

NUTRITIONAL SCIENCES

Program Information

The field of nutritional science has unprecedented public interest. This is fostered by evolving links between diet and health, and the impact of one's individual genetic makeup on nutrient utilization. The Ph.D. degree program in Nutritional Sciences is interdisciplinary, with participating CALS, COM, CLAS, and CVM faculty directing research of doctoral students, where the full spectrum of Nutritional Sciences is available. Emphasis areas include basic nutritional sciences, biochemistry and molecular biology, genetics, immunology, physiology, clinical nutrition, microbiology, and biostatistics.

Students are admitted to the program after the bachelor's degree or a master's degree in nutritional sciences or a related field. Applicants should have a strong undergraduate background in biological sciences and chemistry. Deficiencies may be made up during the first year of graduate study.

Additional information can be found at <http://nutritionalsciences.centers.ufl.edu>.

For additional information, e-mail Dr. Mitch Knutson, Director at mknutson@ufl.edu or Dr. Bobbi Langkamp-Henken, Graduate Coordinator at henken@ufl.edu

Degrees Offered

Degrees Offered with a Major in Nutritional Sciences

- Doctor of Philosophy
 - without a concentration
 - concentration in Clinical and Translational Science

Requirements for these degrees are given in the Graduate Degrees (<http://gradcatalog.ufl.edu/graduate/degrees/>) section of this catalog.

Courses

Nutritional Sciences Program Core Courses

Code	Title	Credits
BCH 6206	Advanced Metabolism	3
HUN 6938	Nutritional Sciences Seminar	1
STA 6166	Statistical Methods in Research I	3
HUN 6301	Nutritional Aspects of Lipid Metabolism	3
HUN 6305	Nutritional Aspects of Carbohydrates	3
HUN 6321	Proteins and Amino Acids in Nutrition	3
HUN 6331	Vitamins in Human Nutrition	3
HUN 6356	Minerals in Nutrition	3

Additional Course Offerings

The following courses may be taken to contribute to the overall degree award requirements.

Food Science and Human Nutrition Departmental Courses

Code	Title	Credits
DIE 6241	Advanced Medical Nutrition Therapy	4
DIE 6242	Advanced Medical Nutrition Therapy II	3
DIE 6516	Professional Development in Dietetics	2
DIE 6905	Problems in Dietetics	1-3
DIE 6938	Advanced Dietetic Seminar	1
DIE 6940	Community Nutrition Practicum	3
DIE 6942	Dietetic Internship I	9
DIE 6944	Dietetic Internship II	6
FOS 5126C	Psychophysical Aspects of Foods	3
FOS 5205	Current Issues in Food Safety and Sanitation	3
FOS 5225C	Principles in Food Microbiology	4
FOS 5437C	Food Product Development	3
FOS 5561C	Citrus Processing Technology	3
FOS 5645	Functional Foods and Nutraceuticals	3
FOS 5732	Current Issues in Food Regulations	3
FOS 6125C	Sensory Evaluation of Food	3
FOS 6215	Principles of Food Safety	3
FOS 6216	Food Safety Systems	2
FOS 6217	Food Safety, Sanitation, and Microbiology	2
FOS 6218	Food Safety Systems	2
FOS 6224	Food and Environmental Virology	2
FOS 6226C	Advanced Food Microbiology	4
FOS 6315C	Advanced Food Chemistry	4
FOS 6317C	Flavor Chemistry and Technology	3
FOS 6355C	Instrumental Analysis and Separations	5
FOS 6428C	Advanced Food Processing	4
FOS 6455C	Industrial Food Fermentations	3
FOS 6736	Food Regulations	2
FOS 6905	Problems in Food Science	1-3
FOS 6910	Supervised Research	1-5
FOS 6915	Research Planning	2
FOS 6936	Topics in Food Science	1-4
FOS 6938	Food Science Seminar	1
FOS 6940	Supervised Teaching	1-5
FOS 6971	Research for Master's Thesis	1-15
FOS 7979	Advanced Research	1-12
FOS 7980	Research for Doctoral Dissertation	1-15
HUN 5441	Metabolic Response to Enteral and Parenteral Nutrition	2
HUN 5447	Nutrition and Immunity	3
HUN 6235	Macronutrients in Human Nutrition	3
HUN 6245	Advanced Human Nutrition	3
HUN 6255	Clinical Nutrition	2-12
HUN 6301	Nutritional Aspects of Lipid Metabolism	3
HUN 6305	Nutritional Aspects of Carbohydrates	3
HUN 6321	Proteins and Amino Acids in Nutrition	3
HUN 6331	Vitamins in Human Nutrition	3
HUN 6356	Minerals in Nutrition	3
HUN 6548	Global Nutrition	3
HUN 6626	Nutrition Education	1
HUN 6804	Nutrition Research Method: Systematic Review	3
HUN 6812C	Analytical Techniques in Nutritional Biochemistry	1
HUN 6835	Research Projects in Nutrition and Dietetics – part 2	2
HUN 6905	Problems in Nutritional Sciences	1-3

HUN 6936	Topics in Nutritional Sciences	1-4
HUN 6938	Nutritional Sciences Seminar	1
HUN 6939	Advanced Clinical Nutrition	2-12
HUN 6940	Supervised Teaching	1-5
HUN 6971	Research for Master's Thesis	1-15
HUN 7979	Advanced Research	1-12
HUN 7980	Research for Doctoral Dissertation	1-15

College of Agricultural and Life Sciences Courses

Code	Title	Credits
ALS 5156	Agricultural Ecology Principles and Applications	3
ALS 5905	Individual Study	1-4
ALS 5932	Special Topics	1-4
ALS 6046	Grant Writing	2
ALS 6166	Exotic Species and Biosecurity Issues	3
ALS 6921	Colloquium on Plant Pests of Regulatory Significance	1
ALS 6925	Integrated Plant Medicine	4
ALS 6931	Plant Medicine Program Seminar	1
ALS 6935	Topics in Biological Invasions	3
ALS 6942	Principles of Plant Pest Risk Assessment and Management	3
ALS 6943	Internship in Plant Pest Risk Assessment and Management	1-10
ANS 6936	Graduate Seminar in Animal Molecular and Cell Biology	1-2
BCH 5045	Graduate Survey of Biochemistry	4
STA 6093	Introduction to Applied Statistics for Agricultural and Life Sciences	3
STA 6329	Matrix Algebra and Statistical Computing	3

Student Learning Outcomes

Nutritional sciences

SLO 1 Articulate Fundamental Knowledge

Articulate (in oral and written form) fundamental knowledge in nutrition, physiology, biochemistry, molecular biology, genetics and genomics.

SLO 2 Research in Nutritional Sciences

Analyze, interpret and evaluate research in nutritional sciences.

SLO 3 Discovery of New Information

Plan, organize and conduct research for the discovery of new information.

SLO 4 Professional Behavior

Display ethical behavior in all areas of conduct; interact with peers, faculty and staff with respect, fellowship and cooperation.