

Colorado CTE Course – Scope and Sequence

Course Name	Culinary Nutrition		Course Details	1 Semester	
			Course = 0.50 Carnegie Unit Credit		
Course Description	The purpose of this course is to develop lifelong, healthy individuals with an understanding of healthy and nutritious preparation techniques utilizing various resources and skills. Emphasis is placed on implementing healthy nutritional choices, preparing nutrient-dense seasonal foods, sports nutrition, exploring careers related to culinary nutrition, and practicing wise consumer decisions.				
Note:	This is a suggested scope and sequence for the course content. The content will work with any textbook or instructional resource. If locally adapted, make sure all essential knowledge and skills are covered.				
SCED Identification #		Schedule calculation based on 60 calendar days of a 90-day semester. Scope and sequence allows for additional time for guest speakers, student presentations, field trips, remediation, or other content topics.			
All courses taught in an approved CTE program must include Essential Skills embedded into the course content. The Essential Skills Framework for this course can be found at https://www.cde.state.co.us/standardsandinstruction/essentialskills . The technical standards for Family and Consumer Sciences are found on the National Administrators for Family and Consumer Sciences website at LEADFCS NATIONAL STANDARDS					
Instructional Unit Topic	Suggested Length of Instruction	CTE or Academic Standard Alignment	Competency / Performance Indicator	Outcome / Measurement	CTSO Integration
Unit 1: Food Safety and Sanitation Principles and Applications	1 week	LEADFCS 8.0 Integrate knowledge, skills and practices required for careers in food production and services	LEADFCS8.1 Analyze career paths within the food production and food services industries. LEADFCS8.2 Demonstrate food safety and sanitation procedures.	LEADFCS8.1.1 Explain the roles, duties, and functions of individuals engaged in food production and services careers. LEADFCS8.2.5 Practice good personal hygiene/health procedures, including dental health and management and report symptoms of illness.	

			LEADFCS8.2.6 Demonstrate proper purchasing, receiving, storage, and handling of both raw and prepared foods. LEADFCS8.2.7 Demonstrate safe food handling and preparation techniques that prevent cross contamination from potentially hazardous foods, between raw and ready-to-eat foods, and between animal and fish sources and other food products. LEADFCS8.3.5 Demonstrate procedures for safe and secure storage of equipment and tools. LEADFCS8.3.6 Identify a variety of types of equipment for food processing, cooking, holding, storing, and serving, including hand tools and small ware. LEADFCS8.5.1 Demonstrate professional skills in safe handling of knives, tools and equipment.	
		LEADFCS8.3 Demonstrate industry standards in selecting, using, and maintaining food production and food service equipment. LEADFCS8.5 Demonstrate professional food preparation methods and techniques for all menu categories to produce a variety of		

		LEADFCS 9.0 Integrate knowledge, skills and practices required for careers in food science, food technology, dietetics and nutrition LEADFCS14.0 Demonstrate nutrition and wellness	food products that meet customer needs. LEADFCS9.2- Apply risk management procedures to food safety, food testing and sanitation.	LEADFCS8.5.3 Utilize weights and measurement tools to demonstrate knowledge of portion control and proper scaling and measurement techniques. LEADFCS8.5.4 Apply the fundamentals of time, temperature, and cooking methods to cooking, cooling, reheating and holding a variety of foods. LEADFCS9.2.1- Analyze factors that contribute to food borne illness. LEADFCS9.2.5- Demonstrate practices and procedures that assure personal and workplace health and hygiene. LEADFCS9.2.6- Demonstrate standard procedures for receiving and storage of raw and prepared foods. LEADFCS9.2.7- Classify current types of cleaning materials and sanitizers and their proper use. LEADFCS9.2.9- Demonstrate waste	
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disposal and recycling
methods.

		practices that enhance individual and family well-being	LEADFCS14.4- Evaluate factors that affect food safety from production through consumption.	LEADFCS14.4.1- Analyze conditions and practices that promote safe food handling. LEADFCS14.4.2- Analyze safety and sanitation practices throughout the food chain. LEADFCS14.4.4- Analyze federal, state, and local inspection and labeling systems that protect the health of individuals and the public. LEADFCS14.4.5- Analyze food borne illness factors, including causes, foods at risk, and methods of prevention commercially and by individuals and families.	
Unit 2:Sustainability Principles and Applications	1 week	CO Analyze sustainability practices and how they relate to food choices, preparation, and waste management	CO Explore the farm to table movement as it relates to all stages of food production.	CO Comprehend the link between farmers and food choices. CO Analyze the relationship of the environment to family and consumer resources. CO Discuss current issues facing local resources	

				CO Develop and debate an opinion relating to the farm to table movement CO Compare organically-produced foods to conventionally-produced foods to GM foods CO Apply “farm to table” concept to food selection and preparation. CO Summarize environmental trends and issues affecting families and future generations CO Describe sustainable practices in food preparation and their importance to resource management. CO Debate public concern for technological advancements in agriculture and aquaculture such as genetically modified foods.	
			CO Recognize how agriculture and technology affect sustainability		
			CO Recognize the implications of	NC 3.4.3 Explore strategies and practices to conserve energy and	

		LEADFCS 14.0 Demonstrate nutrition and wellness practices that enhance individual and family well being	sustainable practices on communities LEADFCS 14.5 Evaluate the influence of science and technology on food composition, safety, and other issues.	reduce waste. NC 2.2.3 Demonstrate behaviors that conserve, reuse, and recycle resources to maintain the environment. CO Describe sustainable practices in food preparation and their importance to resource management. CO Recognize current issues facing local resources NC 3.4 Analyze resource consumption for conservation and waste management practices NS 14.5.1 Analyze how scientific and technical advances influence the nutrient content, availability, and safety of foods. LEADFCS 14.5.2 Analyze how the scientific and technical advances in food processing, storage, product development, and distribution influences nutrition and wellness.	
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		RfA Use reasoning processes, individually and collaboratively, to take responsible action in families, workplaces and communities. LEADFCS 2.0 Evaluate management practices related to the human, economic and environmental resources.	RfA 5 Determine scientific inquiry and reasoning to gain factual knowledge and test theories on which to base judgments for action. LEADFCS 2.5 Analyze relationships between the economic system and consumer actions.	LEADFCS 14.5.4 Analyze the effects of food science and technology on meeting nutritional needs. RfA5.1 Delineate scope, concepts, and scientific terminology for a particular inquiry. RfA5.2 Judge validity and reliability of information, sources, opinions, and evidence. RfA5.5 Draw conclusions based on data and information that are judged to be reliable. LEADFCS 2.5.1 Analyze the use of resources in making choices that satisfy the needs and wants of individuals and families. LEADFCS 2.5.3 Analyze economic effects of laws and regulations that pertain to consumers and providers of services.	
Unit 3: Nutrient Principles and Applications	6-7 Weeks	NS9.0- Integrate knowledge, skills, practices	NS9.3 Evaluate nutrition principles, food plans, preparation	LEADFCS9.3.1 Analyze nutrient requirements across the life span	

		required for careers in food science, food technology, dietetics, and nutrition.	techniques and specialized dietary plans.	addressing the diversity of people, culture, and religions. LEADFCS9.3.2 Analyze nutritional data. LEADFCS9.3.3 Apply principles of food production to maximize nutrient retention in prepared foods. CO 9.3.3 a Prepare foods which demonstrate cooking basics for energy nutrients such as carbohydrates, protein and fats. CO 9.3.3 b Prepare foods which demonstrate cooking basics for non-energy nutrients such as vitamins, minerals and non-nutritive compounds. LEADFCS9.3.5 Analyze recipe/formula proportions and modifications for food production. LEADFCS9.3.6 Critique the selection of foods to promote a healthy lifestyle. LEADFCS9.3.7 Categorize foods into exchange groups and	
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			LEADFCS9.4 Apply basic concepts of nutrition and nutritional therapy in a variety of settings.	plan menus, applying the exchange system to meet various nutrient needs. LEADFCS9.4.1 Analyze nutritional needs of individuals. LEADFCS9.4.3 Utilize a selective menu. LEADFCS9.4.4 Construct a modified diet based on nutritional needs and health conditions.	
		LEADFCS 14.0 Demonstrate nutrition and wellness practices that enhance individual and family well-being.	LEADFCS14.2 Evaluate the nutritional needs of individuals and families in relation to health and wellness across the lifespan. LEADFCS14.3 Demonstrate the ability to acquire, handle, and use foods to meet nutrition and wellness needs of individuals and families across the lifespan. LEADFCS14.5 Evaluate the influence of science and technology on food	LEADFCS 14.2.1 Analyze the effect of nutrients on health, appearance, and peak performance. LEADFCS14.3.1 Apply various dietary guidelines in planning to meet nutrition and wellness needs. LEADFCS14.3.3 Demonstrate ability to select, store, prepare, and serve nutritious and aesthetically pleasing foods. LEADFCS 14.5.4 Analyze effects of food science and technology on	

		RFBS.02 - Integrate knowledge, skills, practices required for careers in food science, food technology, dietetics, and nutrition.	composition, safety, and other issues. RFBS.02.1 Evaluate nutrition principles, food plans, preparation techniques and specialized dietary plans in a variety of settings.	meeting nutritional needs. RFBS.02.0 Evaluate nutrition principles, food plans, preparation techniques and specialized dietary plans in a variety of settings.	
Unit 4: Factors Affecting Food Choices and Cooking Methods	4-5 Weeks	LEADFCS 9.0 Integrate knowledge, skills, practices required for careers in food science, food technology, dietetics, and nutrition.	LEADFCS 9.3 Evaluate nutrition principles, food plans, preparation techniques and specialized dietary plans. CO 9.4 Integrate basic concepts of nutrition and nutritional therapy in a variety of settings.	LEADFCS 9.3.1 Analyze nutrient requirements across the life span addressing the diversity of people, culture, and religions. LEADFCS 9.3.2 Analyze nutritional data. CO 9.3.2 a Plan and prepare meals or food dishes that addresses special dietary needs and follows the principles of menu planning. LEADFCS 9.4.1 Analyze nutritional needs of individuals. LEADFCS 9.4.4 Construct a modified diet based on nutritional needs and health conditions. LEADFCS 9.4.5 Design instruction on nutrition for	

				health	
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		NC 8.0 Analyze economic effects of laws and regulations that pertain to consumers and providers of services.	LEADFCS 9.6 Demonstrate food science, dietetics, and nutrition management principles and practices. LEADFCS 8.4 Demonstrate menu planning principles and techniques based on standardized recipes to meet customer needs. LEADFCS 8.5 Demonstrate professional food preparation methods and techniques for all menu categories to produce a variety of food products that meet customer needs.	maintenance and disease prevention. LEADFCS 9.6.1 Build menus to customer/ client preferences. LEADFCS 8.4.2 Apply menu-planning principles to develop and modify menus. LEADFCS 8.4.7 Apply principles of Measurement, Portion Control, Conversions, Food Cost Analysis and Control, Menu Terminology, and Menu Pricing to menu planning. LEADFCS 8.5.3 Utilize weights and measurement tools to demonstrate knowledge of portion control and proper scaling and measurement techniques. LEADFCS 8.5.14 Compare cooking methods that increase nutritional value, lower calorie and fat content, and utilize herbs and spices to enhance flavor.	
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		RFBS.04- Integrate knowledge, skills, and practices required for careers in food production and services.	RFBS.04.04 Demonstrate menu planning principles and techniques based on standardized recipes to meet customer needs.	RFBS.04.04.b Apply menu-planning principles to develop and modify menus. RFBS.04.04.c Analyze food, equipment, and supplies needed for menus. RFBS.04.04.f Apply principles of Measurement, Portion Control, Conversions, Food Cost Analysis and Control, Menu Terminology, and Menu Pricing to menu planning.	
		NS14.0 Analyze factors that influence nutrition and wellness practices across the lifespan.	LEADFCS14.2 Evaluate the nutritional needs of individuals and families in relation to health and wellness across the lifespan.	NS14.2.2 Analyze the relationship of nutrition and wellness to individual and family health throughout the lifespan. LEADFCS14.2.3 Analyze the effects of food and diet fads, food addictions, and eating disorders on wellness. LEADFCS14.2.4 Analyze sources of food and nutrition information, including food labels, related to health and wellness.	

			LEADFCS14.5 Evaluate the influence of science and technology on food composition, safety, and other issues.	NS14.3 Demonstrate ability to acquire, handle, and use foods to meet nutrition and wellness needs of individuals and families across the lifespan. (Corrected 1-09-09) NS14.3.1 Apply various dietary guidelines in planning to meet nutrition and wellness needs. NS14.3.2 Design strategies that meet the health and nutrition requirements of individuals and families with special needs. NS14.3.3 Demonstrate ability to select, store, prepare, and serve nutritious and aesthetically pleasing foods. NS14.5.1 Analyze how scientific and technical advances influence the nutrient content, availability, and safety of foods.	
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		CADV.03 Integrate knowledge, skills, practices required for careers in food science, food technology, dietetics, and nutrition.	CADV.03.01 Evaluate nutrition principles, food plans, preparations techniques and specialized dietary plans. CADV.03.02 Apply basic concepts of nutrition and nutritional	LEADFCS14.5.2 Analyze how the scientific and technical advances in food processing, storage, product development, and distribution influences nutrition and wellness. NS14.54 Analyze the effects of food science and technology on meeting nutritional needs. CADV.03.01.a Analyze nutrient requirements across the life span addressing the diversity of people, culture, and religions. CADV.03.01.b Analyze nutritional data. CADV.03.01.c Critique the selection of foods to promote a healthy lifestyle. CADV.03.01.d Categorize foods into exchange groups and plan menus, applying the exchange system to meet various nutrient needs.	
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			therapy in a variety of settings.	CADV.03.02.a Analyze nutritional needs of individuals. CADV.03.02.c Utilize a selective menu. CADV.03.02.d Construct a modified diet based on nutritional needs and health conditions. CADV.03.02.e Design instruction on nutrition for health maintenance and disease prevention. FMCS.02.01.a Explain physical, emotional, social, psychological, and spiritual components of individual and family wellness. FMCS.02.01.b Analyze legislation and regulations related to nutrition and wellness. FMCS.02.02.a Analyze the effect of nutrients on health, appearance, and peak performance.	
		CADV.03 Integrate knowledge, skills, practices required for careers in food science, food technology, dietetics, and nutrition.	FMCS.02.01 Analyze factors that influence nutrition and wellness practices across the lifespan. FMCS.02.02 Evaluate the nutritional needs of individuals and families in relation to health and wellness across the life span.		

		RfA Use reasoning processes, individually and collaboratively, to take responsible action in families, workplaces and communities.	RfA2 Analyze recurring and evolving family, workplace, and community concerns.	FMCS.02.02.c Analyze the effects of food and diet fads, food addictions, and eating disorders on wellness. FMCS.02.02.d Analyze sources of food and nutrition information, including food labels, related to health and wellness. RfA2.1 Classify different types of concerns (e.g., theoretic, technical, practical) and possible methods for addressing them. RfA2.2 Describe recurring and evolving concerns facing individuals, families, workplaces, and communities. RfA2.3 Describe conditions and circumstances that create or	
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			RfA4 Implement practical reasoning for responsible action in families, workplaces, and communities.	sustain recurring and evolving concerns. RfA2.4 Describe levels of concerns: individual, family, workplace, community, cultural/societal, global/environmental. RfA4.1 Synthesize information from a variety of sources that are judged to be reliable RfA4.3 Select goals/valued ends to resolve a particular concern. RfA4.4 Establish standards for choosing responsible action to address a particular concern.	
Unit 5: Career Options	1-2 Weeks	9.1 Analyze career paths within food science, food technology, dietetics, and nutrition industries.	9.1.1 Explain the roles and functions of individuals engaged in food science, food technology, dietetics, and nutrition careers. 9.1.2 Analyze opportunities for employment and entrepreneurial endeavors.		

			9.1.3 Summarize education and training requirements and opportunities for career paths in food science, food technology, dietetics, and nutrition.		
Unit 6: Research & Development, and Current Trends	1 Week				

Academic Standards Alignment

Colorado CTE courses are required to integrate academic and essential skills into course content. The following academic standards have been identified as aligned to this course and should be integrated throughout instruction.

[CO CTE Academic Standards Resources](#) (Rubrics, integration strategies, etc)

[CDE Colorado Academic Standards Online](#) (Online standards lookup tool)

Reading, Writing, & Communicating

Standard 1: Oral Expression and Listening

- **Prepared Graduate 1:** Collaborate effectively as group members or leaders who listen actively and respectfully; pose thoughtful questions, acknowledge the ideas of others; and contribute ideas to further the group's attainment of an objective.
- **Prepared Graduate 2:** Deliver effective oral presentations for varied audiences and varied purposes.

Standard 2: Reading for All Purposes

- **Prepared Graduate 4:** Read a wide range of informational texts to build knowledge and to better understand the human experience.
- **Prepared Graduate 5:** Understand how language functions in different contexts, command a variety of word-learning strategies to assist comprehension, and make effective choices for meaning or style when writing and speaking.

Standard 3: Writing and Composition

- **Prepared Graduate 9:** Demonstrate mastery of their own writing process with clear, coherent, and error-free polished products.

Standard 4: Research Inquiry and Design

- **Prepared Graduate 10:** Gather information from a variety of sources; analyze and evaluate its quality and relevance; and use it ethically to answer complex questions.

Note: Mathematics and Science standards will be added in the future. Visit the [Colorado Academic Standards](#) page for the most current version.