Learning Goals:

CHEM 174 (Wasileski) ***Live, Learn and Eat: The Food of Chemistry***	
Disciplinary Learning Goals	**Cluster Learning Goals**
1. Students will be able to identify and understand the structural to functional relationships of molecules (i.e., how does the bonding structure of a molecule influence intermolecular interactions) 2. Students will be able to utilize the scientific method to evaluate how the chemical and physical properties and changes in food are influenced by the ingredients and preparation methods. 3. Students will be able to correlate the method and accuracy of a scientific measurement of food ingredients to how the measurement results are utilized in food labeling in order to evaluate their own food choices as an informed consumer. 4. Students will be able to analyze the complexity and multidisciplinarity of food production and distribution in order to evaluate your own food choices as an informed consumer.	• Students will be able to relate the energy and monetary costs related to preparing a meal and how food choices can influence these costs. (Relates to disciplinary learning goal 4.) • Students will be able to plan and create a nutritionally balanced meal. (Relates to disciplinary learning goal 4.) • Students will be able to make accurate and relevant analytical measurements of nutritional components of food. (Relates to disciplinary learning goals 1, 2 & 3.) • Students will be able to communicate scientific information and findings to nonscientists. (Relates to disciplinary learning goal 1.) • Students will be able to use their scientific knowledge to make informed food choices. (Relates to disciplinary learning goals 1, 2, 3 & 4.) • Students will understand the complexity of food's journey from production to consumption. (Relates to disciplinary learning goal 4.) • Students will understand how food affects our bodies and health. (Relates to disciplinary learning goals 1, 2 & 3.) • Students will understand how food is a civic issue. (Relates to disciplinary learning goals 1, 2, 3 & 4.)

CHEM 174 (Wasileski) ***Live, Learn and Eat: The Food of Chemistry***	
Disciplinary Learning Goals	**Cluster Learning Goals**
5. Students will be able to identify and understand the structural to functional relationships of molecules (i.e., how does the bonding structure of a molecule influence intermolecular interactions) 6. Students will be able to utilize the scientific method to evaluate how the chemical and physical properties and changes in food are influenced by the ingredients and preparation methods. 7. Students will be able to correlate the method and accuracy of a scientific measurement of food ingredients to how the measurement results are utilized in food labeling in order to evaluate their own food choices as an informed consumer. 8. Students will be able to analyze the complexity and multidisciplinarity of food production and distribution in order to evaluate your own food choices as an informed consumer.	• Students will be able to relate the energy and monetary costs related to preparing a meal and how food choices can influence these costs. (Relates to disciplinary learning goal 4.) • Students will be able to plan and create a nutritionally balanced meal. (Relates to disciplinary learning goal 4.) • Students will be able to make accurate and relevant analytical measurements of nutritional components of food. (Relates to disciplinary learning goals 1, 2 & 3.) • Students will be able to communicate scientific information and findings to nonscientists. (Relates to disciplinary learning goal 1.) • Students will be able to use their scientific knowledge to make informed food choices. (Relates to disciplinary learning goals 1, 2, 3 & 4.) • Students will understand the complexity of food's journey from production to consumption. (Relates to disciplinary learning goal 4.) • Students will understand how food affects our bodies and health. (Relates to disciplinary learning goals 1, 2 & 3.) • Students will understand how food is a civic issue. (Relates to disciplinary learning goals 1, 2, 3 & 4.)

BIOL 110 (Clarke)
Plants and Humans

Disciplinary Learning Goals	Cluster Learning Goals
1. Students will be able to understand how the study of plants and their relationship with people is accomplished using the scientific method. i.e. a hypothetico-deductive model that combines theory and data, deduction and induction, analysis and observation, etc. 2. Students will be able to understand the form and function of plants and how these may be compared and contrasted using wild and cultivated plants. 3. Students will be able to understand the process and outcomes of evolution under natural and artificial selection, including genetically modified organisms. 4. Students will be able to understand the reciprocal nature of our relationship with plants and how both plants and people have been changed over evolutionary and historic time frames and across cultures and geographic areas. 5. Students will be able to understand how plants, including those used by humans, can serve as a model for basic biological processes such as growth, reproduction, metabolism, inheritance, competition and coexistence. 6. Students will be able to understand the facets of human biology that are related to plants via mechanisms such as nutrition, medicines derived from plants, and ecosystem services provided by plants both in the wild and in agricultural systems.	• Students will be able to understand how the fate of human societies is influenced by material aspects of cultures including food, nutrition, and agriculture. (Relates to disciplinary learning goals 2, 3, 4, & 6.) • Students will be able to understand how similarities and differences among cultures has been affected over both space and time by human's relationship with plants, particularly food plants. (Relates to disciplinary learning goals 2, 3, 4, & 6.) • Students will be able to understand how societal and personal decisions about how we use plants, particularly food plants, influences the sustainability of the societies we live in. (Relates to disciplinary learning goals 5 & 6.) • Students will be able to understand how both informal experimentation by humans and formal scientific research (including that on genetically modified organisms) has influenced the quality and quantity of plants we consume. (Relates to disciplinary learning goals 1,2, & 3.)

HWP 225 (Lanou)
Nutrition and Lifestyle: Eating to Live Well

Disciplinary Learning Goals	Cluster Learning Goals
1. Students will be able to understand, evaluate, and apply current nutrition principles to promote personal health and support fitness and wellness goals. 2. Students will be able to connect nutrition to disease prevention. 3. Students will be able to improve quality of life through healthy eating choices. 4. Students will be able to evaluate their own nutrient and energy requirements and analyze their current diet to identify needs for healthy behavior change. 5. Students will be able to discuss controversial nutrition topics from an informed perspective. 6. Students will be able to develop as an informed consumer of food.	• Students will be able to better understand where food comes from (farms/plants/animals) and the environmental impact of food production, manufacturing and distribution and to be able to apply these concepts to preparing a healthy meal. (Relates to disciplinary learning goals 2, 3, 4 & 6.) • Students will be able to accurately do nutritional analysis of recipes and nutritional intake for a day. (Relates to disciplinary learning goal 4.) • Students will be able to communicate nutritional information in an educational format to the general public. (Relates to disciplinary learning goals 1, 3, 4, 5 & 6.) • Students will be able to develop an interest in and the skills to influence healthy eating in a health promotion setting. (Relates to disciplinary learning goals 1, 2, 3, 4 & 6.) • Students will be able to use their knowledge to make informed food choices. (Relates to disciplinary learning goals 1, 2, 3, 4, 5 & 6.)

HWP 325 (Lanou) ***Pathophysiology of Chronic Conditions and Illnesses***	
Disciplinary Learning Goals	**Cluster Learning Goals**
1. Students will be able to more deeply understand the relationship between chronic illnesses and conditions and lifestyle choices. 2. Students will be able to read and evaluate research studies on chronic disease prevention, management, and treatment. 3. Students will be able to understand, evaluate, and apply health risk assessment and screening techniques to promote health and support fitness and wellness goals. 4. Students will be able to research and apply stress, anxiety, and/or depression management strategies. 5. Students will be able to work with individuals to develop individual lifestyle plans to prevent, manage, or treat chronic conditions.	• Students will be able to better understand where food comes from (farms/plants/animals) and the environmental impact of food production, manufacturing and distribution and to be able to apply these concepts to preparing a healthy meal. (Relates to disciplinary learning goals 1, 3 & 5.) • Students will be able to communicate disease prevention information and health promotional strategies in an educational format to the general public. (Relates to disciplinary learning goals 1, 2, 3, 4 & 5.) • Students will be able to develop an interest in and the skills to influence healthy choices for disease prevention among family and peers. (Relates to disciplinary learning goals 1, 2, 3, 4 & 5.) • Students will be able to use their knowledge to make informed food choices. (Relates to disciplinary learning goals 1, 2, 3 & 4.)

HWP 373 (Lanou) ***Food Politics and Nutrition Policy: How Government and Industry Impact Health***	
Disciplinary Learning Goals	**Cluster Learning Goals**
1. Students will be able to understand, evaluate, and apply current food and nutrition policy to make informed consumer food choices to promote personal health, environmental wellness, and human rights. 2. Students will be able to understand and utilize methods for influencing food advertising, food and nutrition policy and guidelines, and consumer information. 3. Students will be able to develop appropriate dietary guidelines and food policy for population group.	• Students will be able to better understand where food comes from and the environmental impact of food production, manufacturing and distribution and to be able to apply these concepts to preparing a healthy meal. (Relates to disciplinary learning goals 1, 2 & 3.) • Students will be able to communicate nutrition policy information to nonscientists. (Relates to disciplinary learning goals 1, 2 & 3.) • Students will be able to develop an interest in and the skills to influence food and nutrition policy in the local environment. (Relates to disciplinary learning goals 1, 2 & 3.) • Students will be able to use their knowledge to make informed food choices. (Relates to disciplinary learning goals 1, 2 & 3.)