(7) The student uses leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives. The student is expected to:	(E) participate in community service opportunities	(i) participate in community service opportunities
(8) The student knows and understands the importance of professional ethics and legal responsibilities. The student is expected to:	(A) discuss ethical reasoning to a variety of workplace situations in order to make decisions	(i) discuss ethical reasoning to a variety of workplace situations in order to make decisions
(8) The student knows and understands the importance of professional ethics and legal responsibilities. The student is expected to:	(B) research information on organizational policies in handbooks and manuals	(i) research information on organizational policies in handbooks
(8) The student knows and understands the importance of professional ethics and legal responsibilities. The student is expected to:	(B) research information on organizational policies in handbooks and manuals	(ii) research information on organizational policies in manuals
(9) The student knows and understands the importance of employability skills and is able to explore and effectively plan for managing travel and tourism careers. The student is expected to:	(A) identify and demonstrate behaviors and skills necessary to be employable	(i) identify behaviors necessary to be employable

Knowledge and Skill Statement	Student Expectation	Breakout
(9) The student knows and understands the importance of employability skills and is able to explore and effectively plan for managing travel and tourism careers. The student is expected to:	(A) identify and demonstrate behaviors and skills necessary to be employable	(ii) demonstrate behaviors necessary to be employable
(9) The student knows and understands the importance of employability skills and is able to explore and effectively plan for managing travel and tourism careers. The student is expected to:	(A) identify and demonstrate behaviors and skills necessary to be employable	(iii) identify skills necessary to be employable
(9) The student knows and understands the importance of employability skills and is able to explore and effectively plan for managing travel and tourism careers. The student is expected to:	(A) identify and demonstrate behaviors and skills necessary to be employable	(iv) demonstrate skills necessary to be employable
(9) The student knows and understands the importance of employability skills and is able to explore and effectively plan for managing travel and tourism careers. The student is expected to:	(B) identify the training and education requirements that lead toward an appropriate certification for employment	(i) identify the training requirements that lead toward an appropriate certification for employment
(9) The student knows and understands the importance of employability skills and is able to explore and effectively plan for managing travel and tourism careers. The student is expected to:	(B) identify the training and education requirements that lead toward an appropriate certification for employment	(ii) identify the education requirements that lead toward an appropriate certification for employment
(9) The student knows and understands the importance of employability skills and is able to explore and effectively plan for managing travel and tourism careers. The student is expected to:	(C) demonstrate proper interview techniques	(i) demonstrate proper interview techniques

Knowledge and Skill Statement	Student Expectation	Breakout
(9) The student knows and understands the importance of employability skills and is able to explore and effectively plan for managing travel and tourism careers. The student is expected to:	(D) update or create a career portfolio	(i) update or create a career portfolio
(9) The student knows and understands the importance of employability skills and is able to explore and effectively plan for managing travel and tourism careers. The student is expected to:	(E) investigate continuing education opportunities within the industry	(i) investigate continuing education opportunities within the industry
(9) The student knows and understands the importance of employability skills and is able to explore and effectively plan for managing travel and tourism careers. The student is expected to:	(F) examine appropriate credentialing requirements to maintain compliance with industry requirements	(i) examine appropriate credentialing requirements to maintain compliance with industry requirements
(9) The student knows and understands the importance of employability skills and is able to explore and effectively plan for managing travel and tourism careers. The student is expected to:	(G) compare and contrast the effect of stress, fatigue, and anxiety on job performance	(i) compare and contrast the effect of stress, fatigue, and anxiety on job performance
(9) The student knows and understands the importance of employability skills and is able to explore and effectively plan for managing travel and tourism careers. The student is expected to:	(H) complete required employment forms such as I-9, work visa, W-4, and licensures to meet employment requirements	(i) complete required employment forms
(9) The student knows and understands the importance of employability skills and is able to explore and effectively plan for managing travel and tourism careers. The student is expected to:	(I) explore entrepreneurship opportunities within the travel and tourism industry	(i) explore entrepreneurship opportunities within the travel and tourism industry

Knowledge and Skill Statement	Student Expectation	Breakout
(10) The student develops principles in time management, decision making, effective communication, and prioritizing. The student is expected to:	(A) apply effective practices for time management	(i) apply effective practices for time management
(10) The student develops principles in time management, decision making, effective communication, and prioritizing. The student is expected to:	(B) analyze various steps in the decision-making process for prioritizing effectively	(i) analyze various steps in the decision-making process for prioritizing effectively
(10) The student develops principles in time management, decision making, effective communication, and prioritizing. The student is expected to:	(C) discuss the importance of balancing a career, a family, and leisure activities	(i) discuss the importance of balancing a career, a family, and leisure activities
(11) The student uses technical knowledge and skills required in the travel and tourism industry. The student is expected to:	(A) develop job-specific technical vocabulary	(i) develop job-specific technical vocabulary
(11) The student uses technical knowledge and skills required in the travel and tourism industry. The student is expected to:	(B) use marketing techniques to sell products and services	(i) use marketing techniques to sell products
(11) The student uses technical knowledge and skills required in the travel and tourism industry. The student is expected to:	(B) use marketing techniques to sell products and services	(ii) use marketing techniques to sell services

Knowledge and Skill Statement	Student Expectation	Breakout
(11) The student uses technical knowledge and skills required in the travel and tourism industry. The student is expected to:	(C) evaluate current and emerging technologies to improve guest services	(i) evaluate current technologies to improve guest services
(11) The student uses technical knowledge and skills required in the travel and tourism industry. The student is expected to:	(C) evaluate current and emerging technologies to improve guest services	(ii) evaluate emerging technologies to improve guest services
(11) The student uses technical knowledge and skills required in the travel and tourism industry. The student is expected to:	(D) explain different types of payment options	(i) explain different types of payment options
(11) The student uses technical knowledge and skills required in the travel and tourism industry. The student is expected to:	(E) analyze customer service concepts and scenarios	(i) analyze customer service concepts
(11) The student uses technical knowledge and skills required in the travel and tourism industry. The student is expected to:	(E) analyze customer service concepts and scenarios	(ii) analyze customer service scenarios
(11) The student uses technical knowledge and skills required in the travel and tourism industry. The student is expected to:	(F) describe how customer service affects a company's bottom line	(i) describe how customer service affects a company's bottom line
(11) The student uses technical knowledge and skills required in the travel and tourism industry. The student is expected to:	(G) develop an awareness of cultural diversity to enhance travel planning such as differences in social etiquette, dress, and behaviors	(i) develop an awareness of cultural diversity to enhance travel planning

Knowledge and Skill Statement	Student Expectation	Breakout
(11) The student uses technical knowledge and skills required in the travel and tourism industry. The student is expected to:	(H) demonstrate an understanding of tourism sales and the impact on distribution systems	(i) demonstrate an understanding of tourism sales
(11) The student uses technical knowledge and skills required in the travel and tourism industry. The student is expected to:	(H) demonstrate an understanding of tourism sales and the impact on distribution systems	(ii) demonstrate an understanding of the impact [of tourism sales] on distribution systems
(11) The student uses technical knowledge and skills required in the travel and tourism industry. The student is expected to:	(I) demonstrate knowledge of destination, attraction planning, and development, including the use of organizations such as convention and visitor's bureaus and state tourist boards	(i) demonstrate knowledge of destination, including the use of organizations
(11) The student uses technical knowledge and skills required in the travel and tourism industry. The student is expected to:	(I) demonstrate knowledge of destination, attraction planning, and development, including the use of organizations such as convention and visitor's bureaus and state tourist boards	(ii) demonstrate knowledge of attraction planning, including the use of organizations
(11) The student uses technical knowledge and skills required in the travel and tourism industry. The student is expected to:	(I) demonstrate knowledge of destination, attraction planning, and development, including the use of organizations such as convention and visitor's bureaus and state tourist boards	(iii) demonstrate knowledge of development, including the use of organizations

Subject	Chapter 130. Career and Technical Education, Subchapter I. Hospitality and Tourism
Course Title	§130.259. Hotel Management (One Credit), Adopted 2015.
<p>(a) General Requirements. This course is recommended for students in Grades 10-12. Recommended prerequisite: Principles of Hospitality and Tourism. Students shall be awarded one credit for successful completion of this course.</p>	
<p>(b) Introduction.</p>	
<p>(1) Career and technical education instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.</p> <p>(2) The Hospitality and Tourism Career Cluster focuses on the management, marketing, and operations of restaurants and other food/beverage services, lodging, attractions, recreation events, and travel-related services.</p> <p>(3) Hotel Management focuses on the knowledge and skills needed to pursue staff and management positions available in the hotel industry. This in-depth study of the lodging industry includes departments within a hotel such as front desk, food and beverage, housekeeping, maintenance, human resources, and accounting. This course will focus on, but not be limited to, professional communication, leadership, management, human resources, technology, and accounting.</p> <p>(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.</p> <p>(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.</p>	

(c) Knowledge and Skills.		
Knowledge and Skill Statement	Student Expectation	Breakout
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(A) organize oral and written information	(i) organize oral information
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(A) organize oral and written information	(ii) organize written information
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(B) compose and present individually and in teams a variety of written documents such as agendas, thank you letters, presentations, and advertisements	(i) compose individually a variety of written documents
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(B) compose and present individually and in teams a variety of written documents such as agendas, thank you letters, presentations, and advertisements	(ii) compose in teams a variety of written documents
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(B) compose and present individually and in teams a variety of written documents such as agendas, thank you letters, presentations, and advertisements	(iii) present individually a variety of written documents
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(B) compose and present individually and in teams a variety of written documents such as agendas, thank you letters, presentations, and advertisements	(iv) present in teams a variety of written documents

Knowledge and Skill Statement	Student Expectation	Breakout
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(C) calculate correctly using numerical concepts such as percentage and estimation in practical situations	(i) calculate correctly using numerical concepts
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(D) examine and apply how scientific principles are used in the hotel industry	(i) examine how scientific principles are used in the hotel industry
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(D) examine and apply how scientific principles are used in the hotel industry	(ii) apply how scientific principles are used in the hotel industry
(2) The student uses verbal and nonverbal communication skills to create, express, and interpret information for providing a positive experience for guests and employees. The student is expected to:	(A) develop, deliver, and critique presentations	(i) develop presentations
(2) The student uses verbal and nonverbal communication skills to create, express, and interpret information for providing a positive experience for guests and employees. The student is expected to:	(A) develop, deliver, and critique presentations	(ii) deliver presentations
(2) The student uses verbal and nonverbal communication skills to create, express, and interpret information for providing a positive experience for guests and employees. The student is expected to:	(A) develop, deliver, and critique presentations	(iii) critique presentations

Knowledge and Skill Statement	Student Expectation	Breakout
<p>(2) The student uses verbal and nonverbal communication skills to create, express, and interpret information for providing a positive experience for guests and employees. The student is expected to:</p>	<p>(B) analyze various marketing strategies for a lodging property and available services</p>	<p>(i) analyze various marketing strategies for a lodging property</p>
<p>(2) The student uses verbal and nonverbal communication skills to create, express, and interpret information for providing a positive experience for guests and employees. The student is expected to:</p>	<p>(B) analyze various marketing strategies for a lodging property and available services</p>	<p>(ii) analyze various marketing strategies for available services</p>
<p>(2) The student uses verbal and nonverbal communication skills to create, express, and interpret information for providing a positive experience for guests and employees. The student is expected to:</p>	<p>(C) demonstrate proper techniques for using telecommunications equipment</p>	<p>(i) demonstrate proper techniques for using telecommunications equipment</p>
<p>(2) The student uses verbal and nonverbal communication skills to create, express, and interpret information for providing a positive experience for guests and employees. The student is expected to:</p>	<p>(D) interpret verbal and nonverbal cues to enhance communication with individuals such as coworkers, guests, and clients</p>	<p>(i) interpret verbal cues to enhance communication with individuals</p>
<p>(2) The student uses verbal and nonverbal communication skills to create, express, and interpret information for providing a positive experience for guests and employees. The student is expected to:</p>	<p>(D) interpret verbal and nonverbal cues to enhance communication with individuals such as coworkers, guests, and clients</p>	<p>(ii) interpret nonverbal cues to enhance communication with individuals</p>
<p>(2) The student uses verbal and nonverbal communication skills to create, express, and interpret information for providing a positive experience for guests and employees. The student is expected to:</p>	<p>(E) locate written information used to communicate with individuals such as coworkers and guests</p>	<p>(i) locate written information used to communicate with individuals</p>

Knowledge and Skill Statement	Student Expectation	Breakout
(2) The student uses verbal and nonverbal communication skills to create, express, and interpret information for providing a positive experience for guests and employees. The student is expected to:	(F) apply and model active listening skills to obtain and clarify information	(i) apply active listening skills to obtain information
(2) The student uses verbal and nonverbal communication skills to create, express, and interpret information for providing a positive experience for guests and employees. The student is expected to:	(F) apply and model active listening skills to obtain and clarify information	(ii) model active listening skills to obtain information
(2) The student uses verbal and nonverbal communication skills to create, express, and interpret information for providing a positive experience for guests and employees. The student is expected to:	(F) apply and model active listening skills to obtain and clarify information	(iii) apply active listening skills to clarify information
(2) The student uses verbal and nonverbal communication skills to create, express, and interpret information for providing a positive experience for guests and employees. The student is expected to:	(F) apply and model active listening skills to obtain and clarify information	(iv) model active listening skills to clarify information
(2) The student uses verbal and nonverbal communication skills to create, express, and interpret information for providing a positive experience for guests and employees. The student is expected to:	(G) follow directions and procedures independently and in teams	(i) follow directions independently
(2) The student uses verbal and nonverbal communication skills to create, express, and interpret information for providing a positive experience for guests and employees. The student is expected to:	(G) follow directions and procedures independently and in teams	(ii) follow directions in teams

Knowledge and Skill Statement	Student Expectation	Breakout
<p>(2) The student uses verbal and nonverbal communication skills to create, express, and interpret information for providing a positive experience for guests and employees. The student is expected to:</p>	<p>(G) follow directions and procedures independently and in teams</p>	<p>(iii) follow procedures independently</p>
<p>(2) The student uses verbal and nonverbal communication skills to create, express, and interpret information for providing a positive experience for guests and employees. The student is expected to:</p>	<p>(G) follow directions and procedures independently and in teams</p>	<p>(iv) follow procedures in teams</p>
<p>(3) The student solves problems independently and in teams using critical thinking, innovation, and creativity. The student is expected to:</p>	<p>(A) generate creative ideas to solve problems by brainstorming possible solutions</p>	<p>(i) generate creative ideas to solve problems by brainstorming possible solutions</p>
<p>(3) The student solves problems independently and in teams using critical thinking, innovation, and creativity. The student is expected to:</p>	<p>(B) employ critical-thinking and interpersonal skills to resolve conflicts with individuals such as coworkers, employers, guests, and clients</p>	<p>(i) employ critical-thinking skills to resolve conflicts with individuals</p>
<p>(3) The student solves problems independently and in teams using critical thinking, innovation, and creativity. The student is expected to:</p>	<p>(B) identify and demonstrate both positive and negative work behaviors and personal qualities for employability</p>	<p>(ii) employ interpersonal skills to resolve conflicts with individuals</p>
<p>(3) The student solves problems independently and in teams using critical thinking, innovation, and creativity. The student is expected to:</p>	<p>(C) interpret and use industry standards for principles of budgeting and forecasting to maximize profit and growth</p>	<p>(i) interpret industry standards for principles of budgeting to maximize profit</p>

Knowledge and Skill Statement	Student Expectation	Breakout
(3) The student solves problems independently and in teams using critical thinking, innovation, and creativity. The student is expected to:	(C) interpret and use industry standards for principles of budgeting and forecasting to maximize profit and growth	(ii) use industry standards for principles of budgeting to maximize profit
(3) The student solves problems independently and in teams using critical thinking, innovation, and creativity. The student is expected to:	(C) interpret and use industry standards for principles of budgeting and forecasting to maximize profit and growth	(iii) interpret industry standards for principles of budgeting to maximize growth
(3) The student solves problems independently and in teams using critical thinking, innovation, and creativity. The student is expected to:	(C) interpret and use industry standards for principles of budgeting and forecasting to maximize profit and growth	(iv) use industry standards for principles of budgeting to maximize growth
(3) The student solves problems independently and in teams using critical thinking, innovation, and creativity. The student is expected to:	(C) interpret and use industry standards for principles of budgeting and forecasting to maximize profit and growth	(v) interpret industry standards for principles of forecasting to maximize profit
(3) The student solves problems independently and in teams using critical thinking, innovation, and creativity. The student is expected to:	(C) interpret and use industry standards for principles of budgeting and forecasting to maximize profit and growth	(vi) use industry standards for principles of forecasting to maximize profit
(3) The student solves problems independently and in teams using critical thinking, innovation, and creativity. The student is expected to:	(C) interpret and use industry standards for principles of budgeting and forecasting to maximize profit and growth	(vii) interpret industry standards for principles of forecasting to maximize growth
(3) The student solves problems independently and in teams using critical thinking, innovation, and creativity. The student is expected to:	(C) interpret and use industry standards for principles of budgeting and forecasting to maximize profit and growth	(viii) use industry standards for principles of forecasting to maximize growth

Knowledge and Skill Statement	Student Expectation	Breakout
(4) The student demonstrates an understanding that personal success depends on personal effort. The student is expected to:	(A) demonstrate an understanding of self-responsibility and self-management	(i) demonstrate an understanding of self-responsibility
(4) The student demonstrates an understanding that personal success depends on personal effort. The student is expected to:	(A) demonstrate an understanding of self-responsibility and self-management	(ii) demonstrate an understanding of self-management
(4) The student demonstrates an understanding that personal success depends on personal effort. The student is expected to:	(B) identify and demonstrate both positive and negative work behaviors and personal qualities for employability	(i) identify positive work behaviors for employability
(4) The student demonstrates an understanding that personal success depends on personal effort. The student is expected to:	(B) identify and demonstrate both positive and negative work behaviors and personal qualities for employability	(ii) identify negative work behaviors
(4) The student demonstrates an understanding that personal success depends on personal effort. The student is expected to:	(B) identify and demonstrate both positive and negative work behaviors and personal qualities for employability	(iii) identify personal qualities for employability
(4) The student demonstrates an understanding that personal success depends on personal effort. The student is expected to:	(B) identify and demonstrate both positive and negative work behaviors and personal qualities for employability	(iv) demonstrate positive work behaviors for employability
(4) The student demonstrates an understanding that personal success depends on personal effort. The student is expected to:	(B) identify and demonstrate both positive and negative work behaviors and personal qualities for employability	(v) demonstrate negative work behaviors

Knowledge and Skill Statement	Student Expectation	Breakout
(4) The student demonstrates an understanding that personal success depends on personal effort. The student is expected to:	(B) identify and demonstrate both positive and negative work behaviors and personal qualities for employability	(vi) demonstrate personal qualities for employability
(4) The student demonstrates an understanding that personal success depends on personal effort. The student is expected to:	(C) evaluate the effects of health and wellness on employee performance	(i) evaluate the effects of health on employee performance
(4) The student demonstrates an understanding that personal success depends on personal effort. The student is expected to:	(C) evaluate the effects of health and wellness on employee performance	(ii) evaluate the effects of wellness on employee performance
(5) The student develops principles in time management, decision making, effective communication, and prioritization. The student is expected to:	(A) apply effective practices for managing time and energy	(i) apply effective practices for managing time
(5) The student develops principles in time management, decision making, effective communication, and prioritization. The student is expected to:	(A) apply effective practices for managing time and energy	(ii) apply effective practices for managing energy
(5) The student develops principles in time management, decision making, effective communication, and prioritization. The student is expected to:	(B) develop and implement stress-management techniques	(i) develop stress-management techniques

Knowledge and Skill Statement	Student Expectation	Breakout
(5) The student develops principles in time management, decision making, effective communication, and prioritization. The student is expected to:	(B) develop and implement stress-management techniques	(ii) implement stress-management techniques
(5) The student develops principles in time management, decision making, effective communication, and prioritization. The student is expected to:	(C) assemble and analyze the various steps in the decision-making process	(i) assemble the various steps in the decision-making process
(5) The student develops principles in time management, decision making, effective communication, and prioritization. The student is expected to:	(C) assemble and analyze the various steps in the decision-making process	(ii) analyze the various steps in the decision-making process
(5) The student develops principles in time management, decision making, effective communication, and prioritization. The student is expected to:	(D) evaluate the importance of balancing a career, family, and leisure activities and develop various techniques to reduce conflict	(i) evaluate the importance of balancing a career, family, and leisure activities
(5) The student develops principles in time management, decision making, effective communication, and prioritization. The student is expected to:	(D) evaluate the importance of balancing a career, family, and leisure activities and develop various techniques to reduce conflict	(ii) develop various techniques to reduce conflict
(6) The student understands the importance of employability skills. The student is expected to:	(A) assemble the required training or education requirements that lead to an appropriate industry certification	(i) assemble the required training or education requirements that lead to an appropriate industry certification

Knowledge and Skill Statement	Student Expectation	Breakout
(6) The student understands the importance of employability skills. The student is expected to:	(B) comprehend and model skills related to seeking employment	(i) comprehend skills related to seeking employment
(6) The student understands the importance of employability skills. The student is expected to:	(B) comprehend and model skills related to seeking employment	(ii) model skills related to seeking employment
(6) The student understands the importance of employability skills. The student is expected to:	(C) assemble and/or update an electronic personal career portfolio	(i) assemble and/or update an electronic personal career portfolio
(6) The student understands the importance of employability skills. The student is expected to:	(D) complete a job application in written and electronic format	(i) complete a job application in written format
(6) The student understands the importance of employability skills. The student is expected to:	(D) complete a job application in written and electronic format	(ii) complete a job application in electronic format
(6) The student understands the importance of employability skills. The student is expected to:	(E) examine and model proper interview techniques in applying for employment	(i) examine proper interview techniques in applying for employment
(6) The student understands the importance of employability skills. The student is expected to:	(E) examine and model proper interview techniques in applying for employment	(ii) model proper interview techniques in applying for employment
(6) The student understands the importance of employability skills. The student is expected to:	(F) complete required employment forms such as I-9, work visa, W-4, and licensures to meet employment requirements	(i) complete required employment forms

Knowledge and Skill Statement	Student Expectation	Breakout
(6) The student understands the importance of employability skills. The student is expected to:	(G) research the local labor workforce market to determine opportunities for lodging employment	(i) research the local labor workforce market to determine opportunities for lodging employment
(6) The student understands the importance of employability skills. The student is expected to:	(H) investigate professional lodging organizations and development training opportunities to keep current on relevant trends and information within the lodging industry	(i) investigate professional lodging organizations to keep current on relevant trends within the lodging industry
(6) The student understands the importance of employability skills. The student is expected to:	(H) investigate professional lodging organizations and development training opportunities to keep current on relevant trends and information within the lodging industry	(ii) investigate professional lodging organizations to keep current on relevant information within the lodging industry
(6) The student understands the importance of employability skills. The student is expected to:	(H) investigate professional lodging organizations and development training opportunities to keep current on relevant trends and information within the lodging industry	(iii) investigate professional development training opportunities to keep current on relevant trends within the lodging industry
(6) The student understands the importance of employability skills. The student is expected to:	(H) investigate professional lodging organizations and development training opportunities to keep current on relevant trends and information within the lodging industry	(iv) investigate professional development training opportunities to keep current on relevant information within the lodging industry
(6) The student understands the importance of employability skills. The student is expected to:	(I) create, design, and present lodging entrepreneurship opportunities	(i) create lodging entrepreneurship opportunities
(6) The student understands the importance of employability skills. The student is expected to:	(I) create, design, and present lodging entrepreneurship opportunities	(ii) design lodging entrepreneurship opportunities

Knowledge and Skill Statement	Student Expectation	Breakout
(6) The student understands the importance of employability skills. The student is expected to:	(I) create, design, and present lodging entrepreneurship opportunities	(iii) present lodging entrepreneurship opportunities
(7) The student understands roles within teams, work units, departments, organizations, and the larger environment of the lodging industry. The student is expected to:	(A) identify lodging departments and distinguish among the duties and responsibilities within each department	(i) identify lodging departments
(7) The student understands roles within teams, work units, departments, organizations, and the larger environment of the lodging industry. The student is expected to:	(A) identify lodging departments and distinguish among the duties and responsibilities within each department	(ii) distinguish among the duties within each [lodging] department
(7) The student understands roles within teams, work units, departments, organizations, and the larger environment of the lodging industry. The student is expected to:	(A) identify lodging departments and distinguish among the duties and responsibilities within each department	(iii) distinguish among the responsibilities within each [lodging] department
(7) The student understands roles within teams, work units, departments, organizations, and the larger environment of the lodging industry. The student is expected to:	(B) implement quality-control standards and practices	(i) implement quality-control standards
(7) The student understands roles within teams, work units, departments, organizations, and the larger environment of the lodging industry. The student is expected to:	(B) implement quality-control standards and practices	(ii) implement quality-control practices

Knowledge and Skill Statement	Student Expectation	Breakout
(7) The student understands roles within teams, work units, departments, organizations, and the larger environment of the lodging industry. The student is expected to:	(C) compare and contrast duties and responsibilities from each department to the larger lodging environment, including food and beverage services	(i) compare and contrast duties from each department to the larger lodging environment, including food and beverage services
(7) The student understands roles within teams, work units, departments, organizations, and the larger environment of the lodging industry. The student is expected to:	(C) compare and contrast duties and responsibilities from each department to the larger lodging environment, including food and beverage services	(ii) compare and contrast responsibilities from each department to the larger lodging environment, including food and beverage services
(7) The student understands roles within teams, work units, departments, organizations, and the larger environment of the lodging industry. The student is expected to:	(D) identify, compare, and contrast all types of lodging properties	(i) identify all types of lodging properties
(7) The student understands roles within teams, work units, departments, organizations, and the larger environment of the lodging industry. The student is expected to:	(D) identify, compare, and contrast all types of lodging properties	(ii) compare and contrast all types of lodging properties
(7) The student understands roles within teams, work units, departments, organizations, and the larger environment of the lodging industry. The student is expected to:	(E) compare and contrast lodging revenue and support centers	(i) compare and contrast lodging revenue
(7) The student understands roles within teams, work units, departments, organizations, and the larger environment of the lodging industry. The student is expected to:	(E) compare and contrast lodging revenue and support centers	(ii) compare and contrast lodging support centers

Knowledge and Skill Statement	Student Expectation	Breakout
(7) The student understands roles within teams, work units, departments, organizations, and the larger environment of the lodging industry. The student is expected to:	(F) compare and contrast chain and franchise lodging properties	(i) compare and contrast chain lodging properties
(7) The student understands roles within teams, work units, departments, organizations, and the larger environment of the lodging industry. The student is expected to:	(F) compare and contrast chain and franchise lodging properties	(ii) compare and contrast franchise lodging properties
(7) The student understands roles within teams, work units, departments, organizations, and the larger environment of the lodging industry. The student is expected to:	(G) create, design, and present lodging entrepreneurship opportunities	(i) create lodging entrepreneurship opportunities
(7) The student understands roles within teams, work units, departments, organizations, and the larger environment of the lodging industry. The student is expected to:	(G) create, design, and present lodging entrepreneurship opportunities	(ii) design lodging entrepreneurship opportunities
(7) The student understands roles within teams, work units, departments, organizations, and the larger environment of the lodging industry. The student is expected to:	(G) create, design, and present lodging entrepreneurship opportunities	(iii) present lodging entrepreneurship opportunities
(7) The student understands roles within teams, work units, departments, organizations, and the larger environment of the lodging industry. The student is expected to:	(H) comprehend and model professional attire	(i) comprehend professional attire

Knowledge and Skill Statement	Student Expectation	Breakout
(7) The student understands roles within teams, work units, departments, organizations, and the larger environment of the lodging industry. The student is expected to:	(H) comprehend and model professional attire	(ii) model professional attire
(8) The student uses information technology tools specific to lodging management to access, manage, integrate, and create information. The student is expected to:	(A) use information technology tools to evaluate lodging work responsibilities	(i) use information technology tools to evaluate lodging work responsibilities
(8) The student uses information technology tools specific to lodging management to access, manage, integrate, and create information. The student is expected to:	(B) evaluate technology tools to perform workplace tasks	(i) evaluate technology tools to perform workplace tasks
(8) The student uses information technology tools specific to lodging management to access, manage, integrate, and create information. The student is expected to:	(C) understand and evaluate the hotel/guest cycle with applicable technology	(i) understand the hotel/guest cycle with applicable technology
(8) The student uses information technology tools specific to lodging management to access, manage, integrate, and create information. The student is expected to:	(C) understand and evaluate the hotel/guest cycle with applicable technology	(ii) evaluate the hotel/guest cycle with applicable technology
(8) The student uses information technology tools specific to lodging management to access, manage, integrate, and create information. The student is expected to:	(D) prepare and present complex multimedia publications	(i) prepare complex multimedia publications

Knowledge and Skill Statement	Student Expectation	Breakout
(8) The student uses information technology tools specific to lodging management to access, manage, integrate, and create information. The student is expected to:	(D) prepare and present complex multimedia publications	(ii) present complex multimedia publications
(8) The student uses information technology tools specific to lodging management to access, manage, integrate, and create information. The student is expected to:	(E) demonstrate knowledge and use of point-of-sale systems	(i) demonstrate knowledge of point-of-sale systems
(8) The student uses information technology tools specific to lodging management to access, manage, integrate, and create information. The student is expected to:	(E) demonstrate knowledge and use of point-of-sale systems	(ii) demonstrate use of point-of-sale systems
(8) The student uses information technology tools specific to lodging management to access, manage, integrate, and create information. The student is expected to:	(F) evaluate Internet resources for industry information	(i) evaluate Internet resources for industry information
(8) The student uses information technology tools specific to lodging management to access, manage, integrate, and create information. The student is expected to:	(G) evaluate current and emerging technologies to improve guest services	(i) evaluate current technologies to improve guest services
(8) The student uses information technology tools specific to lodging management to access, manage, integrate, and create information. The student is expected to:	(G) evaluate current and emerging technologies to improve guest services	(ii) evaluate emerging technologies to improve guest services

Knowledge and Skill Statement	Student Expectation	Breakout
(9) The student uses leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives. The student is expected to:	(A) differentiate types of effective leadership and management styles and select which management style is effective for the lodging industry	(i) differentiate types of effective leadership styles
(9) The student uses leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives. The student is expected to:	(A) differentiate types of effective leadership and management styles and select which management style is effective for the lodging industry	(ii) differentiate types of effective management styles
(9) The student uses leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives. The student is expected to:	(A) differentiate types of effective leadership and management styles and select which management style is effective for the lodging industry	(iii) select which management style is effective for the lodging industry
(9) The student uses leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives. The student is expected to:	(B) apply team-building skills	(i) apply team-building skills
(9) The student uses leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives. The student is expected to:	(C) apply decision-making and problem-solving skills	(i) apply decision-making skills
(9) The student uses leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives. The student is expected to:	(C) apply decision-making and problem-solving skills	(ii) apply problem-solving skills

Knowledge and Skill Statement	Student Expectation	Breakout
(9) The student uses leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives. The student is expected to:	(D) apply leadership and teamwork qualities in creating a pleasant working atmosphere	(i) apply leadership qualities in creating a pleasant working atmosphere
(9) The student uses leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives. The student is expected to:	(D) apply leadership and teamwork qualities in creating a pleasant working atmosphere	(ii) apply teamwork qualities in creating a pleasant working atmosphere
(9) The student uses leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives. The student is expected to:	(E) participate in community leadership and teamwork opportunities to enhance professional skills	(i) participate in community leadership opportunities to enhance professional skills
(9) The student uses leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives. The student is expected to:	(E) participate in community leadership and teamwork opportunities to enhance professional skills	(ii) participate in community teamwork opportunities to enhance professional skills
(10) The student understands the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance. The student is expected to:	(A) assess workplace conditions with regard to safety and health	(i) assess workplace conditions with regard to safety

Knowledge and Skill Statement	Student Expectation	Breakout
(10) The student understands the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance. The student is expected to:	(A) assess workplace conditions with regard to safety and health	(ii) assess workplace conditions with regard to health
(10) The student understands the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance. The student is expected to:	(B) apply safety and sanitation standards common to the workplace	(i) apply safety standards common to the workplace
(10) The student understands the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance. The student is expected to:	(B) apply safety and sanitation standards common to the workplace	(ii) apply sanitation standards common to the workplace
(10) The student understands the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance. The student is expected to:	(C) analyze potential effects caused by common chemical and hazardous materials	(i) analyze potential effects caused by common chemical materials
(10) The student understands the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance. The student is expected to:	(C) analyze potential effects caused by common chemical and hazardous materials	(ii) analyze potential effects caused by common hazardous materials

Knowledge and Skill Statement	Student Expectation	Breakout
(10) The student understands the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance. The student is expected to:	(D) demonstrate first aid and cardiopulmonary resuscitation skills	(i) demonstrate first aid skills
(10) The student understands the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance. The student is expected to:	(D) demonstrate first aid and cardiopulmonary resuscitation skills	(ii) demonstrate cardiopulmonary resuscitation skills
(10) The student understands the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance. The student is expected to:	(E) research sources of food-borne illness and determine ways to prevent them	(i) research sources of food-borne illness
(10) The student understands the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance. The student is expected to:	(E) research sources of food-borne illness and determine ways to prevent them	(ii) determine ways to prevent [food-borne illness]
(10) The student understands the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance. The student is expected to:	(F) evaluate the need for personal hygiene and correlate this to the importance of health, safety, and environmental management systems in the organization	(i) evaluate the need for personal hygiene

Knowledge and Skill Statement	Student Expectation	Breakout
(10) The student understands the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance. The student is expected to:	(F) evaluate the need for personal hygiene and correlate this to the importance of health, safety, and environmental management systems in the organization	(ii) correlate [personal hygiene] to the importance of health in the organization
(10) The student understands the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance. The student is expected to:	(F) evaluate the need for personal hygiene and correlate this to the importance of health, safety, and environmental management systems in the organization	(iii) correlate [personal hygiene] to the importance of safety in the organization
(10) The student understands the importance of health, safety, and environmental management systems in organizations and their importance to organizational performance and regulatory compliance. The student is expected to:	(F) evaluate the need for personal hygiene and correlate this to the importance of health, safety, and environmental management systems in the organization	(iv) correlate [personal hygiene] to the importance of environmental management systems in the organization
(11) The student knows and understands the importance of professional ethics and legal responsibilities within the lodging industry. The student is expected to:	(A) demonstrate professional and ethical standards	(i) demonstrate professional standards
(11) The student knows and understands the importance of professional ethics and legal responsibilities within the lodging industry. The student is expected to:	(A) demonstrate professional and ethical standards	(ii) demonstrate ethical standards

Knowledge and Skill Statement	Student Expectation	Breakout
(11) The student knows and understands the importance of professional ethics and legal responsibilities within the lodging industry. The student is expected to:	(B) compare and contrast the rights of the innkeeper and the rights of the guest	(i) compare and contrast the rights of the innkeeper and the rights of the guest
(11) The student knows and understands the importance of professional ethics and legal responsibilities within the lodging industry. The student is expected to:	(C) interpret and explain written organizational policies and procedures to help employees perform their jobs	(i) interpret written organizational policies and procedures to help employees perform their jobs
(11) The student knows and understands the importance of professional ethics and legal responsibilities within the lodging industry. The student is expected to:	(C) interpret and explain written organizational policies and procedures to help employees perform their jobs	(ii) explain written organizational policies and procedures to help employees perform their jobs
(12) The student understands the knowledge and skills required for careers in the lodging industry. The student is expected to:	(A) develop job-specific technical vocabulary	(i) develop job-specific technical vocabulary
(12) The student understands the knowledge and skills required for careers in the lodging industry. The student is expected to:	(B) explain procedures to meet guest needs, including guest registration, rate assignment, room assignment, and determination of payment methods	(i) explain procedures to meet guest needs, including guest registration
(12) The student understands the knowledge and skills required for careers in the lodging industry. The student is expected to:	(B) explain procedures to meet guest needs, including guest registration, rate assignment, room assignment, and determination of payment methods	(ii) explain procedures to meet guest needs, including rate assignment

Knowledge and Skill Statement	Student Expectation	Breakout
(12) The student understands the knowledge and skills required for careers in the lodging industry. The student is expected to:	(B) explain procedures to meet guest needs, including guest registration, rate assignment, room assignment, and determination of payment methods	(iii) explain procedures to meet guest needs, including room assignment
(12) The student understands the knowledge and skills required for careers in the lodging industry. The student is expected to:	(B) explain procedures to meet guest needs, including guest registration, rate assignment, room assignment, and determination of payment methods	(iv) explain procedures to meet guest needs, including determination of payment methods
(12) The student understands the knowledge and skills required for careers in the lodging industry. The student is expected to:	(C) differentiate the functions of meeting and event planning as it correlates to the individual lodging property	(i) differentiate the functions of meeting and event planning as it correlates to the individual lodging property
(12) The student understands the knowledge and skills required for careers in the lodging industry. The student is expected to:	(D) understand the importance of check-out procedures to ensure guest satisfaction and verify settlement of account	(i) understand the importance of check-out procedures to ensure guest satisfaction
(12) The student understands the knowledge and skills required for careers in the lodging industry. The student is expected to:	(D) understand the importance of check-out procedures to ensure guest satisfaction and verify settlement of account	(ii) understand the importance of check-out procedures to verify settlement of account

Subject	Chapter 130. Career and Technical Education, Subchapter I. Hospitality and Tourism
Course Title	§130.260. Hospitality Services (Two Credits), Adopted 2015.
<p>(a) General Requirements. This course is recommended for students in Grades 11 and 12. Recommended prerequisites: Principles of Hospitality and Tourism, Hotel Management, and Travel and Tourism Management. Students shall be awarded two credits for successful completion of this course.</p>	
<p>(b) Introduction.</p>	
<p>(1) Career and technical education instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.</p> <p>(2) The Hospitality and Tourism Career Cluster focuses on the management, marketing, and operations of restaurants and other food/beverage services, lodging, attractions, recreation events, and travel-related services.</p> <p>(3) Hospitality Services provides students with the academic and technical preparation to pursue high-demand and high-skill careers in hospitality related industries. The knowledge and skills are acquired within a sequential, standards-based program that integrates hands-on and project-based instruction. Standards included in the Hospitality Services course are designed to prepare students for nationally recognized industry certifications, postsecondary education, and entry-level careers. In addition, Hospitality Services is designed so that performance standards meet employer expectations, enhancing the employability of students. Instruction may be delivered through laboratory training or through internships, mentoring, or job shadowing.</p> <p>(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.</p> <p>(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.</p>	

(c) Knowledge and Skills.		
Knowledge and Skill Statement	Student Expectation	Breakout
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(A) apply advanced reading, writing, and mathematical skills necessary in the hospitality industry	(i) apply advanced reading skills necessary in the hospitality industry
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(A) apply advanced reading, writing, and mathematical skills necessary in the hospitality industry	(ii) apply advanced writing skills necessary in the hospitality industry
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(A) apply advanced reading, writing, and mathematical skills necessary in the hospitality industry	(iii) apply advanced mathematical skills necessary in the hospitality industry
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(B) understand and develop marketing techniques	(i) understand marketing techniques
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(B) understand and develop marketing techniques	(ii) develop marketing techniques
(2) The student uses communication skills in the creation, expression, and interpretation of information and ideas. The student is expected to:	(A) interpret communication such as verbal and non-verbal	(i) interpret communication

Knowledge and Skill Statement	Student Expectation	Breakout
(2) The student uses communication skills in the creation, expression, and interpretation of information and ideas. The student is expected to:	(B) recognize and respond to guest needs	(i) recognize guest needs
(2) The student uses communication skills in the creation, expression, and interpretation of information and ideas. The student is expected to:	(B) recognize and respond to guest needs	(ii) respond to guest needs
(2) The student uses communication skills in the creation, expression, and interpretation of information and ideas. The student is expected to:	(C) develop listening skills to accurately process messages for guests	(i) develop listening skills to accurately process messages for guests
(2) The student uses communication skills in the creation, expression, and interpretation of information and ideas. The student is expected to:	(D) exhibit public relations skills	(i) exhibit public relations skills
(2) The student uses communication skills in the creation, expression, and interpretation of information and ideas. The student is expected to:	(E) recognize alternate communication services to assist customers with specialized needs	(i) recognize alternate communication services to assist customers with specialized needs
(3) The student researches career opportunities and qualifications to broaden awareness of careers available in the hospitality industry. The student is expected to:	(A) outline a plan for an effective job search, including developing a resume	(i) outline a plan for an effective job search, including developing a resume

Knowledge and Skill Statement	Student Expectation	Breakout
(3) The student researches career opportunities and qualifications to broaden awareness of careers available in the hospitality industry. The student is expected to:	(B) demonstrate flexibility to learn new knowledge and skills	(i) demonstrate flexibility to learn new knowledge
(3) The student researches career opportunities and qualifications to broaden awareness of careers available in the hospitality industry. The student is expected to:	(B) demonstrate flexibility to learn new knowledge and skills	(ii) demonstrate flexibility to learn new skills
(3) The student researches career opportunities and qualifications to broaden awareness of careers available in the hospitality industry. The student is expected to:	(C) prioritize work responsibilities and life responsibilities	(i) prioritize work responsibilities
(3) The student researches career opportunities and qualifications to broaden awareness of careers available in the hospitality industry. The student is expected to:	(C) prioritize work responsibilities and life responsibilities	(ii) prioritize life responsibilities
(3) The student researches career opportunities and qualifications to broaden awareness of careers available in the hospitality industry. The student is expected to:	(D) develop an electronic career portfolio	(i) develop an electronic career portfolio
(3) The student researches career opportunities and qualifications to broaden awareness of careers available in the hospitality industry. The student is expected to:	(E) compare and contrast personal strengths and weaknesses that may determine individual potential for growth within the hospitality industry	(i) compare and contrast personal strengths that may determine individual potential for growth within the hospitality industry

Knowledge and Skill Statement	Student Expectation	Breakout
(3) The student researches career opportunities and qualifications to broaden awareness of careers available in the hospitality industry. The student is expected to:	(E) compare and contrast personal strengths and weaknesses that may determine individual potential for growth within the hospitality industry	(ii) compare and contrast personal weaknesses that may determine individual potential for growth within the hospitality industry
(3) The student researches career opportunities and qualifications to broaden awareness of careers available in the hospitality industry. The student is expected to:	(F) explain what is needed to achieve job advancement	(i) explain what is needed to achieve job advancement
(3) The student researches career opportunities and qualifications to broaden awareness of careers available in the hospitality industry. The student is expected to:	(G) understand the role of professional organizations or industry associations	(i) understand the role of professional organizations or industry associations
(3) The student researches career opportunities and qualifications to broaden awareness of careers available in the hospitality industry. The student is expected to:	(H) research the procedures for licensure, certification, or credentials for a chosen occupation	(i) research the procedures for licensure, certification, or credentials for a chosen occupation
(3) The student researches career opportunities and qualifications to broaden awareness of careers available in the hospitality industry. The student is expected to:	(I) analyze future employment outlooks	(i) analyze future employment outlooks
(3) The student researches career opportunities and qualifications to broaden awareness of careers available in the hospitality industry. The student is expected to:	(J) demonstrate appropriate business and personal etiquette	(i) demonstrate appropriate business etiquette

Knowledge and Skill Statement	Student Expectation	Breakout
(3) The student researches career opportunities and qualifications to broaden awareness of careers available in the hospitality industry. The student is expected to:	(J) demonstrate appropriate business and personal etiquette	(ii) demonstrate appropriate personal etiquette
(3) The student researches career opportunities and qualifications to broaden awareness of careers available in the hospitality industry. The student is expected to:	(K) develop a written organizational policy to ensure successful hospitality operations such as guest satisfaction and employee success	(i) develop a written organizational policy to ensure successful hospitality operations
(3) The student researches career opportunities and qualifications to broaden awareness of careers available in the hospitality industry. The student is expected to:	(L) research the major duties and qualifications for hospitality managerial positions	(i) research the major duties for hospitality managerial positions
(3) The student researches career opportunities and qualifications to broaden awareness of careers available in the hospitality industry. The student is expected to:	(L) research the major duties and qualifications for hospitality managerial positions	(ii) research the major qualifications for hospitality managerial positions
(4) The student reviews ethical and legal responsibilities or related conduct toward guests and employees within the establishment to maintain high industry standards. The student is expected to:	(A) examine laws regarding hiring, harassment, and safety issues	(i) examine laws regarding hiring issues
(4) The student reviews ethical and legal responsibilities or related conduct toward guests and employees within the establishment to maintain high industry standards. The student is expected to:	(A) examine laws regarding hiring, harassment, and safety issues	(ii) examine laws regarding harassment issues

Knowledge and Skill Statement	Student Expectation	Breakout
(4) The student reviews ethical and legal responsibilities or related conduct toward guests and employees within the establishment to maintain high industry standards. The student is expected to:	(A) examine laws regarding hiring, harassment, and safety issues	(iii) examine laws regarding safety issues
(4) The student reviews ethical and legal responsibilities or related conduct toward guests and employees within the establishment to maintain high industry standards. The student is expected to:	(B) compare and contrast legal responsibilities and employer policies	(i) compare and contrast legal responsibilities
(4) The student reviews ethical and legal responsibilities or related conduct toward guests and employees within the establishment to maintain high industry standards. The student is expected to:	(B) compare and contrast legal responsibilities and employer policies	(ii) compare and contrast employer policies
(4) The student reviews ethical and legal responsibilities or related conduct toward guests and employees within the establishment to maintain high industry standards. The student is expected to:	(C) discuss ethical dilemmas	(i) discuss ethical dilemmas
(5) The student uses information technology tools specific to hospitality service careers to access, manage, integrate, or create information. The student is expected to:	(A) examine types of technology used to manage hospitality service operations	(i) examine types of technology used to manage hospitality service operations
(5) The student uses information technology tools specific to hospitality service careers to access, manage, integrate, or create information. The student is expected to:	(B) research website information on hospitality service operations	(i) research website information on hospitality service operations

Knowledge and Skill Statement	Student Expectation	Breakout
(5) The student uses information technology tools specific to hospitality service careers to access, manage, integrate, or create information. The student is expected to:	(C) evaluate current and emerging technologies provided by the hospitality industry	(i) evaluate current technologies provided by the hospitality industry
(5) The student uses information technology tools specific to hospitality service careers to access, manage, integrate, or create information. The student is expected to:	(C) evaluate current and emerging technologies provided by the hospitality industry	(ii) evaluate emerging technologies provided by the hospitality industry
(6) The student applies leadership, teamwork, and critical-thinking skills in collaboration with others to accomplish organizational goals or objectives. The student is expected to:	(A) demonstrate qualities that contribute to employee retention	(i) demonstrate qualities that contribute to employee retention
(6) The student applies leadership, teamwork, and critical-thinking skills in collaboration with others to accomplish organizational goals or objectives. The student is expected to:	(B) formulate staff training plans to create an effective working team	(i) formulate staff training plans to create an effective working team
(6) The student applies leadership, teamwork, and critical-thinking skills in collaboration with others to accomplish organizational goals or objectives. The student is expected to:	(C) evaluate methods of conflict-management skills to facilitate appropriate solutions	(i) evaluate methods of conflict-management skills to facilitate appropriate solutions
(6) The student applies leadership, teamwork, and critical-thinking skills in collaboration with others to accomplish organizational goals or objectives. The student is expected to:	(D) resolve unexpected situations in customer service	(i) resolve unexpected situations in customer service

Knowledge and Skill Statement	Student Expectation	Breakout
(6) The student applies leadership, teamwork, and critical-thinking skills in collaboration with others to accomplish organizational goals or objectives. The student is expected to:	(E) understand diverse employee cultures and customs	(i) understand diverse employee cultures
(6) The student applies leadership, teamwork, and critical-thinking skills in collaboration with others to accomplish organizational goals or objectives. The student is expected to:	(E) understand diverse employee cultures and customs	(ii) understand diverse employee customs
(6) The student applies leadership, teamwork, and critical-thinking skills in collaboration with others to accomplish organizational goals or objectives. The student is expected to:	(F) value cultural diversity of guests	(i) value cultural diversity of guests
(7) The student applies marketing strategies independently and in teams. The student is expected to:	(A) select and assemble effective marketing strategies	(i) select effective marketing strategies
(7) The student applies marketing strategies independently and in teams. The student is expected to:	(A) select and assemble effective marketing strategies	(ii) assemble effective marketing strategies
(7) The student applies marketing strategies independently and in teams. The student is expected to:	(B) develop promotional packages	(i) develop promotional packages

Knowledge and Skill Statement	Student Expectation	Breakout
(7) The student applies marketing strategies independently and in teams. The student is expected to:	(C) devise strategies for maximizing profit	(i) devise strategies for maximizing profit
(7) The student applies marketing strategies independently and in teams. The student is expected to:	(D) create a business plan	(i) create a business plan
(8) The student reviews the importance of management systems such as health, safety, and environmental and their function in performance and regulatory compliance. The student is expected to:	(A) determine local safety and sanitation requirements	(i) determine local safety requirements
(8) The student reviews the importance of management systems such as health, safety, and environmental and their function in performance and regulatory compliance. The student is expected to:	(A) determine local safety and sanitation requirements	(ii) determine local sanitation requirements
(8) The student reviews the importance of management systems such as health, safety, and environmental and their function in performance and regulatory compliance. The student is expected to:	(B) explain how guests and property are protected to minimize losses or liabilities	(i) explain how guests are protected to minimize losses or liabilities
(8) The student reviews the importance of management systems such as health, safety, and environmental and their function in performance and regulatory compliance. The student is expected to:	(B) explain how guests and property are protected to minimize losses or liabilities	(ii) explain how property [is] protected to minimize losses or liabilities

Knowledge and Skill Statement	Student Expectation	Breakout
(8) The student reviews the importance of management systems such as health, safety, and environmental and their function in performance and regulatory compliance. The student is expected to:	(C) outline safety and security issues and analyze solutions for individuals or groups in multiple environments to minimize risks	(i) outline safety issues for individuals or groups in multiple environments to minimize risks
(8) The student reviews the importance of management systems such as health, safety, and environmental and their function in performance and regulatory compliance. The student is expected to:	(C) outline safety and security issues and analyze solutions for individuals or groups in multiple environments to minimize risks	(ii) outline security issues for individuals or groups in multiple environments to minimize risks
(8) The student reviews the importance of management systems such as health, safety, and environmental and their function in performance and regulatory compliance. The student is expected to:	(C) outline safety and security issues and analyze solutions for individuals or groups in multiple environments to minimize risks	(iii) analyze solutions for individuals or groups in multiple environments to minimize risks
(8) The student reviews the importance of management systems such as health, safety, and environmental and their function in performance and regulatory compliance. The student is expected to:	(D) recognize potential, real, or perceived emergency situations such as a natural disaster or terrorist threat in order to respond appropriately	(i) recognize potential, real, or perceived emergency situations
(8) The student reviews the importance of management systems such as health, safety, and environmental and their function in performance and regulatory compliance. The student is expected to:	(E) evaluate equipment for elements such as safety, functionality, and durability	(i) evaluate equipment for elements
(8) The student reviews the importance of management systems such as health, safety, and environmental and their function in performance and regulatory compliance. The student is expected to:	(F) determine most appropriate sources of assistance such as self, coworkers, guests, the Federal Emergency Management Agency (FEMA), or first responders to use in varied emergency situations	(i) determine most appropriate sources of assistance

Knowledge and Skill Statement	Student Expectation	Breakout
(9) The student understands roles within teams, work units, departments, organizations, inter-organizational systems, or the larger environment. The student is expected to:	(A) implement a set of operating procedures that results in profitable operations	(i) implement a set of operating procedures that results in profitable operations
(9) The student understands roles within teams, work units, departments, organizations, inter-organizational systems, or the larger environment. The student is expected to:	(B) create a detailed customer service plan or process to provide maximum customer service	(i) create a detailed customer service plan or process to provide maximum customer service
(9) The student understands roles within teams, work units, departments, organizations, inter-organizational systems, or the larger environment. The student is expected to:	(C) prepare a staffing guide to schedule various staff positions	(i) prepare a staffing guide to schedule various staff positions
(9) The student understands roles within teams, work units, departments, organizations, inter-organizational systems, or the larger environment. The student is expected to:	(D) evaluate inventory management systems used in the hospitality industry to result in profitable operations	(i) evaluate inventory management systems used in the hospitality industry to result in profitable operations
(9) The student understands roles within teams, work units, departments, organizations, inter-organizational systems, or the larger environment. The student is expected to:	(E) describe current industry collaborations or trends that provide more inclusive products or services to customers	(i) describe current industry collaborations or trends that provide more inclusive products or services to customers
(9) The student understands roles within teams, work units, departments, organizations, inter-organizational systems, or the larger environment. The student is expected to:	(F) compare and contrast organizational structures of operations such as lodging, food and beverage, travel, and recreation	(i) compare and contrast organizational structures of operations

Knowledge and Skill Statement	Student Expectation	Breakout
(10) The student uses technological knowledge and skills required in food and beverage service. The student is expected to:	(A) evaluate prepared foods for quality and presentation to set quality standards in accordance with company standards	(i) evaluate prepared foods for quality to set quality standards in accordance with company standards
(10) The student uses technological knowledge and skills required in food and beverage service. The student is expected to:	(A) evaluate prepared foods for quality and presentation to set quality standards in accordance with company standards	(ii) evaluate prepared foods for presentation to set quality standards in accordance with company standards
(10) The student uses technological knowledge and skills required in food and beverage service. The student is expected to:	(B) practice basic nutrition skills by planning, preparing, and presenting quality foods	(i) practice basic nutrition skills by planning quality foods
(10) The student uses technological knowledge and skills required in food and beverage service. The student is expected to:	(B) practice basic nutrition skills by planning, preparing, and presenting quality foods	(ii) practice basic nutrition skills by preparing quality foods
(10) The student uses technological knowledge and skills required in food and beverage service. The student is expected to:	(B) practice basic nutrition skills by planning, preparing, and presenting quality foods	(iii) practice basic nutrition skills by presenting quality foods
(10) The student uses technological knowledge and skills required in food and beverage service. The student is expected to:	(C) evaluate types of kitchen equipment to match equipment with correct cooking methodology	(i) evaluate types of kitchen equipment to match equipment with correct cooking methodology
(11) The student uses technological knowledge and skills required in hotel services. The student is expected to:	(A) describe the necessary information collected during the registration process	(i) describe the necessary information collected during the registration process

Knowledge and Skill Statement	Student Expectation	Breakout
(11) The student uses technological knowledge and skills required in hotel services. The student is expected to:	(B) explain how room rates are established	(i) explain how room rates are established
(11) The student uses technological knowledge and skills required in hotel services. The student is expected to:	(C) explain how standard operating guidelines such as availability, room status, and guest satisfaction are used to assign rooms to arriving guests	(i) explain how standard operating guidelines are used to assign rooms to arriving guests
(11) The student uses technological knowledge and skills required in hotel services. The student is expected to:	(D) examine the account settlement procedures on different methods of payment	(i) examine the account settlement procedures on different methods of payment
(11) The student uses technological knowledge and skills required in hotel services. The student is expected to:	(E) explain how a hotel's computer system is used to create guest accounts	(i) explain how a hotel's computer system is used to create guest accounts
(11) The student uses technological knowledge and skills required in hotel services. The student is expected to:	(F) summarize correct check-out procedures to prevent oversights or errors	(i) summarize correct check-out procedures to prevent oversights or errors
(12) The student uses technological knowledge and skills required in travel and tourism. The student is expected to:	(A) develop technical vocabulary for lodging, food and beverage service, recreation, and travel	(i) develop technical vocabulary for lodging
(12) The student uses technological knowledge and skills required in travel and tourism. The student is expected to:	(A) develop technical vocabulary for lodging, food and beverage service, recreation, and travel	(ii) develop technical vocabulary for food and beverage service

Knowledge and Skill Statement	Student Expectation	Breakout
(12) The student uses technological knowledge and skills required in travel and tourism. The student is expected to:	(A) develop technical vocabulary for lodging, food and beverage service, recreation, and travel	(iii) develop technical vocabulary for recreation
(12) The student uses technological knowledge and skills required in travel and tourism. The student is expected to:	(A) develop technical vocabulary for lodging, food and beverage service, recreation, and travel	(iv) develop technical vocabulary for travel
(12) The student uses technological knowledge and skills required in travel and tourism. The student is expected to:	(B) compare and contrast diverse transportation options	(i) compare and contrast diverse transportation options
(12) The student uses technological knowledge and skills required in travel and tourism. The student is expected to:	(C) integrate various or diverse elements of the travel and tourism industry to create a personalized travel experience for a customer	(i) integrate various or diverse elements of the travel and tourism industry to create a personalized travel experience for a customer
(12) The student uses technological knowledge and skills required in travel and tourism. The student is expected to:	(D) compare and contrast products and services from related industries	(i) compare and contrast products from related industries
(12) The student uses technological knowledge and skills required in travel and tourism. The student is expected to:	(D) compare and contrast products and services from related industries	(ii) compare and contrast services from related industries

Subject	Chapter 130. Career and Technical Education, Subchapter I. Hospitality and Tourism
Course Title	§130.261. Practicum in Hospitality Services (Two Credits), Adopted 2015.
<p>(a) General Requirements. This course is recommended for students in Grades 11 and 12. Recommended prerequisite: Hospitality Services. Students shall be awarded two credits for successful completion of this course. A student may repeat this course once for credit provided that the student is experiencing different aspects of the industry and demonstrating proficiency in additional and more advanced knowledge and skills.</p>	
<p>(b) Introduction.</p>	
<p>(1) Career and technical education instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.</p> <p>(2) The Hospitality and Tourism Career Cluster focuses on the management, marketing, and operations of restaurants and other food/beverage services, lodging, attractions, recreation events, and travel-related services.</p> <p>(3) Practicum in Hospitality Services is a unique practicum experience to provide opportunities for students to participate in a learning experience that combines classroom instruction with actual business and industry career experiences. Practicum in Hospitality Services integrates academic and career and technical education; provides more interdisciplinary instruction; and supports strong partnerships among schools, businesses, and community institutions with the goal of preparing students with a variety of skills in a fast-changing workplace. Students are taught employability skills, including job-specific skills applicable to their training plan, job interview techniques, communication skills, financial and budget activities, human relations, and portfolio development. Practicum in Hospitality Services is relevant and rigorous, supports student attainment of academic and technical standards, and effectively prepares students for college and career success.</p> <p>(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.</p> <p>(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.</p>	

(c) Knowledge and Skills.		
Knowledge and Skill Statement	Student Expectation	Breakout
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(A) research and produce a variety of relevant employment opportunities	(i) research a variety of relevant employment opportunities
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(A) research and produce a variety of relevant employment opportunities	(ii) produce a variety of relevant employment opportunities
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(B) differentiate the essential workplace skills in the career acquisition process	(i) differentiate the essential workplace skills in the career acquisition process
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(C) practice and complete employment-related documents such as job applications (written and electronic formats) and I-9 and W-4 forms	(i) practice [completing employment-related documents]
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(C) practice and complete employment-related documents such as job applications (written and electronic formats) and I-9 and W-4 forms	(ii) complete employment-related documents
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(D) model proper interview techniques in various situations	(i) model proper interview techniques in various situations

Knowledge and Skill Statement	Student Expectation	Breakout
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(E) formulate verbal, nonverbal, and written communication skills	(i) formulate verbal communication skills
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(E) formulate verbal, nonverbal, and written communication skills	(ii) formulate nonverbal communication skills
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(E) formulate verbal, nonverbal, and written communication skills	(iii) formulate written communication skills
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(F) develop and properly use appropriate electronic communication tools	(i) develop appropriate electronic communication tools
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(F) develop and properly use appropriate electronic communication tools	(ii) properly use appropriate electronic communication tools
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(G) display effective listening skills used in the workplace	(i) display effective listening skills used in the workplace
(2) The student develops skills for success in the workplace. The student is expected to:	(A) formulate and model appropriate grooming and appearance for the workplace	(i) formulate and model appropriate grooming for the workplace

Knowledge and Skill Statement	Student Expectation	Breakout
(2) The student develops skills for success in the workplace. The student is expected to:	(A) formulate and model appropriate grooming and appearance for the workplace	(ii) formulate and model appropriate appearance for the workplace
(2) The student develops skills for success in the workplace. The student is expected to:	(B) model dependability, punctuality, and initiative	(i) model dependability
(2) The student develops skills for success in the workplace. The student is expected to:	(B) model dependability, punctuality, and initiative	(ii) model punctuality
(2) The student develops skills for success in the workplace. The student is expected to:	(B) model dependability, punctuality, and initiative	(iii) model initiative
(2) The student develops skills for success in the workplace. The student is expected to:	(C) display positive interpersonal skills such as respect for diversity	(i) display positive interpersonal skills
(2) The student develops skills for success in the workplace. The student is expected to:	(D) differentiate types of diversity from both the employer and customer perspective	(i) differentiate types of diversity from the employer perspective
(2) The student develops skills for success in the workplace. The student is expected to:	(D) differentiate types of diversity from both the employer and customer perspective	(ii) differentiate types of diversity from the customer perspective
(2) The student develops skills for success in the workplace. The student is expected to:	(E) exhibit appropriate business and personal etiquette in the workplace	(i) exhibit appropriate business etiquette in the workplace
(2) The student develops skills for success in the workplace. The student is expected to:	(E) exhibit appropriate business and personal etiquette in the workplace	(ii) exhibit appropriate personal etiquette in the workplace

Knowledge and Skill Statement	Student Expectation	Breakout
(2) The student develops skills for success in the workplace. The student is expected to:	(F) exhibit productive work habits, ethical practices, and a positive attitude	(i) exhibit productive work habits
(2) The student develops skills for success in the workplace. The student is expected to:	(F) exhibit productive work habits, ethical practices, and a positive attitude	(ii) exhibit ethical practices
(2) The student develops skills for success in the workplace. The student is expected to:	(F) exhibit productive work habits, ethical practices, and a positive attitude	(iii) exhibit a positive attitude
(2) The student develops skills for success in the workplace. The student is expected to:	(G) integrate knowledge of personal and occupational safety practices in the workplace	(i) integrate knowledge of personal safety practices in the workplace
(2) The student develops skills for success in the workplace. The student is expected to:	(G) integrate knowledge of personal and occupational safety practices in the workplace	(ii) integrate knowledge of occupational safety practices in the workplace
(2) The student develops skills for success in the workplace. The student is expected to:	(H) collaborate with others to support the organization and complete assigned tasks as a team	(i) collaborate with others to support the organization
(2) The student develops skills for success in the workplace. The student is expected to:	(H) collaborate with others to support the organization and complete assigned tasks as a team	(ii) collaborate with others to complete assigned tasks as a team
(2) The student develops skills for success in the workplace. The student is expected to:	(I) organize work to fulfill responsibilities and meet deadlines	(i) organize work to fulfill responsibilities
(2) The student develops skills for success in the workplace. The student is expected to:	(I) organize work to fulfill responsibilities and meet deadlines	(ii) organize work to meet deadlines

Knowledge and Skill Statement	Student Expectation	Breakout
(2) The student develops skills for success in the workplace. The student is expected to:	(J) compare and contrast the relationship of good physical and mental health strategies for job success and work-life balance	(i) compare and contrast the relationship of good physical health strategies for job success
(2) The student develops skills for success in the workplace. The student is expected to:	(J) compare and contrast the relationship of good physical and mental health strategies for job success and work-life balance	(ii) compare and contrast the relationship of good physical health strategies for work-life balance
(2) The student develops skills for success in the workplace. The student is expected to:	(J) compare and contrast the relationship of good physical and mental health strategies for job success and work-life balance	(iii) compare and contrast the relationship of good mental health strategies for job success
(2) The student develops skills for success in the workplace. The student is expected to:	(J) compare and contrast the relationship of good physical and mental health strategies for job success and work-life balance	(iv) compare and contrast the relationship of good mental health strategies for work-life balance
(3) The student compares and contrasts the importance of work ethics, employer expectations, interaction with diverse populations, and communication skills in the workplace. The student is expected to:	(A) defend personal integrity as it affects human relations on the job	(i) defend personal integrity as it affects human relations on the job
(3) The student compares and contrasts the importance of work ethics, employer expectations, interaction with diverse populations, and communication skills in the workplace. The student is expected to:	(B) study and develop characteristics of successful working relationships such as teamwork, conflict resolution, self-control, and ability to accept criticism	(i) study characteristics of successful working relationships

Knowledge and Skill Statement	Student Expectation	Breakout
(3) The student compares and contrasts the importance of work ethics, employer expectations, interaction with diverse populations, and communication skills in the workplace. The student is expected to:	(B) study and develop characteristics of successful working relationships such as teamwork, conflict resolution, self-control, and ability to accept criticism	(ii) develop characteristics of successful working relationships
(3) The student compares and contrasts the importance of work ethics, employer expectations, interaction with diverse populations, and communication skills in the workplace. The student is expected to:	(C) analyze and defend employer expectations	(i) analyze employer expectations
(3) The student compares and contrasts the importance of work ethics, employer expectations, interaction with diverse populations, and communication skills in the workplace. The student is expected to:	(C) analyze and defend employer expectations	(ii) defend employer expectations
(3) The student compares and contrasts the importance of work ethics, employer expectations, interaction with diverse populations, and communication skills in the workplace. The student is expected to:	(D) demonstrate respect for the rights of others	(i) demonstrate respect for the rights of others
(3) The student compares and contrasts the importance of work ethics, employer expectations, interaction with diverse populations, and communication skills in the workplace. The student is expected to:	(E) compare and contrast the hospitality code of ethics and ethical standards	(i) compare and contrast the hospitality code of ethics and ethical standards

Knowledge and Skill Statement	Student Expectation	Breakout
(3) The student compares and contrasts the importance of work ethics, employer expectations, interaction with diverse populations, and communication skills in the workplace. The student is expected to:	(F) support organizational policies and procedures	(i) support organizational policies and procedures
(4) The student applies academics with career-readiness skills. The student is expected to:	(A) apply mathematical skills to business transactions	(i) apply mathematical skills to business transactions
(4) The student applies academics with career-readiness skills. The student is expected to:	(B) interpret data from documents such as tables, charts, and graphs to estimate and find solutions to problems	(i) interpret data from documents
(4) The student applies academics with career-readiness skills. The student is expected to:	(C) organize and compose workplace business documents	(i) organize workplace business documents
(4) The student applies academics with career-readiness skills. The student is expected to:	(C) organize and compose workplace business documents	(ii) compose workplace business documents
(5) The student applies ethical behavior standards, safety procedures, and legal responsibilities within the workplace. The student is expected to:	(A) compare and contrast published workplace policies	(i) compare and contrast published workplace policies
(5) The student applies ethical behavior standards, safety procedures, and legal responsibilities within the workplace. The student is expected to:	(B) apply responsible and ethical behavior	(i) apply responsible behavior

Knowledge and Skill Statement	Student Expectation	Breakout
(5) The student applies ethical behavior standards, safety procedures, and legal responsibilities within the workplace. The student is expected to:	(B) apply responsible and ethical behavior	(ii) apply ethical behavior
(5) The student applies ethical behavior standards, safety procedures, and legal responsibilities within the workplace. The student is expected to:	(C) evaluate provisions of state and federal labor laws	(i) evaluate provisions of state labor laws
(5) The student applies ethical behavior standards, safety procedures, and legal responsibilities within the workplace. The student is expected to:	(C) evaluate provisions of state and federal labor laws	(ii) evaluate provisions of federal labor laws
(5) The student applies ethical behavior standards, safety procedures, and legal responsibilities within the workplace. The student is expected to:	(D) evaluate the employer's and employee's fiduciary responsibilities to customers such as breach of confidentiality, safety, and privacy	(i) evaluate the employer's fiduciary responsibilities to customers
(5) The student applies ethical behavior standards, safety procedures, and legal responsibilities within the workplace. The student is expected to:	(D) evaluate the employer's and employee's fiduciary responsibilities to customers such as breach of confidentiality, safety, and privacy	(ii) evaluate the employee's fiduciary responsibilities to customers
(6) The student models strategies and technique to develop interpersonal skills. The student is expected to:	(A) model effective interpersonal and team-building skills involving situations with diverse individuals	(i) model effective interpersonal skills involving situations with diverse individuals
(6) The student models strategies and technique to develop interpersonal skills. The student is expected to:	(A) model effective interpersonal and team-building skills involving situations with diverse individuals	(ii) model effective team-building skills involving situations with diverse individuals

Knowledge and Skill Statement	Student Expectation	Breakout
(6) The student models strategies and technique to develop interpersonal skills. The student is expected to:	(B) model leadership through participation in activities such as career and technical student organizations	(i) model leadership through participation in activities
(7) The student evaluates advancement opportunities and career paths in the industry. The student is expected to:	(A) analyze future employment in occupational areas	(i) analyze future employment in occupational areas
(7) The student evaluates advancement opportunities and career paths in the industry. The student is expected to:	(B) develop an entrepreneurial opportunity in the hospitality services area	(i) develop an entrepreneurial opportunity in the hospitality services area
(7) The student evaluates advancement opportunities and career paths in the industry. The student is expected to:	(C) compare and contrast salaries, industry demands, and challenges for various jobs in hospitality services	(i) compare and contrast salaries for various jobs in hospitality services
(7) The student evaluates advancement opportunities and career paths in the industry. The student is expected to:	(C) compare and contrast salaries, industry demands, and challenges for various jobs in hospitality services	(ii) compare and contrast industry demands for various jobs in hospitality services
(7) The student evaluates advancement opportunities and career paths in the industry. The student is expected to:	(C) compare and contrast salaries, industry demands, and challenges for various jobs in hospitality services	(iii) compare and contrast challenges for various jobs in hospitality services
(7) The student evaluates advancement opportunities and career paths in the industry. The student is expected to:	(D) evaluate the changing global workplace and future trends using governmental and other resources	(i) evaluate the changing global workplace using governmental resources

Knowledge and Skill Statement	Student Expectation	Breakout
(7) The student evaluates advancement opportunities and career paths in the industry. The student is expected to:	(D) evaluate the changing global workplace and future trends using governmental and other resources	(ii) evaluate the changing global workplace using other resources
(7) The student evaluates advancement opportunities and career paths in the industry. The student is expected to:	(D) evaluate the changing global workplace and future trends using governmental and other resources	(iii) evaluate future trends using governmental resources
(7) The student evaluates advancement opportunities and career paths in the industry. The student is expected to:	(D) evaluate the changing global workplace and future trends using governmental and other resources	(iv) evaluate future trends using other resources
(8) The student identifies skills and attributes necessary for professional advancement. The student is expected to:	(A) evaluate continuing education opportunities that enhance career advancement and promote lifelong learning	(i) evaluate continuing education opportunities that enhance career advancement
(8) The student identifies skills and attributes necessary for professional advancement. The student is expected to:	(A) evaluate continuing education opportunities that enhance career advancement and promote lifelong learning	(ii) evaluate continuing education opportunities that promote lifelong learning
(8) The student identifies skills and attributes necessary for professional advancement. The student is expected to:	(B) formulate effective strategies to secure, maintain, and terminate employment	(i) formulate effective strategies to secure employment
(8) The student identifies skills and attributes necessary for professional advancement. The student is expected to:	(B) formulate effective strategies to secure, maintain, and terminate employment	(ii) formulate effective strategies to maintain employment

Knowledge and Skill Statement	Student Expectation	Breakout
(8) The student identifies skills and attributes necessary for professional advancement. The student is expected to:	(B) formulate effective strategies to secure, maintain, and terminate employment	(iii) formulate effective strategies to terminate employment
(9) The student understands roles within teams, work units, departments, organizations, and the larger environment of the hospitality services industry. The student is expected to:	(A) explain the different types and functions of all departments such as food and beverage to understand their impact on customer service	(i) explain the different types of all departments to understand their impact on customer service
(9) The student understands roles within teams, work units, departments, organizations, and the larger environment of the hospitality services industry. The student is expected to:	(A) explain the different types and functions of all departments such as food and beverage to understand their impact on customer service	(ii) explain the different functions of all departments to understand their impact on customer service
(9) The student understands roles within teams, work units, departments, organizations, and the larger environment of the hospitality services industry. The student is expected to:	(B) illustrate proficiency with duties in each of the departments of a hotel or tourism venue	(i) illustrate proficiency with duties in each of the departments of a hotel or tourism venue
(9) The student understands roles within teams, work units, departments, organizations, and the larger environment of the hospitality services industry. The student is expected to:	(C) compare and contrast lodging properties	(i) compare and contrast lodging properties
(9) The student understands roles within teams, work units, departments, organizations, and the larger environment of the hospitality services industry. The student is expected to:	(D) analyze the differences between chain and franchise lodging operations	(i) analyze the differences between chain and franchise lodging operations

Knowledge and Skill Statement	Student Expectation	Breakout
(9) The student understands roles within teams, work units, departments, organizations, and the larger environment of the hospitality services industry. The student is expected to:	(E) explore the job duties in travel and tourism, recreation, and amusement and attraction venues	(i) explore the job duties in travel and tourism venues
(9) The student understands roles within teams, work units, departments, organizations, and the larger environment of the hospitality services industry. The student is expected to:	(E) explore the job duties in travel and tourism, recreation, and amusement and attraction venues	(ii) explore the job duties in recreation venues
(9) The student understands roles within teams, work units, departments, organizations, and the larger environment of the hospitality services industry. The student is expected to:	(E) explore the job duties in travel and tourism, recreation, and amusement and attraction venues	(iii) explore the job duties in amusement and attraction venues
(10) The student understands the knowledge and skills required for careers in the lodging industry. The student is expected to:	(A) examine, understand, and articulate job-specific technical vocabulary	(i) examine job-specific technical vocabulary
(10) The student understands the knowledge and skills required for careers in the lodging industry. The student is expected to:	(A) examine, understand, and articulate job-specific technical vocabulary	(ii) understand job-specific technical vocabulary
(10) The student understands the knowledge and skills required for careers in the lodging industry. The student is expected to:	(A) examine, understand, and articulate job-specific technical vocabulary	(iii) articulate job-specific technical vocabulary

Knowledge and Skill Statement	Student Expectation	Breakout
(10) The student understands the knowledge and skills required for careers in the lodging industry. The student is expected to:	(B) explain technical procedures needed to meet guest needs such as registration, rate assignment, room assignment, and determination of payment methods	(i) explain technical procedures needed to meet guest needs
(10) The student understands the knowledge and skills required for careers in the lodging industry. The student is expected to:	(C) research and create a meeting/event company	(i) research a meeting/event company
(10) The student understands the knowledge and skills required for careers in the lodging industry. The student is expected to:	(C) research and create a meeting/event company	(ii) create a meeting/event company
(10) The student understands the knowledge and skills required for careers in the lodging industry. The student is expected to:	(D) evaluate current and emerging technologies to improve guest services	(i) evaluate current technologies to improve guest services
(10) The student understands the knowledge and skills required for careers in the lodging industry. The student is expected to:	(D) evaluate current and emerging technologies to improve guest services	(ii) evaluate emerging technologies to improve guest services
(10) The student understands the knowledge and skills required for careers in the lodging industry. The student is expected to:	(E) determine the correct procedures for the traditional hotel guest cycle	(i) determine the correct procedures for the traditional hotel guest cycle

Knowledge and Skill Statement	Student Expectation	Breakout
(11) The student documents in manual and electronic format acquired technical knowledge and skills from coherent plan of study. The student is expected to:	(A) produce a professional portfolio to include information such as (i) a current resume; (ii) official documentation of attainment of technical skill competencies; (iii) recognitions, awards, and scholarships; (iv) community service activities; (v) student organization participation; (vi) practicum supervisor evaluations; (vii) letters of recommendation; (viii) cover letters; (ix) documentation of preparation for state or national industry certification such as food sanitation certification; and (x) any other supporting documents □	(i) produce a professional portfolio to include information
(11) The student documents in manual and electronic format acquired technical knowledge and skills from coherent plan of study. The student is expected to:	(B) present the portfolio to interested stakeholders	(i) present the portfolio to interested stakeholders
(11) The student documents in manual and electronic format acquired technical knowledge and skills from coherent plan of study. The student is expected to:	(C) evaluate employment options, including salaries and benefits	(i) evaluate employment options, including salaries
(11) The student documents in manual and electronic format acquired technical knowledge and skills from coherent plan of study. The student is expected to:	(C) evaluate employment options, including salaries and benefits	(ii) evaluate employment options, including benefits
(11) The student documents in manual and electronic format acquired technical knowledge and skills from coherent plan of study. The student is expected to:	(D) determine effective money management and financial planning techniques to manage (i) insurance and benefits; (ii) taxes; (iii) retirement; (iv) relocation costs; (v) a budget; (vi) housing costs; and (vii) transportation costs	(i) determine effective money management and financial planning techniques to manage insurance

Knowledge and Skill Statement	Student Expectation	Breakout
(11) The student documents in manual and electronic format acquired technical knowledge and skills from coherent plan of study. The student is expected to:	(D) determine effective money management and financial planning techniques to manage (i) insurance and benefits; (ii) taxes; (iii) retirement; (iv) relocation costs; (v) a budget; (vi) housing costs; and (vii) transportation costs	(ii) determine effective money management and financial planning techniques to manage benefits
(11) The student documents in manual and electronic format acquired technical knowledge and skills from coherent plan of study. The student is expected to:	(D) determine effective money management and financial planning techniques to manage (i) insurance and benefits; (ii) taxes; (iii) retirement; (iv) relocation costs; (v) a budget; (vi) housing costs; and (vii) transportation costs	(iii) determine effective money management and financial planning techniques to manage taxes
(11) The student documents in manual and electronic format acquired technical knowledge and skills from coherent plan of study. The student is expected to:	(D) determine effective money management and financial planning techniques to manage (i) insurance and benefits; (ii) taxes; (iii) retirement; (iv) relocation costs; (v) a budget; (vi) housing costs; and (vii) transportation costs	(iv) determine effective money management and financial planning techniques to manage retirement
(11) The student documents in manual and electronic format acquired technical knowledge and skills from coherent plan of study. The student is expected to:	(D) determine effective money management and financial planning techniques to manage (i) insurance and benefits; (ii) taxes; (iii) retirement; (iv) relocation costs; (v) a budget; (vi) housing costs; and (vii) transportation costs	(v) determine effective money management and financial planning techniques to manage relocation costs
(11) The student documents in manual and electronic format acquired technical knowledge and skills from coherent plan of study. The student is expected to:	(D) determine effective money management and financial planning techniques to manage (i) insurance and benefits; (ii) taxes; (iii) retirement; (iv) relocation costs; (v) a budget; (vi) housing costs; and (vii) transportation costs	(vi) determine effective money management and financial planning techniques to manage a budget

Knowledge and Skill Statement	Student Expectation	Breakout
(11) The student documents in manual and electronic format acquired technical knowledge and skills from coherent plan of study. The student is expected to:	(D) determine effective money management and financial planning techniques to manage (i) insurance and benefits; (ii) taxes; (iii) retirement; (iv) relocation costs; (v) a budget; (vi) housing costs; and (vii) transportation costs	(vii) determine effective money management and financial planning techniques to manage housing costs
(11) The student documents in manual and electronic format acquired technical knowledge and skills from coherent plan of study. The student is expected to:	(D) determine effective money management and financial planning techniques to manage (i) insurance and benefits; (ii) taxes; (iii) retirement; (iv) relocation costs; (v) a budget; (vi) housing costs; and (vii) transportation costs	(viii) determine effective money management and financial planning techniques to manage transportation costs
(11) The student documents in manual and electronic format acquired technical knowledge and skills from coherent plan of study. The student is expected to:	(E) develop a personal budget based on career choice using effective money management and financial planning techniques	(i) develop a personal budget based on career choice using effective money management techniques
(11) The student documents in manual and electronic format acquired technical knowledge and skills from coherent plan of study. The student is expected to:	(E) develop a personal budget based on career choice using effective money management and financial planning techniques	(ii) develop a personal budget based on career choice using effective financial planning techniques

Subject	Chapter 130. Career and Technical Education, Subchapter I. Hospitality and Tourism
Course Title	§130.262. Extended Practicum in Culinary Arts (One Credit), Adopted 2015.
<p>(a) General Requirements. This course is recommended for students in Grades 11 and 12. The practicum course is a paid or unpaid capstone experience for students participating in a coherent sequence of career and technical education courses in the Hospitality and Tourism Career Cluster. Prerequisite: Culinary Arts. Corequisite: Practicum in Culinary Arts. This course must be taken concurrently with Practicum in Culinary Arts and may not be taken as a stand-alone course. Students shall be awarded one credit for successful completion of this course. A student may repeat this course once for credit provided that the student is experiencing different aspects of the industry and demonstrating proficiency in additional and more advanced knowledge and skills.</p>	
<p>(b) Introduction.</p>	
<p>(1) Career and technical education instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.</p> <p>(2) The Hospitality and Tourism Career Cluster focuses on the management, marketing, and operations of restaurants and other food/beverage services, lodging, attractions, recreation events, and travel-related services.</p> <p>(3) Extended Practicum in Culinary Arts is a unique practicum that provides occupationally specific opportunities for students to participate in a learning experience that combines classroom instruction with actual business and industry career experiences. Extended Practicum in Culinary Arts integrates academic and career and technical education; provides more interdisciplinary instruction; and supports strong partnerships among schools, businesses, and community institutions with the goal of preparing students with a variety of skills in a fast-changing workplace.</p> <p>(4) Students are taught employability skills to prepare for college and career success, which include job-specific skills applicable to their training plan, job interview techniques, communication skills, financial and budget activities, human relations, and portfolio development.</p> <p>(5) Instruction may be delivered through school-based laboratory training or through work-based delivery arrangements such as cooperative education, mentoring, and job shadowing.</p> <p>(6) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.</p> <p>(7) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.</p>	

(c) Knowledge and Skills.		
Knowledge and Skill Statement	Student Expectation	Breakout
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(A) participate in a paid or unpaid, laboratory- or work-based application of previously studied knowledge and skills related to culinary arts	(i) participate in a paid or unpaid, laboratory- or work-based application of previously studied knowledge related to culinary arts
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(A) participate in a paid or unpaid, laboratory- or work-based application of previously studied knowledge and skills related to culinary arts	(ii) participate in a paid or unpaid, laboratory- or work-based application of previously studied skills related to culinary arts
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(B) participate in training, education, or preparation for licensure, certification, or other relevant credentials to prepare for employment	(i) participate in training, education, or preparation for licensure, certification, or other relevant credentials to prepare for employment
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(C) demonstrate professional standards and personal qualities needed to be employable such as self-discipline, positive attitude, integrity, leadership, customer service, work ethic, and adaptability with increased fluency	(i) demonstrate professional standards needed to be employable
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(C) demonstrate professional standards and personal qualities needed to be employable such as self-discipline, positive attitude, integrity, leadership, customer service, work ethic, and adaptability with increased fluency	(ii) demonstrate personal qualities needed to be employable
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(D) employ teamwork and conflict-management skills with increased fluency to achieve collective goals	(i) employ teamwork skills with increased fluency to achieve collective goals

Knowledge and Skill Statement	Student Expectation	Breakout
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(D) employ teamwork and conflict-management skills with increased fluency to achieve collective goals	(ii) employ conflict-management skills with increased fluency to achieve collective goals
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(E) employ planning and time-management skills and tools with increased fluency to enhance results and complete work tasks	(i) employ planning skills with increased fluency to enhance results
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(E) employ planning and time-management skills and tools with increased fluency to enhance results and complete work tasks	(ii) employ planning skills with increased fluency to complete work tasks
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(E) employ planning and time-management skills and tools with increased fluency to enhance results and complete work tasks	(iii) employ planning tools with increased fluency to enhance results
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(E) employ planning and time-management skills and tools with increased fluency to enhance results and complete work tasks	(iv) employ planning tools with increased fluency to complete work tasks
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(E) employ planning and time-management skills and tools with increased fluency to enhance results and complete work tasks	(v) employ time-management skills with increased fluency to enhance results
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(E) employ planning and time-management skills and tools with increased fluency to enhance results and complete work tasks	(vi) employ time-management skills with increased fluency to complete work tasks

Knowledge and Skill Statement	Student Expectation	Breakout
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(E) employ planning and time-management skills and tools with increased fluency to enhance results and complete work tasks	(vii) employ time-management tools with increased fluency to enhance results
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(E) employ planning and time-management skills and tools with increased fluency to enhance results and complete work tasks	(viii) employ time-management tools with increased fluency to complete work tasks
(2) The student applies professional communications strategies. The student is expected to:	(A) demonstrate verbal and non-verbal communication consistently in a clear, concise, and effective manner	(i) demonstrate verbal communication consistently in a clear, concise, and effective manner
(2) The student applies professional communications strategies. The student is expected to:	(A) demonstrate verbal and non-verbal communication consistently in a clear, concise, and effective manner	(ii) demonstrate non-verbal communication consistently in a clear, concise, and effective manner
(2) The student applies professional communications strategies. The student is expected to:	(B) present information formally and informally in an effective manner	(i) present information formally in an effective manner
(2) The student applies professional communications strategies. The student is expected to:	(B) present information formally and informally in an effective manner	(ii) present information informally in an effective manner
(2) The student applies professional communications strategies. The student is expected to:	(C) apply active listening skills to obtain and clarify information	(i) apply active listening skills to obtain information
(2) The student applies professional communications strategies. The student is expected to:	(C) apply active listening skills to obtain and clarify information	(ii) apply active listening skills to clarify information

Knowledge and Skill Statement	Student Expectation	Breakout
(2) The student applies professional communications strategies. The student is expected to:	(D) exhibit public relations skills to maintain internal and external customer/client satisfaction	(i) exhibit public relations skills to maintain internal customer/client satisfaction
(2) The student applies professional communications strategies. The student is expected to:	(D) exhibit public relations skills to maintain internal and external customer/client satisfaction	(ii) exhibit public relations skills to maintain external customer/client satisfaction
(3) The student implements advanced problem-solving methods. The student is expected to:	(A) employ critical-thinking skills with increased fluency both independently and in groups to solve problems and make decisions □	(i) employ critical-thinking skills with increased fluency independently to solve problems
(3) The student implements advanced problem-solving methods. The student is expected to:	(A) employ critical-thinking skills with increased fluency both independently and in groups to solve problems and make decisions □	(ii) employ critical-thinking skills with increased fluency independently to make decisions
(3) The student implements advanced problem-solving methods. The student is expected to:	(A) employ critical-thinking skills with increased fluency both independently and in groups to solve problems and make decisions □	(iii) employ critical-thinking skills with increased fluency in groups to solve problems
(3) The student implements advanced problem-solving methods. The student is expected to:	(A) employ critical-thinking skills with increased fluency both independently and in groups to solve problems and make decisions □	(iv) employ critical-thinking skills with increased fluency in groups to make decisions

Knowledge and Skill Statement	Student Expectation	Breakout
(4) The student understands and applies proper safety techniques in the workplace. The student is expected to:	(A) comply with Occupational Safety and Health Administration regulations in the workplace	(i) comply with Occupational Safety and Health Administration regulations in the workplace
(4) The student understands and applies proper safety techniques in the workplace. The student is expected to:	(B) demonstrate knowledge of procedures for reporting and handling accidents and safety incidents	(i) demonstrate knowledge of procedures for reporting accidents
(4) The student understands and applies proper safety techniques in the workplace. The student is expected to:	(B) demonstrate knowledge of procedures for reporting and handling accidents and safety incidents	(ii) demonstrate knowledge of procedures for reporting safety incidents
(4) The student understands and applies proper safety techniques in the workplace. The student is expected to:	(B) demonstrate knowledge of procedures for reporting and handling accidents and safety incidents	(iii) demonstrate knowledge of procedures for handling accidents
(4) The student understands and applies proper safety techniques in the workplace. The student is expected to:	(B) demonstrate knowledge of procedures for reporting and handling accidents and safety incidents	(iv) demonstrate knowledge of procedures for handling safety incidents
(4) The student understands and applies proper safety techniques in the workplace. The student is expected to:	(C) analyze health and wellness practices that influence job performance	(i) analyze health practices that influence job performance
(4) The student understands and applies proper safety techniques in the workplace. The student is expected to:	(C) analyze health and wellness practices that influence job performance	(ii) analyze wellness practices that influence job performance

Knowledge and Skill Statement	Student Expectation	Breakout
(4) The student understands and applies proper safety techniques in the workplace. The student is expected to:	(D) understand and follow workplace safety rules and regulations	(i) understand workplace safety rules and regulations
(4) The student understands and applies proper safety techniques in the workplace. The student is expected to:	(D) understand and follow workplace safety rules and regulations	(ii) follow workplace safety rules and regulations
(5) The student understands the professional, ethical, and legal responsibilities in culinary arts. The student is expected to:	(A) demonstrate a positive, productive work ethic by performing assigned tasks as directed	(i) demonstrate a positive, productive work ethic by performing assigned tasks as directed
(5) The student understands the professional, ethical, and legal responsibilities in culinary arts. The student is expected to:	(B) show integrity by choosing the ethical course of action when making decisions	(i) show integrity by choosing the ethical course of action when making decisions
(5) The student understands the professional, ethical, and legal responsibilities in culinary arts. The student is expected to:	(C) comply with all applicable rules, laws, and regulations in a consistent manner	(i) comply with all applicable rules in a consistent manner
(5) The student understands the professional, ethical, and legal responsibilities in culinary arts. The student is expected to:	(C) comply with all applicable rules, laws, and regulations in a consistent manner	(ii) comply with all applicable laws in a consistent manner
(5) The student understands the professional, ethical, and legal responsibilities in culinary arts. The student is expected to:	(C) comply with all applicable rules, laws, and regulations in a consistent manner	(iii) comply with all applicable regulations in a consistent manner

Knowledge and Skill Statement	Student Expectation	Breakout
(6) The student demonstrates proper culinary techniques and knowledge of the professional kitchen. The student is expected to:	(A) demonstrate proper use of large and small equipment in a commercial kitchen with increased proficiency	(i) demonstrate proper use of large equipment in a commercial kitchen with increased proficiency
(6) The student demonstrates proper culinary techniques and knowledge of the professional kitchen. The student is expected to:	(A) demonstrate proper use of large and small equipment in a commercial kitchen with increased proficiency	(ii) demonstrate proper use of small equipment in a commercial kitchen with increased proficiency
(6) The student demonstrates proper culinary techniques and knowledge of the professional kitchen. The student is expected to:	(B) demonstrate advanced food production and presentation techniques	(i) demonstrate advanced food production techniques
(6) The student demonstrates proper culinary techniques and knowledge of the professional kitchen. The student is expected to:	(B) demonstrate advanced food production and presentation techniques	(ii) demonstrate advanced food presentation techniques
(6) The student demonstrates proper culinary techniques and knowledge of the professional kitchen. The student is expected to:	(C) demonstrate moist, dry, and combination cookery methods	(i) demonstrate moist cookery methods
(6) The student demonstrates proper culinary techniques and knowledge of the professional kitchen. The student is expected to:	(C) demonstrate moist, dry, and combination cookery methods	(ii) demonstrate dry cookery methods
(6) The student demonstrates proper culinary techniques and knowledge of the professional kitchen. The student is expected to:	(C) demonstrate moist, dry, and combination cookery methods	(iii) demonstrate combination cookery methods

Knowledge and Skill Statement	Student Expectation	Breakout
(6) The student demonstrates proper culinary techniques and knowledge of the professional kitchen. The student is expected to:	(D) demonstrate advanced food preparation skills used in commercial food service preparations	(i) demonstrate advanced food preparation skills used in commercial food service preparations
(6) The student demonstrates proper culinary techniques and knowledge of the professional kitchen. The student is expected to:	(E) demonstrate advanced baking techniques	(i) demonstrate advanced baking techniques
(6) The student demonstrates proper culinary techniques and knowledge of the professional kitchen. The student is expected to:	(F) demonstrate proper receiving and storage techniques	(i) demonstrate proper receiving techniques
(6) The student demonstrates proper culinary techniques and knowledge of the professional kitchen. The student is expected to:	(F) demonstrate proper receiving and storage techniques	(ii) demonstrate proper storage techniques
(6) The student demonstrates proper culinary techniques and knowledge of the professional kitchen. The student is expected to:	(G) demonstrate proper cleaning of equipment and maintenance of the commercial kitchen	(i) demonstrate proper cleaning of equipment of the commercial kitchen
(6) The student demonstrates proper culinary techniques and knowledge of the professional kitchen. The student is expected to:	(G) demonstrate proper cleaning of equipment and maintenance of the commercial kitchen	(ii) demonstrate proper maintenance of the commercial kitchen

Subject	Chapter 130. Career and Technical Education, Subchapter I. Hospitality and Tourism
Course Title	§130.263. Extended Practicum in Hospitality Services (One Credit), Adopted 2015.
<p>(a) General Requirements. This course is recommended for students in Grades 11 and 12. The practicum course is a paid or unpaid capstone experience for students participating in a coherent sequence of career and technical education courses in the Hospitality and Tourism Career Cluster. Recommended prerequisite: Hospitality Services. Corequisite: Practicum in Hospitality Services. This course must be taken concurrently with Practicum in Hospitality Services and may not be taken as a stand-alone course. Students shall be awarded one credit for successful completion of this course. A student may repeat this course once for credit provided that the student is experiencing different aspects of the industry and demonstrating proficiency in additional and more advanced knowledge and skills.</p>	
<p>(b) Introduction.</p>	
<p>(1) Career and technical education instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.</p> <p>(2) The Hospitality and Tourism Career Cluster focuses on the management, marketing, and operations of restaurants and other food/beverage services, lodging, attractions, recreation events, and travel-related services.</p> <p>(3) Extended Practicum in Hospitality Services is a unique practicum experience that provides opportunities for students to participate in a learning experience that combines classroom instruction with actual business and industry career experiences. Extended Practicum in Hospitality Services integrates academic and career and technical education; provides more interdisciplinary instruction; and supports strong partnerships among schools, businesses, and community institutions with the goal of preparing students with a variety of skills in a fast-changing workplace.</p> <p>(4) Students are taught employability skills, including job-specific skills applicable to their training plan, job interview techniques, communication skills, financial and budget activities, human relations, and portfolio development. Extended Practicum in Hospitality Services is relevant and rigorous, supports student attainment of academic and technical standards, and effectively prepares students for college and career success.</p> <p>(5) Instruction may be delivered through school-based laboratory training or through work-based delivery arrangement such as cooperative education, mentoring, and job shadowing.</p> <p>(6) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.</p> <p>(7) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.</p>	

(c) Knowledge and Skills.		
Knowledge and Skill Statement	Student Expectation	Breakout
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(A) participate in a paid or unpaid, laboratory- or work-based application of previously studied knowledge and skills related to hospitality services	(i) participate in a paid or unpaid, laboratory- or work-based application of previously studied knowledge related to hospitality services
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(A) participate in a paid or unpaid, laboratory- or work-based application of previously studied knowledge and skills related to hospitality services	(ii) participate in a paid or unpaid, laboratory- or work-based application of previously studied skills related to hospitality services
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(B) participate in training, education, or preparation for licensure, certification, or other relevant credentials to prepare for employment	(i) participate in training, education, or preparation for licensure, certification, or other relevant credentials to prepare for employment
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(C) demonstrate professional standards and personal qualities needed to be employable such as leadership, appreciation for diversity, conflict management, customer service, work ethic, and adaptability with increased fluency	(i) demonstrate professional standards needed to be employable
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(C) demonstrate professional standards and personal qualities needed to be employable such as leadership, appreciation for diversity, conflict management, customer service, work ethic, and adaptability with increased fluency	(ii) demonstrate personal qualities needed to be employable
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(D) employ teamwork and conflict-management skills with increased fluency to achieve collective goals	(i) employ teamwork skills with increased fluency to achieve collective goals

Knowledge and Skill Statement	Student Expectation	Breakout
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(D) employ teamwork and conflict-management skills with increased fluency to achieve collective goals	(ii) employ conflict-management skills with increased fluency to achieve collective goals
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(E) employ planning and time-management skills and tools with increased fluency to enhance results and complete work tasks	(i) employ planning skills with increased fluency to enhance results
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(E) employ planning and time-management skills and tools with increased fluency to enhance results and complete work tasks	(ii) employ planning skills with increased fluency to complete work tasks
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(E) employ planning and time-management skills and tools with increased fluency to enhance results and complete work tasks	(iii) employ planning tools with increased fluency to enhance results
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(E) employ planning and time-management skills and tools with increased fluency to enhance results and complete work tasks	(iv) employ planning tools with increased fluency to complete work tasks
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(E) employ planning and time-management skills and tools with increased fluency to enhance results and complete work tasks	(v) employ time-management skills with increased fluency to enhance results
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(E) employ planning and time-management skills and tools with increased fluency to enhance results and complete work tasks	(vi) employ time-management skills with increased fluency to complete work tasks

Knowledge and Skill Statement	Student Expectation	Breakout
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(E) employ planning and time-management skills and tools with increased fluency to enhance results and complete work tasks	(vii) employ time-management tools with increased fluency to enhance results
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(E) employ planning and time-management skills and tools with increased fluency to enhance results and complete work tasks	(viii) employ time-management tools with increased fluency to complete work tasks
(2) The student applies professional communications strategies. The student is expected to:	(A) demonstrate verbal and non-verbal communication consistently in a clear, concise, and effective manner	(i) demonstrate verbal communication consistently in a clear, concise, and effective manner
(2) The student applies professional communications strategies. The student is expected to:	(A) demonstrate verbal and non-verbal communication consistently in a clear, concise, and effective manner	(ii) demonstrate non-verbal communication consistently in a clear, concise, and effective manner
(2) The student applies professional communications strategies. The student is expected to:	(B) present information formally and informally in an effective manner	(i) present information formally in an effective manner
(2) The student applies professional communications strategies. The student is expected to:	(B) present information formally and informally in an effective manner	(ii) present information informally in an effective manner
(2) The student applies professional communications strategies. The student is expected to:	(C) analyze, interpret, and effectively communicate information	(i) analyze information
(2) The student applies professional communications strategies. The student is expected to:	(C) analyze, interpret, and effectively communicate information	(ii) interpret information

Knowledge and Skill Statement	Student Expectation	Breakout
(2) The student applies professional communications strategies. The student is expected to:	(C) analyze, interpret, and effectively communicate information	(iii) effectively communicate information
(2) The student applies professional communications strategies. The student is expected to:	(D) apply active listening skills to obtain and clarify information	(i) apply active listening skills to obtain information
(2) The student applies professional communications strategies. The student is expected to:	(D) apply active listening skills to obtain and clarify information	(ii) apply active listening skills to clarify information
(2) The student applies professional communications strategies. The student is expected to:	(E) exhibit public relations skills to maintain internal and external customer/client satisfaction	(i) exhibit public relations skills to maintain internal customer/client satisfaction
(2) The student applies professional communications strategies. The student is expected to:	(E) exhibit public relations skills to maintain internal and external customer/client satisfaction	(ii) exhibit public relations skills to maintain external customer/client satisfaction
(3) The student implements advanced problem-solving methods. The student is expected to employ critical-thinking skills with increased fluency both independently and in groups to solve problems and make decisions.	[A] employ critical-thinking skills with increased fluency both independently and in groups to solve problems and make decisions	(i) employ critical-thinking skills with increased fluency independently to solve problems
(3) The student implements advanced problem-solving methods. The student is expected to employ critical-thinking skills with increased fluency both independently and in groups to solve problems and make decisions.	[A] employ critical-thinking skills with increased fluency both independently and in groups to solve problems and make decisions	(ii) employ critical-thinking skills with increased fluency in groups to solve problems

Knowledge and Skill Statement	Student Expectation	Breakout
(3) The student implements advanced problem-solving methods. The student is expected to employ critical-thinking skills with increased fluency both independently and in groups to solve problems and make decisions.	[A] employ critical-thinking skills with increased fluency both independently and in groups to solve problems and make decisions	(iii) employ critical-thinking skills with increased fluency independently to make decisions
(3) The student implements advanced problem-solving methods. The student is expected to employ critical-thinking skills with increased fluency both independently and in groups to solve problems and make decisions.	[A] employ critical-thinking skills with increased fluency both independently and in groups to solve problems and make decisions	(iv) employ critical-thinking skills with increased fluency in groups to make decisions
(4) The student understands and applies proper safety techniques in the workplace. The student is expected to:	(A) demonstrate an understanding of and consistently follow workplace safety rules and regulations	(i) demonstrate an understanding of workplace safety rules and regulations
(4) The student understands and applies proper safety techniques in the workplace. The student is expected to:	(A) demonstrate an understanding of and consistently follow workplace safety rules and regulations	(ii) consistently follow workplace safety rules and regulations
(4) The student understands and applies proper safety techniques in the workplace. The student is expected to:	(B) demonstrate knowledge of procedures for reporting and handling accidents and safety incidents	(i) demonstrate knowledge of procedures for reporting accidents
(4) The student understands and applies proper safety techniques in the workplace. The student is expected to:	(B) demonstrate knowledge of procedures for reporting and handling accidents and safety incidents	(ii) demonstrate knowledge of procedures for reporting safety incidents

Knowledge and Skill Statement	Student Expectation	Breakout
(4) The student understands and applies proper safety techniques in the workplace. The student is expected to:	(B) demonstrate knowledge of procedures for reporting and handling accidents and safety incidents	(iii) demonstrate knowledge of procedures for handling accidents
(4) The student understands and applies proper safety techniques in the workplace. The student is expected to:	(B) demonstrate knowledge of procedures for reporting and handling accidents and safety incidents	(iv) demonstrate knowledge of procedures for handling safety incidents
(5) The student understands the professional, ethical, and legal responsibilities in hospitality services. The student is expected to:	(A) practice ethical conduct when interacting with others such as maintaining client confidentiality and maintaining privacy of sensitive content	(i) practice ethical conduct when interacting with others
(5) The student understands the professional, ethical, and legal responsibilities in hospitality services. The student is expected to:	(B) demonstrate a positive, productive work ethic by performing assigned tasks as directed	(i) demonstrate a positive, productive work ethic by performing assigned tasks as directed
(5) The student understands the professional, ethical, and legal responsibilities in hospitality services. The student is expected to:	(C) show integrity by choosing the ethical course of action when making decisions	(i) show integrity by choosing the ethical course of action when making decisions
(5) The student understands the professional, ethical, and legal responsibilities in hospitality services. The student is expected to:	(D) demonstrate proper etiquette and knowledge of acceptable-use policies when using networks, especially resources on the Internet and intranet	(i) demonstrate proper etiquette when using networks, especially resources on the Internet
(5) The student understands the professional, ethical, and legal responsibilities in hospitality services. The student is expected to:	(D) demonstrate proper etiquette and knowledge of acceptable-use policies when using networks, especially resources on the Internet and intranet	(ii) demonstrate proper etiquette when using networks, especially resources on the intranet

Knowledge and Skill Statement	Student Expectation	Breakout
(5) The student understands the professional, ethical, and legal responsibilities in hospitality services. The student is expected to:	(D) demonstrate proper etiquette and knowledge of acceptable-use policies when using networks, especially resources on the Internet and intranet	(iii) demonstrate knowledge of acceptable-use policies when using networks, especially resources on the Internet
(5) The student understands the professional, ethical, and legal responsibilities in hospitality services. The student is expected to:	(D) demonstrate proper etiquette and knowledge of acceptable-use policies when using networks, especially resources on the Internet and intranet	(iv) demonstrate knowledge of acceptable-use policies when using networks, especially resources on the intranet
(5) The student understands the professional, ethical, and legal responsibilities in hospitality services. The student is expected to:	(E) comply with all applicable rules, laws, and regulations in a consistent manner	(i) comply with all applicable rules in a consistent manner
(5) The student understands the professional, ethical, and legal responsibilities in hospitality services. The student is expected to:	(E) comply with all applicable rules, laws, and regulations in a consistent manner	(ii) comply with all applicable laws in a consistent manner
(5) The student understands the professional, ethical, and legal responsibilities in hospitality services. The student is expected to:	(E) comply with all applicable rules, laws, and regulations in a consistent manner	(iii) comply with all applicable regulations in a consistent manner
(6) The student participates in a supervised hospitality experience. The student is expected to:	(A) conduct, document, and evaluate learning activities in a supervised hospitality experience	(i) conduct learning activities in a supervised hospitality experience
(6) The student participates in a supervised hospitality experience. The student is expected to:	(A) conduct, document, and evaluate learning activities in a supervised hospitality experience	(ii) document learning activities in a supervised hospitality experience

Knowledge and Skill Statement	Student Expectation	Breakout
(6) The student participates in a supervised hospitality experience. The student is expected to:	(A) conduct, document, and evaluate learning activities in a supervised hospitality experience	(iii) evaluate learning activities in a supervised hospitality experience
(6) The student participates in a supervised hospitality experience. The student is expected to:	(B) practice technical procedures such as registration, rate assignment, room assignment, and determination of payment methods needed to meet guest needs	(i) practice technical procedures needed to meet guest needs
(6) The student participates in a supervised hospitality experience. The student is expected to:	(C) examine, understand, and articulate job-specific technical vocabulary	(i) examine job-specific technical vocabulary
(6) The student participates in a supervised hospitality experience. The student is expected to:	(C) examine, understand, and articulate job-specific technical vocabulary	(ii) understand job-specific technical vocabulary
(6) The student participates in a supervised hospitality experience. The student is expected to:	(C) examine, understand, and articulate job-specific technical vocabulary	(iii) articulate job-specific technical vocabulary
(6) The student participates in a supervised hospitality experience. The student is expected to:	(D) demonstrate proficiency in the duties for an appropriate department of a hotel or tourism venue	(i) demonstrate proficiency in the duties for an appropriate department of a hotel or tourism venue
(6) The student participates in a supervised hospitality experience. The student is expected to:	(E) collect representative work samples	(i) collect representative work samples