

**Oklahoma State University  
Department of Nutritional Sciences  
80 Hour Ph.D. in Nutritional Sciences  
Course Requirements**



The 80 hour PhD program is designed for outstanding students who have completed a Bachelor of Science in Nutritional Sciences or a closely related discipline. The Plan of Study (POS) for a doctoral student is individually planned to develop academic excellence specific to the student's career goals. The selection and organization of courses are made in consultation with the advisor and the student's advisory committee based on the following framework.

Students accepted into the 80 credit Ph.D. option will first complete all requirements for the M.S. degree in Nutritional Sciences (Nutrition, thesis option). Students will earn the M.S. in Nutritional Sciences upon successful completion of the 30 credits.

**Required Core Courses for the M.S.**

- NSCI 5000 Master's Thesis (thesis option-6 credits)
- NSCI 5123 Research Methods in Nutritional Sciences
- NSCI 5033 Macronutrients in Human Nutrition
- NSCI 5043 Micronutrients in Human Nutrition
- NSCI 5960 Seminar in Nutritional Sciences (1 hr credits; max 2)
- STAT 5013 Statistics for Experimenters I or REMS 5953 Statistical Methods in Education

**Elective courses for the MS**

- Select at least 11 credits of courses See list of suggested courses below.

After completing the MS, students will then complete a minimum of 50 credits beyond the masters degree including the following required courses for the PhD:

- NSCI 6960 Seminar: Emerging Topics in Nutrition (2 credits, max 4)
- NSCI 6451 Advanced Grant Writing in NSCI or equivalent (e.g., NSCI 5103 Grant Writing for the Professional (GPIDEA), GRAD 5890 (1) Special Topics in Grantsmanship, AGED 5203 Grant Seeking, or equivalent)
- HS 6993 Graduate Seminar in Human Sciences
- STAT 5023 Statistics for Experimenters II, STAT 5083 Statistics for Biomedical Researchers, REMS 6003 Analyses of Variance or equivalent
- NSCI 6000 Doctoral Dissertation (15-30 credits)

**Area of Specialization for the PhD**

- Select three courses to develop an area of specialization (Bioinformatics, Community Nutrition, Molecular Biology, Statistics, etc.) See list of suggested courses below.

Students will complete a minimum of 20 hours of coursework (not counting NSCI 6000) in addition to any core courses the student did not complete as part of the M.S. Students must complete at least one graduate course in NSCI in addition to the core courses; this course will be included as part of the area of specialization or elective courses.

**Suggested courses for area of specialization or electives as approved by the committee:**

- NSCI 5023 Advanced Nutrition in the Pathophysiology of Chronic Disease
- NSCI 5133 Advanced Nutrition for Exercise and Sport
- NSCI 5363 Maternal and Child Nutrition
- NSCI 5393 Nutrition and Aging
- NSCI 5443 Nutrigenomics and Nutrigenetics
- NSCI 5543 Obesity Prevention Across the Lifespan
- NSCI 5553 Global Nutrition and Food Security
- NSCI 5563 Nutritional Assessment
- NSCI 5613 Advanced Nutrition Education and Counseling
- NSCI 5643 Advanced Medical Nutrition Therapy

- NSCI 5713 Advanced Community Nutrition
- NSCI 5743 Advanced Laboratory Techniques in Nutrition
- NSCI 5870 Problems in Nutritional Sciences
- NSCI 5913 Nutritional Epidemiology
- NSCI 6022 Advanced Energy Metabolism
- NSCI 6033 Phytochemicals
- NSCI 6870 Independent Study in Nutritional Sciences
- BIOC 4113 Molecular Biology
- BIOC 5102 Molecular Genetics
- BIOC 5112 Articulation of Research Logic
- BIOC 5824 Biochemical Laboratory Methods
- BIOC 6763 Nucleic Acids and Protein Synthesis
- BIOC 6773 Protein Structure and Enzyme Function
- BIOC 6783 Biomembranes and Bioenergetics
- BIOL 5215 Mammalian Physiology
- BIOL 5283 Endocrinology
- CPSY 5173 Gerontological Counseling
- CPSY 5473 Basic Counseling Skills
- CPSY 5503 Multicultural Counseling
- HCA 5023 Human Resources in Health Care & Public Administration
- HDF5 5413 Adult Development and Aging
- HDF5 5423 Research Perspectives in Gerontology
- HDF5 5433 Theories of Aging
- HHP 5593 Human Electrocardiographic Interpretation
- HHP 5613 Cardiac Rehabilitation
- HHP 5853 Clinical Exercise Testing and Prescription
- HHP 5873 Human Bioenergetics
- HLTH 5113 Psychological Aspects of Health
- HLTH 5323 General Epidemiology
- HLTH 5453 Cultural Issues in Health
- MGMT 5113 Management and Organization Theory
- MPH/VBSC 5413 Food Safety and Public Health
- REMS 5013 Research Design and Methodology
- REMS 5963 Computer Applications in Nonparametric Data Analyses
- REMS 6013 Multiple Regression Analysis in Behavioral Studies
- REMS 6033 Factor Analysis in Behavioral Research
- REMS 6373 Program Evaluation
- REMS 6663 Applied Multivariate Research in Behavioral Studies
- SCFD 5873 Culture, Society and Education
- SCFD 5913 Introduction to Qualitative Inquiry
- SCFD 6123 Qualitative Research I
- SCFD 6193 Qualitative Research II
- SOC 5333 Global Population and Social Problems
- STAT 4043 Applied Regression Analysis
- STAT 5033 Nonparametric Methods
- STAT 5043 Sample Survey Designs
- STAT 5053 Time Series Analysis
- STAT 5063 Multivariate Methods
- STAT 5073 Categorical Data Analysis
- STAT 5091 SAS Programming
- STAT 5303 Experimental Designs
- VBSC 6120 Advanced Physiology of Selected Systems

*NOTE.* NSCI 5303, 5333 and 5353 are levelling courses and may not be used on a Plan of Study. NSCI 5412, NSCI 5422 and NSCI 5432 are supervised practice experiences associated with the dietetic internship and should not be included on the POS to meet degree requirements.