

## ***Nutrition Science Assessment 2016***

The Nutrition Science Program within the Department of Nutrition, Dietetics, and Food Sciences (NDFS) uses the following self-assessment process and resulting decisions to improve the Nutrition Science program is based on data generated by the following methods.

### **Student Evaluations**

The standardized USU IDEA course evaluation form is provided to all students in all courses taught by Nutrition faculty to allow the students an opportunity to evaluate both the course and the instructor. Nutrition faculty are encouraged to map course objectives to the IDEA survey. Nutrition Science courses have historically been highly rated for instructor effectiveness and contributed towards NDFS receiving the College of Agriculture and Applied Sciences teaching award for 2014.

### **Yearly Focus Group for Graduating Students**

- Input from students to help make data based decisions for the program
- Student assessment of our program is vital and offers a unique perspective
- Student input has guided curriculum changes to increase the overall effectiveness of the program

The discussions with our outgoing undergraduates have been vital in making sure we are meeting the needs of students, shaping our curriculum, and giving our future alumni a stake in the program.

### **Assessment of Course Specific Learning Objectives**

Students are asked questions about core concepts at the beginning and end of the semester. Results of the pre and post tests are then compared to get assess concepts learned or improved over the semester. This has now been implemented in some of our core courses and the data will be used to objectively assess student learning. We are in the first year of implementing these tests and will use the data to measure instructional success and identify possible deficiencies.

### **Nutrition Science Overall Learning Objectives and Course Map**

- Creation of a master document that includes course objectives/maps for all classes included in the nutrition science degree.
- This document allows the faculty to identify deficiencies and redundancies in the curriculum.
- This information coupled with the graduating senior exit interviews, allows for data based decisions to improve the overall program.

## **Faculty Program Assessment**

Assessment information from these various sources is discussed and reviewed by Nutrition Science faculty and used to improve and modernize program objectives, course content and degree requirements. The single most important department activity for reviewing assessment as well as all other aspects of the program is the yearly faculty retreat. This meeting provides a period of reflection on the past year; an opportunity to make changes and/or modifications to requirements, policies and procedures; and a forum for planning the coming academic year.

### ***Recent Data Based Decisions***

#### **Initiative 1. Eliminate NDFS 5220: Endocrine Aspects of Nutrition**

This decision was based on student exit interviews and our overall course map indicating that the material was largely redundant. Students interested in a more detailed course involving endocrinology are now advised to take ADVS 5630 as an elective.

#### **Initiative 2. Creation of NDFS 5230: Communication of Current Topics**

NDFS 5230 was developed in response to our faculty program assessment and student exit interviews. As a faculty, we recognized a program deficiency in this important topic and corresponding student skill set. Students also indicated their desire for another communication intensive course and in response this course was created to meet these needs.

#### **Initiative 3. Changing NDFS 5250: Occupational Experience From a Required to an Elective Class**

NDFS 5250 is a 1-credit course wherein students describe their experience working a real world job related to Nutrition Science. However, the course has devolved into some students working jobs at the very periphery of actual Nutrition Science and erosion of the original course intent. Student exit interviews and faculty discussion indicated that making this class an elective would eliminate this problem and improve the quality of this course.

#### **Initiative 3. Elimination of NDFS 5300: Advanced Micronutrient Nutrition**

This decision was made through examination of our course map, student exit interviews, and faculty discussion. These data sources clearly indicated that the material taught in this course was redundant and elimination of this course would allow faculty resources to be diverted into teaching more relevant, non-redundant courses.

#### **Initiative 4. Creation of NDFS 5310: Fundamentals of Nutrition Research**

This course was created based on student exit interviews and faculty discussion. We have learned through student exit interviews that many students are going on to pursue professional/graduate degrees. Establishment of this course will aid these students in this pursuit by making them better prepared to be involved with modern nutrition research.

#### **Initiative 5. Creation of NDFS 6600: Current Topics in Obesity**

NDFS 6600 was created in response to student exit interviews and faculty discussion. Obesity has become the most important topic in Nutrition Science. Although covered in other NDFS courses, this graduate level class will allow for more in-depth study.

<b>NUTRITION SCIENCE PROGRAM OVERALL LEARNING OBJECTIVES</b>	<b>LOWER DIVISION NDFS CLASSES</b>	<b>UPPER DIVISION NDFS CLASSES</b>
Describe the digestion and metabolism of the energy nutrients (carbohydrates, lipids, protein).	1020, 4200	5410
Describe the digestion and metabolism of the non-energy nutrients (vitamins/minerals).	1020, 4200	5410
Identify the nutrients needed to maintain health and body function. Be familiar with symptoms of nutrient deficiencies and toxicities. Recognize food sources for each nutrient.	1020, 4200	5410
Learn the role of nutrition in relation to health and the prevention of chronic disease.	1020, 4020	5410, 5230
Differentiate between credible, science-based sources of nutrition information and unreliable sources.	3020, 4020	5230, 5410
Evaluate food quality based on food labeling, nutrition labeling, and food safety practices	3020, 4020	
Determine nutrient needs and recommendations associated with different life cycle stages.	2020	
Understand what constitutes a sustainable food system and understand the effects of food policy and production on consumers.	1020	5230
Learn appropriate techniques used to manage body weight.	3020, 1020, 4020	
Understand the principles of exercise physiology as related to energy requirements and nutrient requirements during exercise.	3020, 4020	
Understand the effects of dietary supplements on health or athletic performance	3020	5410
Learn the impact of biological, socioeconomic, cultural, and psychological factors on eating behavior.	1020	5230
Identify major concepts in nutrition assessment, community needs assessment, designing interventions, motivating consumers and the marketing and evaluation of nutrition-related programs.		5230
Describe the role of nutrition in public health.	1020, 4020	5230
Understand epidemiologic concepts of illness and disease, with a focus on nutrition-related conditions.		
Understand the effects of micro and macronutrients on gene regulation.	4020	5410
Learn the effects of non-nutritive dietary compounds on health and disease.	1020	5410
Understand the relationship between nutrition, the microbiome, and health and disease.	4020	5410
Understand how nutrition science studies are designed, analyzed and interpreted.	4020	5230, 5410
Effectively communicate nutrition research findings to both the academic community and the lay public.		5230, 7800
Understand nutrition science research: experimental design, ethics, dissemination of results, and communicating results.		5310

### **Initiative 6. Creation of a nutritional neuroscience course**

This course was created based on student exit interviews and faculty discussion. The faculty and exiting students recognized that coverage this topic was a deficiency in the program. This class will be developed and taught by a recently hired, new faculty member, Clara Cho.

### **Initiative 7. Creation of an advanced Sports Nutrition course**

This course is being developed by Dr. Heidi Wengreen, Sheryl Aguilar and Natalie Norris. This course is in response to our new sports nutrition emphasis and will complement the joint NDFS/Athletics feeding station. The course will be applied in nature and give students a hands on experience with sports nutrition.

### **Initiative 8. Creation of a dietary supplement course (TBN)**

This course is being developed in response to student exit interviews and to fill in a partial void created by the elimination of NDFS 5300. This course will emphasize aspects of the supplement industry currently not covered in our curriculum including supplement regulations.