Learning objectives and Course Map for Nutrition Science

OVERALL LEARNING OBJECTIVES	LOWER DIVISION NDFS CLASSES	UPPER DIVISION NDFS CLASSES
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