Indiana Department of Education
Academic Standards Content Framework

NUTRITION SCIENCE CAREERS I

Nutrition Science Careers I builds on content and skills of Nutrition and Wellness and/or Food Science and prepares students for careers and higher education programs related to nutrition, dietetics, food science, food research and development including careers that focus on assisting individuals and families in managing their personal, family, and social needs regarding nutrition, diet, and foods. The course of study includes, but is not limited to: advanced topics and issues in nutrition; advanced food science topics and issues; food and nutrition for individuals and families with special needs and disadvantaging conditions; topics related to management of daily living needs of individuals and families; nutrition and foods in child care and convalescent care; topics and issues related to maintaining the food supply; topics related to cleaning and maintenance, purchasing, and food preparation; managing operations in food production, food science, or food research and development establishments; providing for the dietary needs of persons with special requirements; related research, development, and testing. Ethical, legal, and safety issues as well as helping processes and collaborative ways of working with others are to be addressed. Intensive laboratory experiences with industry applications are a required component of this course of study. Work-based experiences in nutrition science careers are strongly encouraged. This course provides the foundation for study in higher education that leads to related careers.

- DOE Code:5457
- Recommended Grade Levels: 11-12
- Recommended Prerequisites: Nutrition and Wellness, Biochemistry of Foods
- Credits: 1-3 credit(s) per semester, 6 credits maximum
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and
- Core 40 with Technical Honors diplomas
- Science Credit??

Application of Content

Intensive laboratory applications are a component of this course and may be either school based or work based or a combination of the two. Work-based learning experiences should be in a closely related industry setting. Instructors shall have a standards-based training plan for students participating in work-based learning experiences

Career and Technical Student Organizations (CTSOs)

Career and Technical Student Organizations are considered a powerful instructional tool when integrated into Career and Technical Education programs. They enhance the knowledge and skills students learn in a course by allowing a student to participate in a unique program of career and leadership development. Students should be encouraged to participate in FCCLA and/or FFA, the CTSOs for the most closely related subject matter areas.

Content Standards		
Domain 1 – Principles of Nutrition		
	Core Standard 1: Explain the principles of nutrition and their application	
	NSC-1.1	Assess the basic dietary needs for macro and micro nutrients and the function of each

		nutrient
	NSC-1.2	*Compare and contrast the wide variety of nutrition databases,* calorie counters, USDA Dietary Guidelines, and food indexes including but not limited to: World Health Organization, USDA, FDA, Choose MyPlate, Supertracker, INFOODS, USDA National Nutrient Database
	NSC-1.3	Review basic physiological functions affected by nutrients, phytochemicals, and antioxidants and the consequence of deficiencies
	NSC-1.4	Recognize basic functions of life such as ingestion, digestion, absorption, metabolism, excretion, etc.
	NSC-1.5	Review enzymes and chemicals that aid in basic life functions
	NSC-1.6	Analyze the nutrient/calorie needs at various stages of life: Infancy, childhood, adolescence, adulthood, and pregnancy/lactation, geriatric
Domain 2- Nutrition Screening and Assessment		
	Content Standard 2-Apply the principles of nutrition screening and analysis of results	
	NSC-2.1	Analyze the purpose, appropriateness, and types of nutrition screening as an epidemiological tool
	NSC-2.2	Evaluate the methodology and results of nutrition screening
	NSC-2.3	Prepare sample documentation related to nutrition screening
	NSC-2.4	Perform a nutrition assessment
	NSC-2.5	Collect data for nutrition assessments
	NSC-2.6	Compare and contrast nutrition assessments and the impact on policy, law, healthcare, insurance, and social factors
	NSC-2.7	Compare various nutrition status indicators including demographic data, nutrition screening surveillance systems, community health resources, public health programs and other relevant indicators.
Domain 3-Nutrition Diagnosis		
	Core Standard 3- *Compare and contrast the relationship between nutrition diagnoses and medical diagnosis*	
	NSC-3.1	Explain how nutrition diagnosis relates to a medical diagnosis
	NSC-3.2	Analyze the steps and professionals involved in the process of nutrition and medical diagnosis
	NSC-3.3	Identify the etiological basis for common conditions in nutritional diagnosis including cause, risk factors, signs and symptoms
Domain 4-Nutrition Interventions		
	Core Standard 4- Apply nutrition interventions in diverse settings and with diverse populations.	
	NSC-4.1	Identify nutrition care, nutrient needs for health promotion and disease prevention across the life span.
	NSC-4.2	Create menus that promote a healthy lifestyle across the life span
	NSC-4.3	Explain the role of Medical Nutrition Therapy for treating medical conditions
	NSC-4.4	Compare and contrast energy/nutrient needs for various activity levels and conditions
	NSC-4.5	Develop and implement a personalized care plan

	NSC-4.6	Provide provisions in the care plan to accommodate for communication, counseling, discharge, and continuity of care
	NSC-4.7	Evaluate interventions for diverse populations
	NSC-4.8	Review community nutrition organizations and identify local initiatives for health promotion
Domain 5-Nutrition Monitoring and Evaluation		
	Core Standard 5-Perform nutrition monitoring progress and evaluation of outcome indicators	
	NSC-5.1	Define outcome indicators and levels of success
	NSC-5.2	Practice measuring indicators and evaluating medical success
	NSC-5.3	Practice determining continuation of care plan
Domain 6- Education, Training, and Management		
	Core Standard 6-Analyze education, training, and management initiatives in nutrition science careers	
	NSC-6.1	Define the components of an education plan
	NSC-6.2	Analyze food production and distribution practices in various settings
	NSC-6.3	Create a safety and sanitation training plan for a nutrition services setting
	NSC-6.4	Review protocols for purchasing food/supplies and vendor selection