

Family and Consumer Sciences
Course: Nutrition Science
Course Code # 5615
1 Credit

		Student:
		Grade:
		Teacher:
		School:
		Number of Competencies in Course: 36
School Year:		Number of Competencies Mastered:
Term:	Fall Spring	Percent of Competencies Mastered:

Standard 1.0 Analyze the interrelationship of food, nutrition and science.

Learning Expectations	Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
1.1 Compare and contrast food preparation, nutrition science and core science courses.			
1.2 Summarize how technology has revolutionized food products and processing methods.			
1.3 Relate the main goal of food scientists to individuals, communities, cultures and the world.			

Standard 2.0 Use sound nutritional practices to create a personal profile to established optimal lifelong health habits.

Learning Expectations	Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
2.1 Use current guidelines and/or technology to determine personal nutrient intake and develop a plan for change.			
2.2 Using scientific evidence, examine food nutrition claims for accuracy.			
2.3 Evaluate current world health concerns to nutrition and food practices.			
2.4 Examine the role of the digestive system in the body's metabolism of food.			

Standard 3.0 Examine methodology for use of scientific laboratory to conduct and report results of food science experiments.

Learning Expectations	Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
3.1 Use appropriate safety techniques for the laboratory.			
3.2 Identify the location and demonstrate the correct use of emergency equipment in the laboratory.			
3.3 Design a laboratory experiment to demonstrate knowledge of the scientific method.			
3.4 Demonstrate the ability to complete a laboratory report based on the scientific method.			
3.5 Use the metric system in laboratory experiments for data collection and evaluation.			

Standard 4.0 Research and analyze methods used in food product development and marketing.

Learning Expectations	Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
4.1 Examine the sensory factors that make up the sensory characteristics for tasting foods.			
4.2 Demonstrate controlled sensory testing and rating techniques.			
4.3 Research the federal government's role in regulating label information.			
4.4 Analyze and compare food claims and wordings.			
4.5 Develop a food label using federal guidelines for a simulated food product.			

Standard 5.0 Evaluate a variety of changes, including chemical and physical, that affect food product quality.

Learning Expectations	Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
5.1 Classify changes in matter as physical or chemical.			
5.2 Investigate the basic organization of the modern periodic table including atomic number and atomic properties.			
5.3 Differentiate between mixtures and compounds as they are represented in various food products.			
5.4 Demonstrate how the major leavening agents are used in foods and describe the chemical processes observed.			
5.5 Demonstrate the difference between the chemical processes of fermentation and pasteurization and explain the usage of each in food technology.			

Standard 6.0 Apply science process skills when analyzing the structure and composition of nutrients.

Learning Expectations	Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
6.1	Evaluate the properties and scientific functions of water in relation to food and food preparation.		
6.2	Analyze the molecular structure of carbohydrates and fiber in relation to their scientific function in food and food preparation.		
6.3	Analyze the properties and composition of lipids in relation to their functions in food preparation.		
6.4	Evaluate the properties and scientific functions of water, carbohydrates, fiber and lipids in the body.		
6.5	Describe the molecular structure of protein and the functions of protein in food.		
6.6	Examine the types, functions, sources and deficiencies of minerals.		
6.7	Examine the types, functions, sources and deficiencies of vitamins.		

Standard 7.0 Analyze methods used and factors involved in the scientific processing of food.

Learning Expectations	Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
7.1	Research the use of additives in food products and food production.		
7.2	Evaluate current trends in commercial food preservation; including thermal preservation, dehydration and irradiation.		
7.3	Compare the processes of fermentation and curing.		
7.4	Evaluate the causes and prevention of food contamination and spoilage.		
7.5	Analyze the science involved in developing new food products.		

Standard 8.0 Apply employability and leadership skills as an integral part of the nutrition science program.

Learning Expectations	Check the appropriate Mastery or Non-Mastery column	Mastery	Non-Mastery
8.1	Participate in Family, Career and Community Leaders of America (FCCLA) co-curricular student organization activities that enhances nutrition science skills.		
8.2	Practice leadership, citizenship and teamwork skills when planning and implementing collaborative projects.		

Additional comments:



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