

# NUTRITIONAL SCIENCES

The Department of Nutritional Sciences advances health and quality of life of individuals and communities and prepares professionals through discovery, education and application of scientific knowledge.

Graduates are prepared to apply nutrition knowledge in dietetic internships, healthcare professional schools, graduate programs and food and nutrition-related professions. Four degree options and a minor are offered through the department.

The human nutrition/premedical sciences option is ideal for students desiring greater depth in the physiological and biochemical sciences in preparation for medical and other professional schools, graduate study and research in human nutrition. It includes the prerequisites for admission to most medical, dental, optometry and pharmacy schools. The allied health option provides required coursework for most nursing schools, physician assistant programs, schools of physical and occupational therapy, dental hygiene and other health professions. The public health nutrition option offers coursework for positions in nutrition education, wellness, school food service management and other areas in the health field. The dietetics option provides the coursework required to become a Registered Dietitian (see OSU Didactic Program in Dietetics below).

The mission of the OSU Didactic Program in Dietetics is to promote human health and quality of life by preparing students for supervised practice leading to eligibility for the Commission on Dietetic Registration (CDR) credentialing exam to become a RDN. The dietetics profession is diverse and dynamic, integrating human nutrition, food service administration, food science, chemistry, physiology, management and interpersonal skills. The dietetics option is the only option that includes the Didactic Program in Dietetics (DPD) coursework required to apply for competitive dietetic internships (DI). When students successfully complete the academic requirements (DPD) and supervised practice component (DI), they are eligible for the national Registration Examination for Dietitians administered by the CDR of the Academy of Nutrition and Dietetics (the Academy). Individuals who successfully complete the examination become Registered Dietitians/Nutritionists and are entitled to use the initials "RD" or "RDN" to signify professional competence. Many states, including Oklahoma, also require a license to practice dietetics in the state. Each state law varies in its scope. Didactic Program in Dietetics information and the DPD Student Handbook are found at <https://education.okstate.edu/departments-programs/nutritional-sciences/didactic-program-dietetics/index.html> (<https://education.okstate.edu/departments-programs/nutritional-sciences/didactic-program-dietetics/>).

The Didactic Program in Dietetics is currently granted continuing accreditation by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) of the Academy of Nutrition and Dietetics, 120 South Riverside Plaza, Suite 2190, Chicago, Illinois 60606-6995, 312.899.0040 ext. 5400.

Nutrition professionals work in a wide range of settings, in both the public and private sectors and assume an array of challenging responsibilities. Career opportunities for a registered/licensed dietitian include: health care dietitian and administrator, fitness/wellness consultant, public health nutritionist, school nutrition director, Cooperative Extension educator, entrepreneur in dietetic programs and services, and corporate dietitian/nutritionist. DPD Graduates who do not enter dietetic internships may work in related fields which do not require the RD credential such

as nutrition researcher, school food service, Cooperative Extension, pharmaceutical or food sales, food service management and government programs; take the certified dietary manager (CDM) exam; or enter related graduate programs such as Master of Science in Public Health. Upon earning the DPD "verification statement," students may take the CDR exam to become dietetic technicians, registered (DTR). University teaching and research in the field of nutrition and some specialized careers require advanced degrees or additional course work.

## Admission Requirements

Transfer students must have earned a 2.5 retention GPA in order to be admitted to the NSCI undergraduate program.

Further information may be found at <https://education.okstate.edu/departments-programs/nutritional-sciences/index.html> (<https://education.okstate.edu/departments-programs/nutritional-sciences/>).

## Dietetic Internship

The dietetic internship (DI) at Oklahoma State University requires a bachelor's degree and prior completion of the DPD requirements for admission and meets the Academy's 1000-hour supervised practice requirement for registration eligibility. Its mission is to advance health and quality of life of individuals and communities by preparing dietetic professionals for competent practice through education, discovery and application of scientific knowledge. The internship provides experience in clinical, management, and community practice settings where interns develop entry-level practice competence. Entry into the dietetic internship is competitive, requiring an application to the OSU DI and NSCI Master's of Sciences degree and participation in the Academy of Nutrition and Dietetics computer matching or pre-selection process. All students admitted to the Dietetic Internship must earn the departmental Master of Science in Nutritional Sciences (Dietetics Research option or Dietetics Practice option) or enter with at least an MS which is essentially equivalent to the NSCI MS (Dietetics Research option or Dietetics Practice option).

The Dietetic Internship at OSU is currently granted continuing accreditation by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) of the Academy of Nutrition and Dietetics, 120 South Riverside Plaza, Suite 2190, Chicago, Illinois 60606-6995, 312.899.0040 ext. 5400.

Dietetic Internship information is found at <https://education.okstate.edu/departments-programs/nutritional-sciences/dietetic-internship-program/index.html> (<https://education.okstate.edu/departments-programs/nutritional-sciences/dietetic-internship-program/>).

## Courses

### NSCI 2011 Applied Principles of Human Nutrition

**Prerequisites:** Past completion of or concurrent enrollment in NSCI 2013 and must be majoring or minoring in NSCI.

**Description:** Application of human nutrition concepts in the form of diet, metabolism, and behavioral measurement.

**Credit hours:** 1

**Contact hours:** Lab: 2 Contact: 2

**Levels:** Undergraduate

**Schedule types:** Lab

**Department/School:** Nutritional Sciences

**NSCI 2013 Principles of Human Nutrition (N)**

**Description:** Functions of the nutrients in human life processes. Nutrient relationship to health as a basis for food choices. Open to all University students. Previously offered as NSCI 2123, NSCI 2114 and FNIA 1113.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Nutritional Sciences

**General Education and other Course Attributes:** Natural Sciences

**NSCI 2111 Professional Careers in Nutritional Sciences**

**Prerequisites:** For students interested in Allied Health, Community Nutrition or Nutrition and Exercise or consent of instructor.

**Description:** Career opportunities in health professions. Roles and responsibilities of health care professionals. Routes to professional memberships and current issues in professionalism. Previously offered as FNIA 2111.

**Credit hours:** 1

**Contact hours:** Lecture: 1 Contact: 1

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Nutritional Sciences

**NSCI 2112 Foods of the African Diaspora: Chronology, Evolution and Impact**

**Description:** An exploration of the evolution of African American foodways and their physical health impacts within the historical contexts of slavery, emancipation, cultural development, religion, and traditional health beliefs.

**Credit hours:** 2

**Contact hours:** Lecture: 2 Contact: 2

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Nutritional Sciences

**NSCI 2211 Professional Careers in Dietetics**

**Prerequisites:** NSCI students or consent of instructor.

**Description:** Career opportunities in Dietetics. Roles and responsibilities of Dietitians. Routes to professional memberships and current issues in professionalism.

**Credit hours:** 1

**Contact hours:** Lecture: 1 Contact: 1

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Nutritional Sciences

**NSCI 2311 Introduction to Public Health Nutrition**

**Description:** Overview of Public Health Nutrition with an emphasis on how biological, social, economic, and political factors affect nutrition and health status of populations.

**Credit hours:** 1

**Contact hours:** Lecture: 1 Contact: 1

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Nutritional Sciences

**NSCI 2412 Introduction to Nutrition & Food Literacy**

**Prerequisites:** NSCI 2013 or consent of instructor.

**Description:** Application of nutrition education principles and public health approaches for planning, purchasing, preparing and preserving healthy affordable foods to improve health outcomes.

**Credit hours:** 2

**Contact hours:** Lecture: 1 Lab: 3 Contact: 4

**Levels:** Undergraduate

**Schedule types:** Lab, Lecture, Combined lecture and lab

**Department/School:** Nutritional Sciences

**NSCI 2850 Special Topics in Nutritional Sciences**

**Description:** Study of specific consumer education issues or topics in nutritional sciences. Offered for variable credit, 1-3 credit hours, maximum of 4 credit hours.

**Credit hours:** 1-3

**Contact hours:** Contact: 1-3 Other: 1-3

**Levels:** Undergraduate

**Schedule types:** Independent Study

**Department/School:** Nutritional Sciences

**NSCI 3011 Nutrition and Evidence-based Practice I**

**Prerequisites:** NSCI 2013 and STAT 2013 or STAT 2023.

**Description:** Understanding basic research designs and methodologies, ethics in research, and the use of research in the development of evidence-based recommendations for healthy individuals, applying statistics, and interpreting data in nutrition research.

**Credit hours:** 1

**Contact hours:** Lecture: 1 Contact: 1

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Nutritional Sciences

**NSCI 3021 Nutrition and Evidence-based Practice II**

**Prerequisites:** NSCI 3011 and BIOL 3204. "C" or better in NSCI 3011

**Description:** Understanding research focused on pathophysiology of chronic disease and the role of nutrition in the prevention and treatment of these diseases. Course builds on an understanding of physiology and of nutrition research from BIOL 3204 and NSCI 3011. Ethics in research.

**Credit hours:** 1

**Contact hours:** Lecture: 1 Contact: 1

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Nutritional Sciences

**NSCI 3133 Science of Food Preparation**

**Prerequisites:** HTM 1113 or NSCI 3993 and NSCI 2013, and CHEM 3013. "C" or better in NSCI 3993.

**Description:** Scientific principles underlying functions of food ingredients, recipe/menu modification, diet management for disease states and food safety.

**Credit hours:** 3

**Contact hours:** Lecture: 2 Lab: 3 Contact: 5

**Levels:** Undergraduate

**Schedule types:** Lab, Lecture, Combined lecture and lab

**Department/School:** Nutritional Sciences

**NSCI 3223 Nutrition Across the Life Span****Prerequisites:** NSCI 2013 or equivalent.**Description:** Nutritional needs and dietary concerns of individuals from conception through old age. Previously offered as NSCI 4223 and FNIA 4223.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Undergraduate**Schedule types:** Lecture**Department/School:** Nutritional Sciences**NSCI 3312 Nutrition Care Process and Assessment****Prerequisites:** NSCI 2013 and NSCI 3223 and BIOL 3204, Option in DIET or consent of instructor. "C" or better in NSCI 3223.**Description:** Familiarity and application of the Nutrition Care Process - a systematic approach to providing quality nutrition care. The student will also be introduced to and be able to apply medical terminology and nutrition assessment practices in the Nutrition Care process.**Credit hours:** 2**Contact hours:** Lecture: 2 Contact: 2**Levels:** Undergraduate**Schedule types:** Lecture**Department/School:** Nutritional Sciences**NSCI 3440 Nutritional Sciences Pre-Professional Experience****Prerequisites:** HS 1112 or HS 3112 (or concurrent).**Description:** Student-arranged, instructor-approved, job shadowing, work or volunteer experience in professional settings related to the Nutritional Sciences option. Forty hours of experience required per credit hour. Offered for variable credit, 1-3 credit hours, maximum of 3 credit hours.**Credit hours:** 1-3**Contact hours:** Contact: 1-3 Other: 1-3**Levels:** Undergraduate**Schedule types:** Independent Study**Department/School:** Nutritional Sciences**NSCI 3543 Food and the Human Environment (IS)****Description:** Impact of the various factors that affect food availability, production, processing, distribution and consumption of food in the world. International cultures and foods. Challenges of and solutions to the world food crisis. Previously offered as FNIA 3543.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Undergraduate**Schedule types:** Lecture**Department/School:** Nutritional Sciences**General Education and other Course Attributes:** International Dimension, Social & Behavioral Sciences**NSCI 3733 Environmental Nutrition****Prerequisites:** NSCI 2013.**Description:** Evidence-based examination of agricultural production, food systems, and sustainability on food, nutritional quality, and societal health, from harvest to health.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Undergraduate**Schedule types:** Lecture**Department/School:** Nutritional Sciences**NSCI 3813 Nutrition Counseling****Prerequisites:** NSCI 2114 and NSCI 3223 and NSCI 3312 and HDFS 2113 and PSYC 1113 or consent of instructor. "C" or better in NSCI 2114, NSCI 3223 and NSCI 3312.**Description:** Theory and practice of counseling and interviewing skills as applied to nutrition counseling. Previously offered as NSCI 3812.**Credit hours:** 3**Contact hours:** Lecture: 2 Lab: 2 Contact: 4**Levels:** Undergraduate**Schedule types:** Lab, Lecture, Combined lecture and lab**Department/School:** Nutritional Sciences**NSCI 3993 Culinary Principles in Nutrition****Prerequisites:** NSCI 2211. Option in Dietetics or consent of instructor.**Description:** Familiarity and application of techniques and theories of food preparation including use and selection of equipment, sanitation and quality controls.**Credit hours:** 3**Contact hours:** Lecture: 2 Lab: 3 Contact: 5**Levels:** Undergraduate**Schedule types:** Lab, Lecture, Combined lecture and lab**Department/School:** Nutritional Sciences**NSCI 4021 Nutrition and Evidence-based Practice III****Prerequisites:** NSCI 3021. "C" or better in NSCI 3021**Description:** In-depth study of major controversial issues in the field of nutrition. Course builds on understanding of nutrition research from NSCI 3011 and 3021. Review and analysis of current research. Ethics in research.**Credit hours:** 1**Contact hours:** Lecture: 1 Contact: 1**Levels:** Undergraduate**Schedule types:** Lecture**Department/School:** Nutritional Sciences**NSCI 4023 Nutrition in the Pathophysiology of Chronic Disease****Prerequisites:** NSCI 2013, NSCI 3011, NSCI 3223 and BIOL 3204. "C" or better in NSCI 3011 and NSCI 3223.**Description:** Analysis of the role of dietary bioactive components in health maintenance and chronic disease prevention. Communication of evidence-based nutrition information to the public.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Undergraduate**Schedule types:** Lecture**Department/School:** Nutritional Sciences**NSCI 4111 Professional Preparation for Careers in Dietetics****Prerequisites:** NSCI 4854 or concurrent, or consent of instructor. "C" or better in NSCI 2211, NSCI 3011, NSCI 3543, NSCI 3813 and NSCI 3993.**Description:** Preparation of supervised practice applications and supporting documents. Options for professional credentials, graduate school, and careers. Professional issues in dietetics.**Credit hours:** 1**Contact hours:** Lecture: 1 Contact: 1**Levels:** Undergraduate**Schedule types:** Lecture**Department/School:** Nutritional Sciences

**NSCI 4123 Human Nutrition and Metabolism I**

**Prerequisites:** NSCI 2013 and CHEM 3013 or CHEM 3053 and BIOL 3204 or consent of instructor.

**Description:** Examine the chemical characteristics and functions of macronutrients; digestion, absorption, transport and metabolism of macronutrients; control of intermediary metabolism and metabolic pathways. No credit for students with degree credit in NSCI 5303.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Nutritional Sciences

**NSCI 4133 Nutrition for Exercise and Sport**

**Prerequisites:** NSCI 2013.

**Description:** Application of principles of nutrient metabolism as they relate to physical activity, sport and health. Strongly recommend a background including NSCI 4123 and BIOC 3653.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Nutritional Sciences

**NSCI 4143 Human Nutrition and Metabolism II**

**Prerequisites:** NSCI 4123 or consent of instructor.

**Description:** Chemical characteristics, absorption, transport, functions, requirements and health implications of vitamins and minerals. Discussion of phytochemicals and supplements in relation to health maintenance and disease prevention. No credit for students with degree credit in NSCI 5353.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Nutritional Sciences

**NSCI 4313 Dietary and Herbal Supplements**

**Prerequisites:** NSCI 2114 and NSCI 3021 and BIOL 3204 or instructor approval.

**Description:** Explore the safety and efficacy of botanical/herbal and dietary supplements in health applications including dietary supplementation in the prevention and treatment of chronic disease.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Nutritional Sciences

**NSCI 4331 Quantity Food Production Practicum**

**Prerequisites:** NSCI 2013, NSCI 3993 and NSCI 4573 with a grade of "C" or better. Restricted to DIET option.

**Description:** Observation and practice in real-life-quantity food production settings. Students will need immunizations, TB tests, and background checks completed before the semester of enrollment in the course.

**Credit hours:** 1

**Contact hours:** Lab: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lab

**Department/School:** Nutritional Sciences

**NSCI 4373 Principles of Nutrition Education and Behavior Change**

**Prerequisites:** NSCI 2114 and NSCI 3021 and NSCI 3223 or consent of instructor. "C" or better in NSCI 3021 and NSCI 3223.

**Description:** Analysis of various methods, strategies, theories, resources and evaluation methods for nutrition education. Principles of behavior change and effective nutrition counseling. Overview of public health nutrition programs. Previously offered as FNIA 4373.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Nutritional Sciences

**NSCI 4573 Management in Dietetics**

**Prerequisites:** ACCT 2103 or ACCT 2003; and NSCI 3993 or HTM 1113 or HTM 1114.

**Description:** Management practices in the field of dietetics including program, clinical and food systems management.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Nutritional Sciences

**Additional Fees:** Nutritional Sci Consumable fee of \$20 applies.

**NSCI 4632 Community Nutrition I**

**Prerequisites:** NSCI 2114 and NSCI 3223 or consent of instructor. "C" or better in NSCI 2211, NSCI 3011, NSCI 3543, NSCI 3813 and NSCI 3993

**Description:** Application of nutrition epidemiological, environmental and program assessment practices in community nutrition settings. Field work required.

**Credit hours:** 2

**Contact hours:** Lecture: 2 Contact: 2

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Nutritional Sciences

**NSCI 4633 Community Nutrition II**

**Prerequisites:** NSCI 2114 and NSCI 3223 and NSCI 4632 or consent of instructor. "C" or better in NSCI 4632

**Description:** Application of nutrition, education, communication and evaluation principles to planning and implementing community nutrition programs and services. Field work required.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Nutritional Sciences

**NSCI 4643 Capstone for Nutritional Sciences**

**Prerequisites:** Senior standing in NSCI or consent of instructor.

**Description:** Integration of the body of knowledge in nutritional sciences. Examination of the research basis for defining and solving critical issues. Oral and written reports.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Nutritional Sciences

**NSCI 4850 Special Unit Studies in Nutritional Sciences**

**Description:** Special units of study in nutritional sciences. Offered for variable credit, 1-3 credit hours, maximum of 6 credit hours.

**Credit hours:** 1-3

**Contact hours:** Contact: 1-3 Other: 1-3

**Levels:** Undergraduate

**Schedule types:** Independent Study

**Department/School:** Nutritional Sciences

**NSCI 4854 Medical Nutrition Therapy I**

**Prerequisites:** NSCI 3223 and NSCI 3813 and NSCI 4123 or concurrent enrollment. "C" or better in NSCI 3813 and NSCI 4123

**Description:** Physiological and metabolic bases for dietary modifications in disease states. Previously offered as NSCI 4853.

**Credit hours:** 4

**Contact hours:** Lecture: 4 Contact: 4

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Nutritional Sciences

**NSCI 4864 Medical Nutrition Therapy II**

**Prerequisites:** NSCI 4854. "C" or better in NSCI 4854.

**Description:** A continuation of NSCI 4854, Medical Nutrition Therapy I. Previously offered as NSCI 4863 and NSCI 4852.

**Credit hours:** 4

**Contact hours:** Lecture: 4 Contact: 4

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Nutritional Sciences

**NSCI 4900 Honors Creative Component**

**Prerequisites:** College of Human Sciences Honors Program participation, senior standing.

**Description:** Guided creative component for students completing requirements for College Honors in College of Human Sciences. Thesis, creative project or report under the direction of a faculty member in the major area, with second faculty reader and oral exam. Offered for variable credit, 1-3 credit hours, maximum of 3 credit hours.

**Credit hours:** 1-3

**Contact hours:** Contact: 1-3 Other: 1-3

**Levels:** Undergraduate

**Schedule types:** Independent Study

**Department/School:** Nutritional Sciences

**General Education and other Course Attributes:** Honors Credit

**NSCI 4913 Nutritional Epidemiology**

**Prerequisites:** Junior standing, STAT 2013 and HLTH 3723 and NSCI 2013 with a minimum grade of "C", or consent of instructor.

**Description:** Assessing the impact of nutrition and physical activity on health outcomes from an epidemiological perspective. Attention will be given to understanding the spectrum of study designs, including their benefits and drawbacks, used to examine this relationship.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Nutritional Sciences

**NSCI 5000 Master's Thesis**

**Prerequisites:** Consent of adviser.

**Description:** Individual research and thesis that will fulfill the requirements for the master's degree. Offered for variable credit, 1-6 credit hours, maximum of 6 credit hours.

**Credit hours:** 1-6

**Contact hours:** Contact: 1-6 Other: 1-6

**Levels:** Graduate

**Schedule types:** Independent Study

**Department/School:** Nutritional Sciences

**NSCI 5003 Diabetes Medical Nutrition Therapy**

**Prerequisites:** Admission to MS in Dietetics.

**Description:** An in-depth study of diabetes management with emphasis in nutrition care. Topics will include diabetes pathophysiology, clinical care guidelines, basic pharmacology, clinical nutrition education and counseling strategies, and nutrition care planning. Web-based instruction.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Nutritional Sciences

**NSCI 5011 Special Topics in Nutritional Sciences**

**Prerequisites:** NSCI graduate standing.

**Description:** Orientation to graduate study and research in nutritional sciences.

**Credit hours:** 1

**Contact hours:** Lecture: 1 Contact: 1

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Nutritional Sciences

**NSCI 5012 Public Policy Development in Food, Nutrition and Related Programs**

**Description:** Rationale underlying governmental programs in food and nutrition and human sciences and assessment of the effectiveness of the programs.

**Credit hours:** 2

**Contact hours:** Lecture: 2 Contact: 2

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Nutritional Sciences

**NSCI 5013 Financial Management and Cost Controls in Dietetics**

**Prerequisites:** Admission to Great Plains IDEA online MS in Dietetics or consent of instructor.

**Description:** An overview of accounting, cost controls, and financial management in food service. Special emphasis placed on understanding the topics and applying them to the theoretical and/or practical research for food service systems. Web-based instruction.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Nutritional Sciences

**NSCI 5023 Advanced Nutrition in the Pathophysiology of Chronic Disease****Prerequisites:** NSCI 2114, NSCI 3011, NSCI 3223 and BIOL 3204.**Description:** In-depth study of the pathophysiology of chronic diseases and the role of dietary bioactive components in health maintenance and disease prevention.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Nutritional Sciences**NSCI 5033 Macronutrients in Human Nutrition****Prerequisites:** Biochemistry and advanced human nutrition/metabolism, or consent of instructor.**Description:** Characteristics, biological roles, digestion, absorption, transport and metabolism of the macronutrients. Previously offered as NSCI 6023.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Nutritional Sciences**NSCI 5043 Micronutrients in Human Nutrition****Prerequisites:** NSCI 5033 or consent of instructor.**Description:** In-depth study of vitamins and minerals and their interrelationships in metabolism. Previously offered as NSCI 6123.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Nutritional Sciences**NSCI 5053 Functional Foods for Chronic Disease Prevention****Prerequisites:** Admission to Great Plains IDEA MS in Dietetics or consent of instructor.**Description:** Integrate and evaluate the regulatory principles, food science, nutrient science and nutritional metabolism for the development of functional foods, nutraceuticals, and dietary supplements for chronic disease prevention. Web-based instruction.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Nutritional Sciences**NSCI 5063 Food Culture****Prerequisites:** Admission to MS in Dietetics.**Description:** Survey of topics that affect how we perceive food in the modern world. Students examine food as a badge of cultural identity, a focus of media scrutiny and promotion, a symbol of religion, and a driver of technology.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Nutritional Sciences**NSCI 5073 Nutrition Therapy for Eating Disorders****Prerequisites:** Admission to Great Plains IDEA MS in Dietetics. Medical Nutrition Therapy or consent of instructor.**Description:** Study of eating disorders management and nutrition care. Topics will include eating disorders medical complications, clinical care guidelines, basic pharmacology, clinical nutrition education, nutrition care planning, psychology of eating disorders, team collaboration, and therapeutic modalities for nutrition counseling. Web-based instruction.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Nutritional Sciences**NSCI 5103 Grant Writing for the Professional****Prerequisites:** Admission to the Great Plains IDEA online MS in Dietetics or consent of instructor.**Description:** Grant proposal preparation experience including written critique of proposals and budget planning. Designed for the working professional. Web-based instruction.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Nutritional Sciences**NSCI 5123 Research Approaches and Translation in Nutritional Sciences****Description:** Basic components of the research process in nutritional sciences, critical interpretation, and translation to practice applications for nutrition professionals.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Nutritional Sciences**NSCI 5133 Advanced Nutrition for Exercise and Sport****Prerequisites:** Intro nutrition and biochemistry or consent of instructor.**Description:** Advanced study of nutrition and metabolism relating to physical activity, sports and health.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Nutritional Sciences**NSCI 5203 Nutrition in Wellness****Prerequisites:** Admission to the Great Plains IDEA online MS in Dietetics or consent of instructor.**Description:** Wellness promotion through nutrition. Nutritional risk and protective factors will be examined as they relate to public health and individual nutrition. Web-based instruction.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Nutritional Sciences

**NSCI 5210 Contemporary Issues in Food Service**

**Prerequisites:** Admission to the Great Plains IDEA online MS in Dietetics program or consent of instructor.

**Description:** Contemporary issues in food service in dietetics; formulation of innovative solutions and processes to enhance effectiveness in the work place. Previously offered as NSCI 5211. Offered for variable credit, 3-9 credit hours, maximum of 9 credit hours.

**Credit hours:** 3-9

**Contact hours:** Contact: 3-9 Other: 3-9

**Levels:** Graduate

**Schedule types:** Independent Study

**Department/School:** Nutritional Sciences

**NSCI 5213 Entrepreneurship in Food Service and Dietetics**

**Prerequisites:** Admission to Great Plains IDEA online MS in Dietetics.

**Description:** An overview of entrepreneurship, characteristics of entrepreneurs and small business development within the context of food service and dietetics. Web-based instruction.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Nutritional Sciences

**NSCI 5223 Advanced Nutrition Across the Life Span**

**Prerequisites:** Admission to the Great Plains IDEA online MS in Dietetics.

**Description:** Examination of the influence of normal physiological stresses on nutritional needs throughout the life span. Web-based instruction.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Nutritional Sciences

**NSCI 5240 Contemporary Issues in Nutrition**

**Prerequisites:** Enrolled in Great Plains IDEA online MS in Dietetics.

**Description:** Contemporary issues in nutrition. Web-based instruction. Offered for variable credit, 3-9 credit hours, maximum of 9 credit hours.

**Credit hours:** 3-9

**Contact hours:** Contact: 3-9 Other: 3-9

**Levels:** Graduate

**Schedule types:** Independent Study

**Department/School:** Nutritional Sciences

**NSCI 5303 Human Nutrition and Metabolism I**

**Prerequisites:** Introductory nutrition, organic chemistry, physiology or consent of instructor.

**Description:** Examine the chemical characteristics and functions of macronutrients; digestion, absorption, transport and metabolism of macronutrients; control of intermediary metabolism and metabolic pathways. No credit for students with degree credit in NSCI 4123.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Nutritional Sciences

**NSCI 5313 Dietary and Herbal Supplements**

**Prerequisites:** Introductory nutrition and human physiology; or consent of instructor.

**Description:** Explore the safety and efficacy of botanical/herbal and dietary supplements in health applications including dietary supplementation in the prevention and treatment of chronic disease.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Nutritional Sciences

**NSCI 5323 Physical Health, Nutrition, Wellness and Active Aging**

**Description:** Normative biological and physiological changes due to aging are identified with a focus on how environmental factors such as physical activity and nutrition can support health aging and prevention of frailty and age-related diseases. Multiple facets of active aging that can augment quality of life will be examined. Resources for implementation of inclusive programs for diverse groups of aging adults will be explored. Web-based instruction.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Nutritional Sciences

**NSCI 5353 Human Nutrition and Metabolism II**

**Prerequisites:** Introductory nutrition, organic chemistry, biochemistry and physiology.

**Description:** Chemical characteristics, absorption, transport, functions, requirements and health implications of vitamins and minerals. Discussion of phytochemicals and supplements in relation to health maintenance and disease prevention. No credit for students with degree credit in NSCI 4143.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Nutritional Sciences

**NSCI 5363 Maternal and Child Nutrition**

**Prerequisites:** NSCI 2114 or equivalent.

**Description:** Nutritional needs and dietary concerns during pregnancy, lactation, infancy and childhood through puberty. Discussion of implications for nutrition intervention, family education and policy.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Nutritional Sciences

**NSCI 5373 Childhood Nutrition**

**Prerequisites:** Admission to MS in Dietetics.

**Description:** The physiological, biochemical, and nutritional aspects of disease processes relevant to infants and children up to 18 years of age. Discussion of medical nutrition therapy for a variety of medical conditions found in this population including inborn errors of metabolism, food hypersensitivity, obesity, and diseases of the major organ systems.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Nutritional Sciences

**NSCI 5393 Nutrition and Aging****Prerequisites:** NSCI 2114 or equivalent.**Description:** Nutritional needs, and dietary concerns of the elderly. Implications for food and nutrition programs, policies, research and education.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Nutritional Sciences**NSCI 5403 Contemporary Issues in Dietetics Practice****Description:** Contemporary management practices in the field of dietetics including innovative solutions and processes in program, clinical and food systems management. Online, asynchronous format.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Nutritional Sciences**NSCI 5412 Dietetic Internship Management Practicum****Prerequisites:** Acceptance as a dietetic intern.**Description:** Supervised learning experiences in approved food service management for the achievement of performance requirements for entry level dietitians. Graded on a pass-fail basis. Previously offered as NSCI 5440.**Credit hours:** 2**Contact hours:** Contact: 2 Other: 2**Levels:** Graduate**Schedule types:** Independent Study**Department/School:** Nutritional Sciences**NSCI 5422 Dietetic Internship Clinical Practicum****Prerequisites:** Acceptance as a dietetic intern.**Description:** Supervised learning experiences in approved clinical for the achievement of performance requirements for entry level dietitians. Graded on a pass-fail basis.**Credit hours:** 2**Contact hours:** Contact: 2 Other: 2**Levels:** Graduate**Schedule types:** Independent Study**Department/School:** Nutritional Sciences**NSCI 5432 Dietetic Internship Community Nutrition Practicum****Prerequisites:** Acceptance as a dietetic intern.**Description:** Supervised learning experiences in approved community nutrition settings for the achievement of performance requirements for entry level dietitians. Graded on a pass-fail basis.**Credit hours:** 2**Contact hours:** Contact: 2 Other: 2**Levels:** Graduate**Schedule types:** Independent Study**Department/School:** Nutritional Sciences**NSCI 5443 Precision Nutrition****Prerequisites:** For graduate students in NSCI or by permission of the instructor.**Description:** Fundamental concepts for understanding, interpreting, and evaluating studies related to precision nutrition. The goal of this course is to help students understand, in depth, the influence of genetics and epigenetics on nutrient metabolism, and the implications for human metabolic diseases such as cardiovascular disease and cancer. We will also review the current evidence, uncertainties and controversies, and future directions in precision nutrition.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Nutritional Sciences**NSCI 5453 Nutrition and Health Disparities****Prerequisites:** Lifespan nutrition; or Consent of Instructor.**Description:** Examination of nutrition and health disparities in the U.S. Identification of sociocultural determinants of health and their influence on nutrition and health outcomes. Exploration of interdisciplinary strategies to reduce nutrition and health disparities.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Nutritional Sciences**NSCI 5473 Pediatric Clinical Nutrition****Prerequisites:** Admission to Great Plains IDEA MS in Dietetics or consent of instructor.**Description:** Examination of the physiological, biochemical and nutritional aspects of disease processes relevant to infants and children up to 18 years of age. Medical nutrition therapy for a variety of medical conditions found in this population including inborn errors of metabolism, food hypersensitivity, obesity and diseases of the major organ systems. Web-based instruction.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Nutritional Sciences**NSCI 5513 Public Health Nutrition****Prerequisites:** Admission to Great Plains IDEA MS in Dietetics or consent of Instructor.**Description:** Information and activities related to public health nutrition with focus on how nutrition research, policies and programs impact populations. Web-based instruction.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Nutritional Sciences

**NSCI 5543 Obesity Prevention Across the Lifespan**

**Prerequisites:** Introductory and lifespan nutrition; or consent of instructor.

**Description:** Obesity in the population from childhood to the adult age groups. Examination of the impact of obese conditions on disease development throughout the life span. Critical analysis of prevention efforts and interventions used in the behavioral and clinical management of overweight and obese individuals in community and clinical settings.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Nutritional Sciences

**NSCI 5553 Global Nutrition and Food Security**

**Description:** Advanced study of the magnitude, causes, and nature of hunger and under-nutrition in low income countries; emphasis on programs, policies and planning directed toward alleviating hunger and malnutrition.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Nutritional Sciences

**NSCI 5563 Nutritional Assessment**

**Prerequisites:** Lifespan nutrition, human nutrition & metabolism, or equivalent.

**Description:** Dietary, physical, and biochemical assessment techniques and their application to patient or client nutritional status assessment in health care systems.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Nutritional Sciences

**NSCI 5603 Statistical Methods in Dietetics**

**Prerequisites:** Admission to MS in Dietetics.

**Description:** The elementary tools that are commonly used in making statistical decisions in the field of dietetics. Understanding of data and the methods used to analyze such data particularly as it pertains to the dietetics profession. Web-based instruction.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Nutritional Sciences

**NSCI 5613 Nutrition Education and Behavior Change**

**Prerequisites:** Consent of instructor.

**Description:** Analysis and practice of various learning and behavior change theories and application for understanding and/or modifying eating behavior, diet, and related health indices.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Nutritional Sciences

**NSCI 5643 Advanced Medical Nutrition Therapy**

**Prerequisites:** Admission to dietetic internship or consent of instructor.  
**Description:** Physiological and metabolic bases for nutritional support in disease.

**Credit hours:** 3

**Contact hours:** Lecture: 2 Lab: 3 Contact: 5

**Levels:** Graduate

**Schedule types:** Lab, Lecture, Combined lecture and lab

**Department/School:** Nutritional Sciences

**NSCI 5673 Human Resources**

**Prerequisites:** Admission to Great Plains IDEA online MS in Dietetics or consent of instructor.

**Description:** Future role, focus, practices and governance of human resources in health care.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Nutritional Sciences

**NSCI 5683 Fundamentals of Leadership in Dietetics**

**Prerequisites:** Admission to Great Plains IDEA online MS in Dietetics or consent of instructor.

**Description:** Study of the key issues in the theory, research, and application of leadership within the context of dietetics practice. Includes defining leadership, understanding situational characteristics that facilitate/hinder effective leadership, understanding effective/dysfunctional leadership, and gaining greater insight into one's own leadership style and functioning. Web-based instruction.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Nutritional Sciences

**NSCI 5713 Public Health Nutrition and Food Policy**

**Prerequisites:** Consent of instructor

**Description:** Current issues in the public health and community nutrition with emphasis on the impact of legislative, political, economic, environmental and cultural diversity factors on food systems and nutritional well-being of populations. Application to grant writing, program planning and evaluation.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Nutritional Sciences

**NSCI 5743 Advanced Laboratory Techniques in Nutritional Sciences**

**Prerequisites:** A course in biochemistry and a course in statistics.

**Description:** An integrated lecture and laboratory course examining the basic theories and techniques used in experimental nutritional sciences. Application of a range of biochemical and molecular biological techniques as they are currently applied to modern biomedical research.

**Credit hours:** 3

**Contact hours:** Lecture: 2 Lab: 2 Contact: 4

**Levels:** Graduate

**Schedule types:** Lab, Lecture, Combined lecture and lab

**Department/School:** Nutritional Sciences

**NSCI 5753 Health Care Administration****Prerequisites:** Admission to MS in Dietetics.**Description:** Overview of U.S. and international health care systems. Administrative roles of health care professionals and how they affect patient health and health care delivery in various settings.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Nutritional Sciences**NSCI 5843 Non-thesis Graduate Capstone****Prerequisites:** Final semester and consent of instructor.**Description:** A guided course with a research paper and presentation that is the final requirement for graduate students in NSCI's Master of Science degree, non-thesis plan. Not recommended for students interested in pursuing a PhD. Graded on a pass-fail basis. Previously offered as NSCI 5840.**Credit hours:** 3**Contact hours:** Contact: 3 Other: 3**Levels:** Graduate**Schedule types:** Independent Study**Department/School:** Nutritional Sciences**NSCI 5870 Problems in Nutritional Science****Description:** Analysis of emerging problems and trends in nutritional sciences. Offered for variable credit, 1-4 credit hours, maximum of 6 credit hours.**Credit hours:** 1-4**Contact hours:** Contact: 1-4 Other: 1-4**Levels:** Graduate**Schedule types:** Independent Study**Department/School:** Nutritional Sciences**NSCI 5913 Nutritional Epidemiology****Prerequisites:** HLTH 5323 or MPH 5323 or admission to NSCI graduate program, and Introductory Nutrition and Statistics, or consent of instructor.**Description:** Assessing the impact of nutrition and physical activity on health outcomes from an epidemiological perspective. Attention will be given to understanding the spectrum of study designs, including their benefits and drawbacks, used to examine this relationship.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Nutritional Sciences**NSCI 5960 Master's Seminar in Nutritional Sciences****Prerequisites:** NSCI graduate students.**Description:** Individual and group seminars on current issues and research in nutritional sciences. Previously offered as NSCI 5961. Offered for fixed credit, 1 credit hour, maximum of 2 credit hours.**Credit hours:** 1**Contact hours:** Contact: 1 Other: 1**Levels:** Graduate**Schedule types:** Discussion**Department/School:** Nutritional Sciences**NSCI 5962 Environmental Scanning and Analysis****Prerequisites:** Admission to Great Plains IDEA online MS in Dietetics or consent of instructor.**Description:** Review of current issues in the economic, social, ethical, political, legal, technological, and ecological environments and the effect of these changes on dietetics practice. Previously offered as NSCI 5963.**Credit hours:** 2**Contact hours:** Lecture: 2 Contact: 2**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Nutritional Sciences**NSCI 6000 Doctoral Dissertation****Prerequisites:** Consent of major professor.**Description:** Offered for variable credit, 1-12 credit hours, maximum of 45 credit hours.**Credit hours:** 1-12**Contact hours:** Contact: 1-12 Other: 1-12**Levels:** Graduate**Schedule types:** Independent Study**Department/School:** Nutritional Sciences**NSCI 6022 Advanced Energy Metabolism****Prerequisites:** NSCI 5033 and NSCI 5043**Description:** Critical discussion and directed study of current literature and concepts in the nutritional control of gene expression and regulation of energy homeostasis from the cellular to organismal level.**Credit hours:** 2**Contact hours:** Lecture: 2 Contact: 2**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Nutritional Sciences**NSCI 6033 Functional Foods and Phytochemicals****Prerequisites:** Advanced human nutrition/metabolism or consent of instructor.**Description:** Identification of basic structural, functional and metabolic properties of phytochemicals (substances in plants that have been linked to reducing chronic disease) and their respective food sources. Special attention placed on health benefits and chronic disease risk reduction.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Nutritional Sciences**NSCI 6223 Nutrition in Immunology****Prerequisites:** NSCI 5043 or consent of instructor.**Description:** Principles and issues related to nutrition and immunology. Impact of nutrients and nutritional status on integrity of the immune system.**Credit hours:** 3**Contact hours:** Lecture: 3 Contact: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Nutritional Sciences

**NSCI 6243 Nutrition and Cancer**

**Description:** Examination of basic cancer biology and methodology used to study nutrition and cancer relationships. The role of nutrition in specific cancers, cancer prevention and cancer treatment will be explored.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Nutritional Sciences

**NSCI 6451 Advanced Grant Writing in Nutritional Sciences**

**Prerequisites:** Admission to the PhD in NSCI and NSCI 5123 or equivalent, or consent of instructor.

**Description:** Grant writing, identifying external funding and managing grants for nutritional sciences research projects.

**Credit hours:** 1

**Contact hours:** Lecture: 1 Contact: 1

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Nutritional Sciences

**NSCI 6643 Clinical Aspects of Nutrition Support**

**Prerequisites:** Medical nutrition therapy; or consent of instructor.

**Description:** Specialized nutrition assessment and support. Review of energy expenditure and substrate utilization in specific disease states. Current methods for the initiation and management of enteral and parenteral nutrition therapy including access, metabolic and mechanical complications. Evaluation of nutrition support methodology in selected disease states.

**Credit hours:** 3

**Contact hours:** Lecture: 3 Contact: 3

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Nutritional Sciences

**NSCI 6870 Independent Study in Nutritional Sciences**

**Description:** In-depth analysis of research issues in nutritional sciences. Offered for variable credit, 1-3 credit hours, maximum of 6 credit hours.

**Credit hours:** 1-3

**Contact hours:** Contact: 1-3 Other: 1-3

**Levels:** Graduate

**Schedule types:** Independent Study

**Department/School:** Nutritional Sciences

**NSCI 6960 Seminar: Emerging Topics in Nutrition**

**Description:** Critical evaluation of research in nutritional sciences. Individual and group seminars on selected topics. Previously offered as NSCI 6961. Offered for fixed credit, 1 credit hour, maximum of 4 credit hours.

**Credit hours:** 1

**Contact hours:** Contact: 1 Other: 1

**Levels:** Graduate

**Schedule types:** Discussion

**Department/School:** Nutritional Sciences

## Undergraduate Programs

- Nutritional Sciences: Allied Health, BS (<http://catalog.okstate.edu/education-human-sciences/nutritional-sciences/allied-health-bs/>)
- Nutritional Sciences: Dietetics, BS (<http://catalog.okstate.edu/education-human-sciences/nutritional-sciences/dietetics-bs/>)

- Nutritional Sciences: Human Nutrition/Pre-Medical Sciences, BS (<http://catalog.okstate.edu/education-human-sciences/nutritional-sciences/human-nutrition-pre-medical-sciences-bs/>)
- Nutritional Sciences: Public Health Nutrition, BS (<http://catalog.okstate.edu/education-human-sciences/nutritional-sciences/public-health-nutrition-bs/>)

## Graduate Programs

The Department of Nutritional Sciences (NSCI) offers graduate study leading to a Graduate Certificate in Dietetics, Master of Science degree in Nutritional Sciences and a Doctor of Philosophy degree in Nutritional Sciences. Graduate study in NSCI emphasizes the conduct and application of research to the field of human nutrition. Graduate students work with an advisor and advisory committee to develop flexible, yet rigorous programs of study and research that meet the degree requirements and each student's professional goals within an area of specialization in the field.

## The Graduate Certificate in Dietetics

The Graduate Certificate in Dietetics builds competencies in the area of Dietetics and provides a path for eligibility to sit for the Registered Dietitian Nutritionist credential examination. The Graduate Certificate in Dietetics is designed for students who are concurrently enrolled in a Master of Public Health (MPH) or related graduate program. Applicants must have completed an Accreditation Council for Nutrition and Dietetics (ACEND) accredited Didactic Program in Dietetics and have a verification statement. The Plan of Study (POS) includes 18 credit hours, including the dietetic internship practicum courses. The practicum courses fulfill the supervised practice requirements of ACEND.

## The Master of Science Degree

The MS degree program is designed to develop research skills, stimulate independent thought and critical thinking, and provide up-to-date knowledge in a variety of areas of human nutrition. Admission to the MS graduate program is selective and is based on a variety of factors including the student's grade-point average (overall and science GPA), letters of recommendation and goal statement; Graduate Record Examination (GRE) scores are optional. The prerequisite for the MS program is a BS in nutritional sciences. Students with a BS degree in a subject area other than nutrition are required to have a minimum of 30 credit hours of undergraduate/graduate coursework related to nutritional sciences, including at least one course in biochemistry, one course in physiology and one upper-level nutrition course prior to full admission. Applicants who do not meet these requirements may be considered for conditional acceptance and required to take prerequisite courses and/or demonstrate academic ability.

Students in the MS NSCI program may select from three options: Dietetics Research, Dietetics Practice, or Nutrition. Choosing an option should be guided by the student's academic and career goals. In all three options, the student's plan of study and area of research, if applicable, are determined in consultation with his/her advisor and advisory committee. The Dietetics Research and Dietetics Practice options are designed for students who aim to earn a MS degree and complete the accredited Dietetic Internship program. Respectively, the two options require a minimum of 36 or 32 credit hours. Students applying for these options must have completed an ACEND accredited Didactic Program in Dietetics and have a verification statement. The Nutrition option is designed for students who aim to enhance their career with a graduate degree or to prepare for a doctoral program. Students desiring to conduct research

should select either the Dietetics Research or Nutrition option; both have a thesis and non-thesis plan. In both plans, thesis research is conducted within the advisor's area of expertise and is approved by an advisory committee. The non-thesis MS degree plan requires three credit hours of NSCI 5843 Non-thesis Graduate Capstone including a written research paper and an oral presentation.

An online Master of Science degree in Nutritional Sciences with an option in Dietetics is also offered to Registered Dietitians (RD), individuals who are RD eligible, or have completed a Didactic Program in Dietetics. OSU offers this degree program as a member of the Great Plains Interactive Distance Education Alliance (Great Plains IDEA) which provides the opportunity for eligible individuals to study with faculty from eight universities in the Alliance via Internet-based courses. The MS in Dietetics requires completion of 36 credit hours, including nine core credits, six OSU Nutritional Sciences Core credits, 18 elective credits and NSCI 5843 Non-thesis Graduate Capstone. A faculty advisor and the graduate committee from the Nutritional Sciences department must approve a student's program of study. More detailed information can be found at: [gpidea.okstate.edu](http://gpidea.okstate.edu) (<http://gpidea.okstate.edu>).

## The Doctor of Philosophy Degree

The PhD degree is awarded in Nutritional Sciences. Two programs are available: a 60-hour program for MS graduates and an 80-hour program for BS graduates. The focus of the program is to prepare individuals for careers in a variety of areas including higher education, industry, healthcare and governmental programs. Admission to the program is competitive and applicants are expected to provide evidence of exceptional academic ability and preparation, a statement of goals and letters of recommendation. Grade-point average in previous undergraduate, professional school and graduate coursework are considered in the evaluation of the applicant; Graduate Record Examination (GRE) scores are optional. If a thesis was not required as a component of the applicant's MS program, the student's advisory committee reserves the right to determine if a thesis or thesis-equivalent project must be completed.

Students accepted into the 60-credit hour PhD option must have completed 30 hours of graduate coursework in nutrition or an area of specialization such as biochemistry, biology, dietetics, public health, exercise science, food science, hospitality/restaurant management, or other major field related to the desired area of study. A master's degree is highly preferred but not required. If a thesis was not completed as a part of the graduate coursework, the student's advisory committee reserves the right to determine if a thesis or thesis-equivalent project must be completed. Students with a degree or graduate coursework in a subject area other than nutrition may be considered for provisional admission with courses completed in the first year of admission to assure a basic nutrition foundation and earning a 3.0 or higher GPA. The graduate faculty committee will determine which courses must be completed within the first year of admission; the courses will be indicated in the applicant's admission letter.

Students accepted into the 80-credit hour PhD option must hold a Bachelor of Science (BS) in nutrition or an area of specialization such as biochemistry, biology, dietetics, public health, exercise science, food science, hospitality/restaurant management, or other major field related to the desired area of study. Students with a degree in a subject area other than nutrition may be considered for provisional admission with completion of courses in the first year of admission to assure a basic nutrition foundation and the student earns a 3.0 or higher GPA. The graduate faculty committee will determine which courses must be

completed within the first year of admission and will be indicated in the applicant's admission letter.

The PhD program includes a strong emphasis on research in areas ranging from basic molecular and cellular sciences to clinical and community applications. Students also gain experience in resource generation, knowledge sharing and community engagement. Each program of study is designed by the student under direction of his/her faculty advisor and advisory committee to develop the student's competence in an area of specialization and research methodologies. Doctoral training includes 15-30 hours of dissertation research, a qualifying examination covering core nutrition knowledge, a comprehensive examination focused on the area of specialization and participation in research throughout the program.

More detailed information on graduate study in the Department of Nutritional Sciences can be obtained by writing the graduate coordinator, or accessing the website at Department of Nutritional Sciences, Graduate Programs (<https://education.okstate.edu/departments-programs/nutritional-sciences/graduate.html>).

## Minors

- Nutritional Sciences (NSCI), Minor (<http://catalog.okstate.edu/education-human-sciences/nutritional-sciences/minor/>)

## Certificates

- Post-Baccalaureate in Dietetics, UCRT (<http://catalog.okstate.edu/education-human-sciences/nutritional-sciences/post-baccalaureate-dietetics-ucrt/>)

## Faculty

**Professor, Department Head:** Norman Hord, PhD, RD

**Professor, Associate Department Head:** Deana Hildebrand, PhD, RD/LD

**Associate Professor, Graduate Coordinator:** Jillian Joyce, PhD, RD

**Regents Professor and Jim and Lynne Williams Endowed Professor:** Edralin A. Lucas, PhD

**Professor, Senior Associate Dean for Research, Graduate Studies, and Faculty Affairs:** Stephen L. Clarke, PhD, RD

**Professor and John and Sue Taylor Endowed Professor:** Dingbo Lin, PhD

**Professor, Cooperative Extension Specialist:** Janice Hermann, PhD, RD/LD

**Associate Professors:** Winyoo Chohanadisai, PhD; Sam Emerson, PhD; McKale Montgomery, PhD, RD

**Assistant Professors:** Jiyoung Bae, PhD; PhD, RD; Yoo Kim, PhD; Allison Hepworth, PhD; Harriet Okronipa, PhD; Rachel Liebe, PhD

**Teaching Professor and Director for the Development of an Advanced Practice Doctorate:** Gena Wollenberg, PhD, RD/LD

**Teaching Associate Professor, Dietetic Intern Director:** Lauren Amaya, PhD, RD/LD

**Teaching Assistant Professor, Didactic Program in Dietetics Director and Dietetic Internship Assistant Director:** Catherine Palmer, MS, RD/LD

**Teaching Associate Professor:** Shirley Evans, PhD, PA, RD/LD

**Teaching Instructor:** Michael Rhone, MS, RD

**Extension Specialist, CNEP Coordinator:** Candance Gabel, MS, RD/LD

**Associate Extension Specialists:** Jenni Klufa, MS, RD/LD; Diana Romano, MS, RD/LD

**Assistant Extension Specialist:** Christi Evans, MS, RD

**Emeritus Regents Professor:** Barbara J. Stoecker, PhD, RD/LD, FAND