MS NUTRITION

Program Learning Objectives

After successfully completing the Master of Science in Nutrition, students will be able to:

1. Apply fundamental principles of nutrition science in research and required coursework
2. Explain, analyze, and interpret fundamental scientific concepts in the specific area of thesis research
3. Apply the scientific method to nutrition research through the design, conduct, and defense of a thesis research project
4. Apply critical thinking skills to the analysis of published research literature and the design/interpretation of a thesis research project
5. Show independent and creative thinking skills in the formulation, design, conduct, and interpretation of nutrition research
6. Demonstrate strong written and oral communication skills
7. Work productively, respectfully, and professionally as part of a research team and in other group settings
8. Exhibit leadership, ethical conduct, and community values

Required Courses

FSN 516	Population Health and Epidemiology	3
or FSN 531	Lipid Metabolism and Nutrition	
FSN 528	Biochemical and Molecular Aspects of Human Macronutrient Metabolism	4
FSN 529	Metabolic and Molecular Aspects of Vitamins	2
FSN 530	Metabolic and Molecular Aspects of Minerals	2
FSN 582	Current Nutrition Research	3
FSN 599	Thesis	6
STAT 511	Statistical Methods	4
Approved Electives		
See approved electives list below.		21
Total units		**45**

Approved Electives

Select from one of the three Emphasis Areas in consultation with thesis supervisor (at least 3 units must be at the 500-level):	21

Molecular Nutrition Emphasis Area

Select from the following:

ASCI 403	Applied Biotechnology in Animal Science
ASCI 419	Animal Metabolism and Nutrition
BIO 441	Bioinformatics Applications
BIO 475	Molecular Biology Laboratory
BIO 476	Gene Expression Laboratory
BIO 501	Molecular & Cellular Biology
CHEM 428	Nutritional Biochemistry
CHEM 474	Protein Techniques Laboratory
FSN 500	Individual Study
FSN 505	Orientation to Graduate Studies
FSN 581	Graduate Seminar in Food Science and Nutrition
STAT 513	Applied Experimental Design and Regression Models
STAT 523	Design and Analysis of Experiments I

Public Health Nutrition Emphasis Area

Select from the following:

FSN 500	Individual Study
FSN 505	Orientation to Graduate Studies
FSN 581	Graduate Seminar in Food Science and Nutrition
KINE 503	Current Health Issues
KINE 510	Advanced Health Behavior Change Programs
STAT 417	Survival Analysis Methods
STAT 419	Applied Multivariate Statistics
STAT 421	Survey Sampling and Methodology
STAT 513	Applied Experimental Design and Regression Models
STAT 524	Applied Regression Analysis
STAT 530	Statistical Computing with SAS

Health and Wellness Emphasis Area

Select from the following:

COMS 418	Health Communication
FSN 500	Individual Study
FSN 505	Orientation to Graduate Studies
FSN 581	Graduate Seminar in Food Science and Nutrition
HLTH 434	Health Promotion Program Planning
HLTH 450	Worksite and University Health Promotion Programs
KINE 408	Exercise and Health Gerontology
KINE 504	Advanced Pathophysiology and Exercise
KINE 522	Advanced Biomechanics
KINE 525	Advanced Motor Learning and Control
KINE 526	Advanced Sport and Exercise Psychology
KINE 530	Advanced Physiology of Exercise
PSY 465	Cross-Cultural International Psychology
STAT 513	Applied Experimental Design and Regression Models