Food Technology

Career Cluster	Hospitality and Tourism
Course Code	19254
Prerequisite(s)	N/A
Credit	0.5
Program of Study and Sequence	Cluster Course – Fundamental Food Concepts **– Food Technology** – Nutrition and Wellness – Nutritional Sciences - Restaurant Management/Culinary Arts I – Restaurant Management/Culinary Arts II – Capstone Experience
Student Organization	Family, Career and Community Leaders of America (FCCLA)
Coordinating Work-Based Learning	Workplace Tours; Mentoring
Industry Certifications	N/A
Dual Credit or Dual Enrollment	N/A
Teacher Certification	Family and Consumer Sciences (FACS); FACS Education; Hospitality and Tourism Pathway Endorsement
Resources	FCCLA

Course Description:

Food Technology offers opportunities to study the composition, structure, and properties of foods. Students examine changes that occur during the processing, storage, preparation, and consumption of food. Students explore effects of various materials, microorganisms, and processes on food products through laboratory experiments.

Program of Study Application

Food Technology is a pathway course in the Hospitality and Tourism career cluster; Restaurant and Food Service Pathway.

Career Cluster: Hospitality & Tourism

Course: Food Technology

Course Standards

FT 1 Students will integrate knowledge, skills, and practices required for careers in food science, food processing and food production from production to consumption.

Webb Level	*Sub-indicator*	*Integrated Content*
Level 2: Skill/Concept	FT1.1 Determine the contributions of food science to society	
Level 2: Skill/Concept	FT 1.2 Summarize food science in relation to social change and technological advances	
Level 2: Skill/Concept	FT 1.3 Explain contributions of food science to changing food quality and availability	
Level 2: Skill/Concept	FT 1.4 Investigate careers in food science, food processing, and food production industries	

Notes

FT 2 Students will explore scientific practices as they relate to the food industry.

Webb Level	*Sub-indicator*	*Integrated Content*
Level 2: Skill/Concept	FT. 2.1 Demonstrate safe laboratory practices	
Level 3: Strategic Thinking	FT 2.2 Apply skills needed for valid and reliable scientific experiments	

Notes

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FT 3 Students will investigate physical and chemical changes of food composition.

Webb Level	*Sub-indicator*	*Integrated Content*
Level 2: Skill/Concept	FT 3.1 Differentiate roles of the three phases of water in food preparation, food processing and food safety, e.g. steaming, freezing, boiling, shocking (ice bath), dehydration	
Level 3: Strategic Thinking	FT 3.2 Investigate changes of macro nutrients in food processing and preparation, e.g. heat application, varied ingredients	
Level 3: Strategic Thinking	FT 3.3 Investigate changes of micro nutrients in food processing and preparation, e.g. heat applications, solubility	

Notes

FT 4 Students will demonstrate food safety and sanitation procedures.

Webb Level	Sub-indicator	Integrated Content
Level 2: Skill/Concept	FT 4.1 Practice procedures that minimize the risks of food borne illness	
Level 3: Strategic Thinking	FT 4.2 Differentiate how microorganisms act in food and their effect on food products, e.g. fermentation, molds, probiotics and yeast	
Level 2: Skill/Concept	FT 4.3 Classify sources of contamination: chemical, physical, and biological	

Notes

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FT 5 Students will use the role of sensory evaluation in the food industry.

Webb Level	Sub-indicator	Integrated Content
Level 3: Strategic Thinking	FT 5.1 Differentiate sensory characteristics that affect food preferences	
Level 2: Skill/Concept	FT 5.2 Implement procedures for evaluation of sensory characteristics	

Notes

FT 6 Students will investigate technological advances in food science, food processing, and food production.

Webb Level	Sub-indicator	Integrated Content
Level 2: Skill/Concept	FT 6.1 Distinguish scientific advances that have changed the food supply and preparation, e.g. genetically modified organisms (GMOs), molecular gastronomy	
Level 3: Strategic Thinking	FT 6.2 Investigate use of technology in new food product development	

Notes