Colorado CTE Course – Scope and Sequence

Course Name **Course Description**	**Principles of Food Production**		**Course Details** **Course = 0.50 Carnegie Unit Credit**	**Level II Course following Introduction to Agriculture A & B.**	
Course Description	Identify changes and trends in local and global food systems while understanding the selection, evaluation and inspection of existing food systems. Learn about the production and distribution channels of both animal and plant products while also recognizing the role of marketing in the food industry.				
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 #	**18301**	Schedule calculation based on 60 % of instructional time in 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**					
Instructional Unit Topic	**Suggested % of Instructional Time**	**CTE or Academic Standard Alignment**	**Competency / Performance Indicator**	**Outcome / Measurement**	**CTSO Integration**
FFP Standards found in National AFNR **FFPS Standards found in CO-CTE AFNR standards**					
Food Production Systems	5%	**FPPS.01** Understand the Food Products and Processing Industry	**FPPS.01.04** Identify and evaluate food products and processing segments **FPPS.01.05** Identify and design distribution channels	**FPPS.01.04.a** Define producers, packer/processers, distributors, consumer **FPPS.01.04.b** Describe the interrelationship of processing segments **FPPS.01.05.a** Define Wholesalers, Local Markets/Direct Markets (CSA), Retailers, Governments/Institutional (School Lunch and Prison Lunch), Restaurant (Catering)/Hotel, Fast Food	

				FPPS.01.05.b Describe the movement of products through channels	
Cultural Perspectives of Food & Food Production Methods	12%	**FPPS.02** Understand World Food needs	**FPPS.02.03** Explain food related cultural practices and their impact on food supply **FPPS.02.04** Analyze the relationship between food supply and economic development **FPPS.02.05** Analyze food supply systems based on sustainability	**FPPS.02.03.a** Define and Describe Organic, Natural, Conventional, GMOs **FPPS.02.03.b** Research cultural practices and their impact on quantity and quality of food production **FPPS.02.04.a** Describe food supply and its impact on economic development **FPPS.02.04.b** Research food supply in developed and underdeveloped countries **FPPS.02.05.a** Define sustainable food supply and identify sustainable food production practices **FPPS.02.05.b** Research current practices to improve sustainability in food supply **FPPS.02.05.c** Compare sustainability of food supplies in developed to developing countries	
		FPP.04. Explain the scope of the food industry and the historical and current developments of food product and processing.	**FPP.04.01.** Examine the scope of the food industry by evaluating local and global policies, trends and customs for food production.	**FPP.04.01.02.a**. Examine the impact of consumer trends on food products and processing practices (e.g., health and nutrition, organic, information about food products, local food movements, farm-to-fork	

				supply chains, food system transparency, etc.). **FPP.04.01.03.a.** Compare and contrast cultural differences regarding food products and processing practices. **FPP.04.01.03.b.** Analyze food production and distribution outcomes based on cultural customs.	
Food Processing	13%	**FPP.03.** Select and process food products for storage, distribution and consumption.	**FPP.03.02.** Design and apply techniques of food processing, preservation, packaging and presentation for distribution and consumption of food products.	**FPP.03.02.02.a.** Differentiate between methods and materials used for processing food for different markets (e.g., fresh food products, ready to eat food products, etc.). **FPP.03.02.02.b.** Outline appropriate methods and prepare foods for sale and distribution for different markets. **FPP.03.02.04.a**. Summarize types of materials and methods used in food packaging and presentation. **FPP.03.02.04.b.** Analyze the degree of desirable food qualities of foods stored in various packaging.	
Nutrition & Food	12%	**FPP.02**. Apply principles of nutrition, biology, microbiology, chemistry and human behavior to the development of food products.	**FPP.02.01.** Performance Indicator: Apply principles of nutrition and biology to develop food products that provide a safe,	**FPP.02.01.01.a**. Research and summarize properties of common food constituents e.g., proteins, carbohydrates, fats, vitamins, minerals).	

Nutrient classifications, nutritional requirements, impact of nutrition on societies			wholesome and nutritious food supply for local and global food systems. **FPPS.02.02** Analyze the relationship between diet and population health	**FPP.02.01.01.b.** Compare and contrast the relative value of food constituents relative to food product qualities (e.g., taste, appearance, etc.). **FPP.02.01.02.a**. Research and report methods of nutritional planning to meet essential needs for the human diet (e.g., MyPlate). **FPP.02.01.02.b.** Compare and contrast the nutritional needs of different human diets **FPPS.02.02.a** Identify nutritional diseases/deficiencies **FPPS.02.02.b** Determine causes of diseases/deficiencies **FPPS.02.02.c** Explore societal impacts of diet and health	
Food Labeling	5%	**FPP.02.** Apply principles of nutrition, biology, microbiology, chemistry and human behavior to the development of food products.	**FPP.02.03.** Apply principles of human behavior to develop food products to provide a safe, wholesome and nutritious food supply for local and global food systems.	**FPP.02.03.01.a.** Examine and explain the importance of food labeling to the consumer. FPP.02.03.01.b. Examine, interpret and explain the meaning of required components on a food label.	
Food Inspection & Quality Evaluation Milk, meat, eggs, fruit & vegetables	13%	**FPP.03**. Select and process food products for storage, distribution and	**FPP.03.01**. Implement selection, evaluation and inspection techniques to ensure	**FPP.03.01.01.a.** Summarize characteristics of quality and yield grades of food products.	

		consumption.	safe and quality food products.	FPP.03.01.01.b. Analyze factors that affect quality and yield grades of food products. **FPP.03.01.01.c.** Outline procedures to assign quality and yield grades to food products according to industry standards. **FPP.03.01.02.a.** Summarize procedures to select raw food products based on yield grades and quality grades. **FPP.03.01.03.a.** Identify and describe protocols for inspection and harvesting techniques for animal food products (e.g., pre-mortem and post-mortem inspections, Food Safety Inspection Service guidelines (FSIS), etc.). **FPP.03.01.03.b.** Examine and evaluate inspection and harvesting of animals using regulatory agency approved or industry-approved techniques.	