

MASTER OF SCIENCE (M.S.) MAJOR IN HUMAN NUTRITION (NON-THESIS OPTION)

Program Overview

The Graduate program in Human Nutrition promotes the study of human nutrition, food science, and biotechnology with emphasis on promoting health and preventing disease. Graduate instruction is based on a variety of learning strategies, including lecture, seminar-style discussion, participation in research, and practical laboratory work using state of the art equipment and techniques. Graduates achieve the technical skills, scientific knowledge, and local, national, and global perspectives to integrate the fields of nutrition, food science and food biotechnology to address human health concerns of the 21st century.

Dietetic Internship Concurrent Enrollment

Students enrolled in the M.S. program who are interested in obtaining the registered dietitian (RD) credential are encouraged to apply for admission to the Texas State dietetic internship (DI) after they have completed at least one term. While up to nine hours of courses taken as part of the DI may count towards the M.S. degree, completion of both the M.S. and DI may require more course work than needed to complete the M.S. alone. Students interested in this dual option are required to meet with the graduate coordinator to determine courses required to complete both programs. It is important to note that admission to the M.S. does not guarantee acceptance into the Texas State DI.

Application Requirements

The items listed below are required for admission consideration for applicable semesters of entry during the current academic year. Submission instructions, additional details, and changes to admission requirements for semesters other than the current academic year can be found on The Graduate College's website (<http://www.gradcollege.txstate.edu>). International students should review the International Admission Documents webpage (<http://mycatalog.txstate.edu/graduate/admission-documents/international/>) for additional requirements.

- completed online application
- \$55 nonrefundable application fee
- or
- \$90 nonrefundable application fee for applications with international credentials
- baccalaureate degree (preferably in nutrition, food science or a related field) from a regionally accredited university
- official transcripts from **each institution** where course credit was granted
- minimum 3.0 GPA in the last 60 hours of undergraduate course work (plus any completed graduate courses)
- background course work in:
 - Introductory Biology
 - Introductory Nutrition
 - Microbiology
 - Anatomy and Physiology

- Introductory Chemistry (at least two semesters)
- Organic Chemistry (at least one course)
- Biochemistry
- Nutrition in the Lifespan
- GRE not required
- resume/CV
- statement of purpose describing professional aspirations and rationale for pursuing graduate study
- three letters of recommendation from professionals or academics competent to assess the student's interest in pursuing a career in nutrition

TOEFL, PTE, or IELTS Scores

Non-native English speakers who do not qualify for an English proficiency waiver:

- official TOEFL iBT scores required with a 78 overall
- official PTE scores required with a 52
- official IELTS (academic) scores required with a 6.5 overall and minimum individual module scores of 6.0

This program does **not** offer admission if the scores above are not met.

Degree Requirements

The Master of Science (M.S.) degree with a major in Human Nutrition requires 39 semester credit hours. Students who do not have the appropriate background course work may be required to complete a leveling course.

Course Requirements

Code	Title	Hours
Required Courses		
NUTR 5305	Seminar in Nutrition and Disease	3
NUTR 5306	Seminar in Nutrition in the Lifespan	3
NUTR 5350	Research Methods in Nutrition and Food Science	3
NUTR 5364	The Science of Nutrition and Exercise	3
NUTR 5366	Nutrient Metabolism I	3
NUTR 5367	Nutrient Metabolism II	3
NUTR 5372	Advances in Nutrition Policy and Ethics	3
Prescribed Electives		
Choose 18 hours from the following courses:		18
AG 5370	Special Problems in Technical Agriculture	
FCS 5311	Statistics and Data Analysis for Family and Consumer Sciences	
NUTR 5302F	Nutritional Supplements	
NUTR 5302G	Pediatric Obesity	
NUTR 5320	Diet Therapy and Pathophysiology	
NUTR 5355	Advanced Independent Study in Nutrition	
NUTR 5360	Practicum for Dietetic Internship	
NUTR 5361	Advanced Food Systems Administration	
NUTR 5362	Advanced Medical Nutrition Therapy	
NUTR 5363	Advanced Community Nutrition	
NUTR 5371	Externship in Human Nutrition	
NUTR 5374	Advanced Nutrition and Genetics	

SPAN 5322 Spanish for the Professions

Total Hours**39**

Comprehensive Examination Requirement

Comprehensive exams for the M.S. in Human Nutrition are written and take place each fall and spring semester. Students are given three questions per core NUTR graduate course one month prior to the exam. On the day of the exam, they are given two questions per course and must answer one per course without external aids. Students must earn a 5 or greater on each question and an average of 70% to pass their exams. If a student fails to pass the exam, they may repeat the questions they failed the following time the exam is offered.

Students who do not successfully complete the requirements for the degree within the timelines specified will be dismissed from the program.

Master's level courses in Human Nutrition: NUTR

Courses Offered

Nutrition and Foods (NUTR)

NUTR 5199B. Thesis.

Continuing thesis enrollment. Focus is on data collection, analysis and writing of the thesis. The student continues to enroll in this course until the thesis is defended.

1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.

Course Attribute(s): Exclude from 3-peat Processing

Grade Mode: Credit/No Credit

NUTR 5299B. Thesis.

Continuing thesis enrollment. Focus is on data collection, analysis and writing of the thesis. The student continues to enroll in this course until the thesis is defended.

2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.

Course Attribute(s): Exclude from 3-peat Processing

Grade Mode: Credit/No Credit

NUTR 5300. Foundation Studies in Human Nutrition.

This course is designed for students who do not have a sufficient background in the foundations of nutrition and food science to be successful in graduate level courses. This course does not earn graduate degree credit. Course is repeatable. Prerequisite: Instructor approval.

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.

Course Attribute(s): Exclude from 3-peat Processing|Exclude from Graduate GPA|Leveling

Grade Mode: Leveling/Assistantships

NUTR 5302F. Nutritional Supplements.

An advanced study of the efficacy of dietary supplements. Both nutrient and non-nutrient supplement components will be discussed. Clinical trials, epidemiological data and molecular mechanisms of action of dietary supplements will be compared to manufacturer's claimed action. Prerequisite: Instructor approval.

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.

Course Attribute(s): Exclude from 3-peat Processing|Topics

Grade Mode: Standard Letter

NUTR 5302G. Pediatric Obesity.

An advanced study of pediatric obesity, including causes, economic and health related consequences, evidence-based treatment and prevention strategies. Prerequisite: Instructor approval.

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.

Course Attribute(s): Exclude from 3-peat Processing|Topics

Grade Mode: Standard Letter

NUTR 5305. Seminar in Nutrition and Disease.

An advanced study of a selected topic in nutrition concerning nutrients and functional foods and their role in disease prevention or treatment. Class topics will enter on clinical trials, epidemiological data and molecular mechanisms of action concerning the ability of nutrients to prevent or treat disease. Repeatable for credit when topic varies.

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.

Course Attribute(s): Exclude from 3-peat Processing

Grade Mode: Standard Letter

NUTR 5306. Seminar in Nutrition in the Lifespan.

An advanced study of a selected topic in nutrition and the lifespan from a multidisciplinary perspective, including review of scientific literature in nutrition, physiology, biochemistry, sociology, exercise sports science, epidemiology, endocrinology and genetics. Repeatable for credit when topic varies.

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.

Grade Mode: Standard Letter

NUTR 5320. Diet Therapy and Pathophysiology.

This course will study the physiological and biochemical abnormalities of certain disease states as they relate to the human body's systems placing emphasis on diet modification as a therapeutic measure.

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.

Grade Mode: Standard Letter

NUTR 5350. Research Methods in Nutrition and Food Science.

Evaluation of research concepts, methods, and strategies used in nutrition and food science research. Topics include the nature of scientific research, sampling, measurement, data collection, types of research methodology, use of data analysis and management software, and evaluation of research reports.

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.

Grade Mode: Standard Letter

NUTR 5355. Advanced Independent Study in Nutrition.

Individual work with specific guidance from graduate nutrition faculty. Work may include participation in research, professional practice, and/or critical review of the scientific literature. Course may be repeated once for credit when topics vary.

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.

Grade Mode: Standard Letter

NUTR 5360. Practicum for Dietetic Internship.

Students observe and engage in the practice of dietetics under the supervision of practitioners in facilities for health care, public health, and food systems. Repeated twice to meet requirements to complete the dietetic internship program. Prerequisite: Instructor approval.

3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.

Course Attribute(s): Exclude from 3-peat Processing

Grade Mode: Credit/No Credit

NUTR 5361. Advanced Food Systems Administration.

Techniques and procedures for management, service, and marketing of meals in commercial and noncommercial food service facilities.

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.

Grade Mode: Standard Letter

NUTR 5362. Advanced Medical Nutrition Therapy.

Advanced study of medical nutrition therapy with emphasis on application of principles and techniques of nutritional assessment emphasizing current clinical nutrition practices. Current scientific literature will be used extensively to discuss most recent advances in the area of medical nutrition therapy.

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.

Grade Mode: Standard Letter

NUTR 5363. Advanced Community Nutrition.

Assessment of the nutritional needs of the community and of programs that serve the needs. Experiences include survey techniques, nutritional education, and management of programs to meet specific nutritional needs through community agencies.

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.

Grade Mode: Standard Letter

NUTR 5364. The Science of Nutrition and Exercise.

An advanced course focusing on the physiological and biochemical impact of nutrient intake on physical performance, health and fitness. Special emphasis will be placed on the investigation of a variety of dietary supplements, including purported ergogenic aids. The course requires significant reading and interpreting of the scientific literature.

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.

Grade Mode: Standard Letter

NUTR 5366. Nutrient Metabolism I.

An advanced study of the biochemical and physiological foundations of nutrition and metabolism and its relevance to health and wellness. Scientific literature pertaining to biochemical structure, metabolism and physiological regulation of macronutrients and water-soluble vitamins.

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.

Grade Mode: Standard Letter

NUTR 5367. Nutrient Metabolism II.

An advanced study of the biochemical and physiological foundations of nutrition with emphasis on fat-soluble vitamins and minerals. Current scientific information pertaining to structure, metabolism and physiological regulation of these micronutrients.

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.

Grade Mode: Standard Letter

NUTR 5371. Externship in Human Nutrition.

Structured practical experience in human nutrition, food science, food biotechnology. Supervision provided by a member of the graduate faculty and a designated individual at the work site. Requires a minimum of 150 hours of supervised experience. Prerequisite: Instructor approval.

3 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.

Course Attribute(s): Exclude from 3-peat Processing

Grade Mode: Standard Letter

NUTR 5372. Advances in Nutrition Policy and Ethics.

This course considers the disparate influences on the US food supply, on federal and state nutrition and food-related policies, and ultimately, on individual dietary intake. Potential influences, including current state and federal policies, industry, interest groups, and the media, driven by economics and ethical consideration, will be addressed.

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.

Grade Mode: Standard Letter

NUTR 5374. Advanced Nutrition and Genetics.

This course will examine the specific processes in intermediary nutrient metabolism and their genetic regulation. The effects of nutrients on gene expression, cell signaling, cell physiology, and disease processes will also be explored.

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.

Grade Mode: Standard Letter

NUTR 5375. Advances in Life Span Nutrition.

An advanced study of the nutritional requirements throughout the life span involving a multidisciplinary approach including, biochemistry, endocrinology and genetics, and perspectives of human psychological and social development. Prerequisite: Instructor approval.

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.

Grade Mode: Standard Letter

NUTR 5399A. Thesis.

Initial thesis enrollment. Focus is on identification of thesis topic, review of literature, research design and preparation of thesis proposal. No thesis credit is awarded until completion of NUTR 5399B.

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.

Grade Mode: Credit/No Credit

NUTR 5399B. Thesis.

Continuing thesis enrollment. Focus is on data collection, analysis and writing of the thesis. The student continues to enroll in this course until the thesis is defended.

3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.

Course Attribute(s): Exclude from 3-peat Processing

Grade Mode: Credit/No Credit

NUTR 5599B. Thesis.

Continuing thesis enrollment. Focus is on data collection, analysis and writing of the thesis. The student continues to enroll in this course until the thesis is defended.

5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.

Course Attribute(s): Exclude from 3-peat Processing

Grade Mode: Credit/No Credit

NUTR 5999B. Thesis.

Continuing thesis enrollment. Focus is on data collection, analysis and writing of the thesis. The student continues to enroll in this course until the thesis is defended.

9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.

Course Attribute(s): Exclude from 3-peat Processing

Grade Mode: Credit/No Credit