Food Science and Technology Assessment Plan
Rev. 11/17/2020

Food Science and Technology	19-20	20-21	21-22	22-23	23-24	24-25
FDSTB1 - Introduction to Food Science and Technology						
• 1. Upon successful completion of the course, the student will be able to differentiate and identify career opportunities and requirements related to the food science and technology industry sector with an emphasis on career planning.			P			
• 2. Upon successful completion of the course, the student will be able to evaluate the importance of fundamental employability skills.			P			
• 3. Upon successful completion of the course, the student will be able to demonstrate the function and proper use of laboratory equipment and techniques.			P			
• 4. Upon successful completion of the course the student will be able to apply basic math, chemistry, and physics concepts used in food science and technology.			P			
• 5. Upon successful completion of the course, the student will be able to distinguish how human factors are involved in sensory evaluation of foods with a focus on physical, psychological, cultural, and environmental influences on food likes and dislikes.			P			
FDSTB2 - Food Customs and Culture						
• 1. Upon successful completion of the course, the student will be able to evaluate and describe the cultural, religious, and psychosocial factors that influence eating patterns, regional flavor profiles, core foods, traditional celebration and fasting in a variety of cultures around the world and in the USA.			P			
• 2. Upon successful completion of the course, the student will be able to apply relevant research and findings regarding food practices and nutrition related health problems of various cultural groups.			P			
• 3. Upon successful completion of the course, the student will be able to differenciate and describe cultural values, health and religious beliefs, and nutrition practices of different cultural groups as applies to the delivery of culturally competent health care.			P			
• 4. Upon successful completion of the course, the student will be able to use critical thinking skills to assess the social, environmental and health impact of contemporary dietary patterns in at least three different cultures.			P			
FDSTB3 - Principles of Food Science						
• 1. Upon successful completion of the course, the student will be able to differentiate and describe the functional properties, structure, chemical reactions, and importance of carbohydrates, lipids, and proteins.			P			
• 2. Upon successful completion of the course, the student will be able to perform the basic control measurements introduced in the laboratory.			P			
• 3. Upon successful completion of the course, the student will be able to compare various types of food production and be aware of changes that occur to food due to processing.			P			
• 4. Upon successful completion of the course, the student will be able to evaluate and understand biotechnology and its use in the food industry.			P			
• 5. Upon successful completion of the course, the student will be able to design a laboratory report using the scientific method.			P			
• 6. Upon successful completion of the course, the student will be able to demonstrate how to effectively work in a group to complete labs and reports.			P			
FDSTB4 - Food Safety						
• 1. Upon successful completion of the course, the student will be able to evaluate and describe the conditions and practices that lead to food-borne illness.				P		
• 2. Upon successful completion of the course, the student will be able to differentiate the types of microorganisms that can cause food-borne illnesses.				P		
• 3. Upon successful completion of the course, the student will be able to analyze and identify potential sources of food-borne pathogens.				P		
• 4. Upon successful completion of the course, the student will be able to evaluate various risks and propose actions commonly employed for a specific food commodity.				P		
• 5. Upon successful completion of the course, the student will be able to demonstrate an understanding of the importance of food safety training for workers.				P		
• 6. Upon successful completion of the course, the student will be able to apply an understanding of the laws and regulations governing food safety principles (PCQI, HACCP, HARPC).				P		

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FDSTB5 - Food Processing Technology						
• 1. Upon successful completion of the course, the student will be able to demonstration the use of various equipment used in food processing and how to select the food processing method most suitable for a specific food product.				P		
• 2. Upon successful completion of the course, the student will be able to identify and analyze the general processing flow (pre- and post-harvest) for various food products, the impact of processing on the physical, chemical and sensory properties of the food products including the harvesting, processing, packaging, and storage of processed food products.				P		
• 3. Upon successful completion of the course, the student will be able to demonstrate various processing techniques emphasizing fermentation, dehydration, freezing, heating, pressing, and raw material handling.				P		
• 4. Upon successful completion of the course, the student will be able to employ Good Manufacturing Practices (GMP) for producing safe and quality food products and comprehend industrypractices for analysis of the chemistry and microbiology of food.				P		
• 5. Upon successful completion of the course, the student will be able to work effectively in teams and to apply critical thinking skills to new food processing situations.				P		
FDSTB10 - Food Systems Management						
• 1. Upon successful completion of the course, the student will be able to distinguish and explain the basic principles and practices of cleaning and sanitation for the control of microorganisms in food manufacturing.				P		
• 2. Upon successful completion of the course, the student will be able to produce a Good Manufacturing Practices (GMP) program.				P		
• 3. Upon successful completion of the course, the student will be able to evaluate equipment and sanitary facility design and determine compliance with FDA requirements.				P		
• 4. Upon successful completion of the course, the student will be able to develop an allergen control program.				P		
• 5. Upon successful completion of the course, the student will be able to demonstrate an understanding of the utilization and waste management practices in food processing.				P		
• 6. Upon successful completion of the course, the student will be able to differentiate and recognize basic principles of pest control measures and interventions.				P		