NUTRITION AND FOODS (NUTR)

NUTR 1162. Food Systems Laboratory.
This course provides for application of the management techniques and concepts of planning, preparation, cost analysis, and evaluation covered in NUTR 1362. Pre or Co-requisite: NUTR 1362
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours. Grade Mode: Standard Letter

NUTR 1362. Food Systems.
Nutrition, food science, and management principles in planning, procuring, preparing, preserving, evaluating, and serving food to fulfill dietary requirements of individuals and diverse cultural groups. Includes federal legislation, environmental issues, and culinary principles. Pre or Co-requisite: NUTR 1162
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours. Grade Mode: Standard Letter

NUTR 2162. Food Science Laboratory.
Students engage in laboratory techniques and exercises related to food, chemistry, microbiology, nutrition, food palatability, and food safety. Prerequisite: NUTR 2360 with grade of C or higher. Co- or prerequisite: NUTR 2362
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours. Grade Mode: Standard Letter

TCCN: BIOL 1322

The science of human nutrition with emphasis on nutrient digestion, absorption, and excretion; nutrient metabolism, requirements, and sources. Prerequisite: Three semester hours of science
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours. Grade Mode: Standard Letter

NUTR 2361. Nutritional Assessment.
This course teaches the principles and techniques of assessing nutritional status, presents interviewing and nutrition counseling theories, development of individualized treatment plans and educational tools, and accessing community nutrition resources. Practical application is provided through assignments and in-class experiences. Prerequisites: NUTR 1362, NUTR 2360 with grades of C or higher
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours. Grade Mode: Standard Letter

NUTR 2362. Food Science.
Students learn the scientific principles underlying the relationships among food, chemistry, microbiology, nutrition, and food safety as related to the major food groups. Prerequisites: 3 hours of chemistry or biology, and NUTR 2360 with grade of C or higher. Co- or prerequisite: NUTR 2162
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours. Grade Mode: Standard Letter

For non-science majors. Involves the study of the nutrients and their function in promoting health throughout the life span. Includes standards for consumer selection of a proper diet and analysis of nutrition-related health problems
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours. Grade Mode: Standard Letter

NUTR 3363. Nutrition for Wellness and Fitness.
Students will study the causes and treatment of overweight and obesity and the effects of dietary and lifestyle choices on attainment and maintenance of health and prevention of chronic diseases. Basic exercise physiology is introduced and dietary recommendations for sports, fitness and prevention of eating disorders are also presented. Prerequisites: NUTR 2361 and NUTR 3367; BIO 2430, or BIO 2451 and BIO 2452, all with grades of C or higher
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours. Grade Mode: Standard Letter

This course focuses on basic nutritional science, with emphasis on the physiological and biochemical importance of nutrition to physical performance, health, and fitness. The use and efficacy of ergogenic aids will be investigated. The course requires reading and interpreting the scientific literature. Restricted to students majoring in Athletic Training, Exercise Sports Science, Family and Consumer Sciences, Health & Fitness Management, or Health & Wellness Promotion
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours. Grade Mode: Standard Letter

NUTR 3367. Nutrition and Physiology.
This course integrates the study of nutrition with other biological sciences, focusing on cellular and molecular physiological processes related to digestion, absorption, transport, and metabolism of nutrients and other dietary components. Prerequisites: NUTR 2360 and BIO 2430 with grades of C or higher; and CHEM 1341, CHEM 1141, CHEM 1342, CHEM 1142
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours. Grade Mode: Standard Letter

NUTR 4101. Special Problems in Nutrition and Foods.
Independent reading and/or research on a specific topic related to students' primary area of interest. Work may consist of research, reviews, and integration of existing literature, or other appropriate independent work. May be repeated once for credit with approval of instructor
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours. Course Attribute(s): Exclude from 3-peat Processing
Grade Mode: Standard Letter

NUTR 4167. Food Systems-Production & Management Laboratory.
This course provides for the application of the management techniques and concepts of institutional food production covered in NUTR 4367. Prerequisites: NUTR 1362, NUTR 2360 with grades of C or higher; Pre- or corequisite: NUTR 4367
1 Credit Hour. 0 Lecture Contact Hours. 2 Lab Contact Hours. Grade Mode: Standard Letter

Students engage in applied experience under the supervision of a professional mentor in nutrition and foods-related professions, services, businesses, and/or research. Prerequisite: must meet college, department and program requirements. (WI)(Capstone Course)
3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours. Course Attribute(s): Exclude from 3-peat Processing/Intensive
Grade Mode: Standard Letter
Nutrition and Foods (NUTR)

NUTR 4302C. Micronutrients.
A study of the biochemical and physiological foundations of nutrition. Information pertaining to biochemical structure, metabolism and physiological regulation of minerals and fat-soluble vitamins. Prerequisites: NUTR 2360 and NUTR 3365; Co-requisite: CHEM 2450
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.

Course Attribute(s): Exclude from 3-peat Processing
Grade Mode: Standard Letter

NUTR 4302E. Community Nutrition.
A study of community nutrition programs addressing food insecurity, prevention and treatment of chronic diseases, and health promotion among special populations, including maternal, infant, child, adolescent and older adults. Review of national and international healthcare systems; program planning incorporating evidence-based intervention strategies. Prerequisite: NUTR 2360 or NUTR 3362; NUTR 4365
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing
Grade Mode: Standard Letter

NUTR 4350. Hospitality.
Focus on the principles underlying operations in the hospitality industry. Concepts include residential and lodging operations, guest expectations, food, beverage, and maintenance services, promotions, budget control, personnel and security
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

NUTR 4360. Medical Nutrition Therapy.
This course explains the physiological and biochemical abnormalities of certain disease states of human body systems with emphasis on diet modification as a therapeutic measure. Prerequisites: NUTR 3367; and BIO 2430 or BIO 2451 and BIO 2452, all with grades of C or better; and NUTR 4365 with a grade of D or better
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

A study of the biochemical and physiological foundations of nutrition. Information pertaining to cytology, biochemical structure of nutrients, energy transformations, nutrient-drug interactions, and the anatomy, physiology, and nutrient metabolism of major organ systems is covered. Prerequisites: NUTR 3367; and BIO 2430 or BIO 2451 and BIO 2452, all with grades of C or better; and NUTR 4365 with grade of D or better
Pre- or co-requisite: CHEM 2350 and CHEM 2150, or CHEM 3375, or CHEM 4375
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

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. Prerequisites: NUTR 3367; and BIO 2430 or BIO 2451 and BIO 2452; and BIO 2440 or BIO 2400, all with grades of C or higher
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

NUTR 4363. Nutrition Counseling and Education.
Study of teaching/learning styles and development of counseling skills to improve the nutritional status of individuals, families, and groups. Development of effective nutrition education materials and media communications. Prerequisites: NUTR 2361, 4365
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

NUTR 4365. Nutrition in the Life Span.
This course provides for the in-depth study of the normal growth, development, and nutritional requirements associated with pre-pregnancy, pregnancy, infancy, childhood, adolescence, and the older adulthood. Prerequisites: NUTR 2361, NUTR 3367; and BIO 2430 or BIO 2451 and BIO 2452, all with grades of C or higher. (WI)
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Course Attribute(s): Writing Intensive
Grade Mode: Standard Letter

This course addresses the influence of government, interest groups, media, and industry on nutrition policy decisions, public and private funding, nutrition education, the food supply and food choices, and includes discussion of ethical considerations that have an impact on public health. Prerequisites: NUTR 1362 with grade of C or higher; NUTR 4365. (WI)
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Course Attribute(s): Writing Intensive
Grade Mode: Standard Letter

NUTR 4367. Food Systems-Production & Management.
Students study the principles, policies, and procedures for planning, procurement, staffing, production, evaluation, and research in institutional food service. Topics include systems design, decision hierarchy, organizational structure, and personnel selection, training, and management. Prerequisites: NUTR 1362, NUTR 2360 with grades of C or higher; Pre- or co-requisite: NUTR 4167
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

Independent reading and/or research on a specific topic related to students’ primary area of interest. Work may consist of research, reviews, and integration of existing literature, or other appropriate independent work. May be repeated once for credit with approval of instructor. (WI)
3 Credit Hours. 0 Lecture Contact Hours. 6 Lab Contact Hours.
Course Attribute(s): Exclude from 3-peat Processing
Writing Intensive
Grade Mode: Leveling/Assistantships

NUTR 5101. Graduate Assistant Development.
This course is required as a condition of employment for graduate teaching and instructional assistants. This course provides regular in-service and planned periodic evaluations of instructional responsibilities. This course does not earn graduate degree credit
1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.
Course Attribute(s): Graduate Assistantship
Exclude from Graduate GPA
Grade Mode: Leveling/Assistantships

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. Prerequisite: NUTR 5399A
1 Credit Hour. 1 Lecture Contact Hour. 0 Lab Contact Hours.
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. Prerequisite: NUTR 5399A
2 Credit Hours. 2 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Credit/No Credit

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. Prerequisite: consent of graduate advisor. No graduate credit awarded; may be repeated
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Course Attribute(s): Exclude from Graduate GPA|Leveling
Grade Mode: Leveling/Assistantships

NUTR 5302E. Nutrition and Disease.
An advanced study of the ability of various nutrient and non-nutrient compounds found in food to prevent and treat disease. Diseases covered include cancer, diabetes, cardiovascular disease, among others. Prerequisite: graduate standing and permission of instructor
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Course Attribute(s): Topics
Grade Mode: Standard Letter

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: graduate standing and consent of instructor
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Course Attribute(s): 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: graduate standing and consent of instructor
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Course Attribute(s): Topics
Grade Mode: Standard Letter

NUTR 5302J. Diet Therapy and Pathophysiology.
This course will investigate the use of diet as a treatment for a variety of acute and chronic disease states. Students will also learn to apply the nutrition care process to treat patients/clients with acute and chronic diseases
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 5303. Nutrition and Food Science Project.
Directs the graduate student to review, analyze and compile current scientific literature pertaining to a specific, advanced topic in nutrition under guidance of faculty. Course includes preparation of a manuscript (review of literature) in publication format. Prerequisite: Graduate Standing
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
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.
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

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

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. Graded on a credit (CR), no credit (F) basis. Prerequisites: Admission to Texas State Dietetic Internship
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

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. Prerequisites: Graduate Standing
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. Prerequisites: Graduate Standing
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

NUTR 5369. Nutrition and Immune Function.
This course integrates existing knowledge in several areas - nutrition, food science, metabolism and immunology. Discussion will focus on the effect of dietary components on activation of cells and genes related to immune system and underlying mechanisms of nutritional immunomodulation. Prerequisites: Graduate Standing
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

NUTR 5370. Food and Nutritional Toxicology.
Basic principles of nutritional and food toxicology. Absorption, metabolism and excretion of xenobiotics, allergenic and toxic constituents in diet. Effect of dietary toxins on nutritional status, mutagenesis, carcinogenesis and disease. Regulation and safety assessment of foods including food additives, environmental contaminants, pesticides and antibiotic residues. Prerequisite: Graduate standing
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. Prerequisites: Graduate standing and approval by graduate advisor and faculty supervisor
3 Credit Hours. 0 Lecture Contact Hours. 40 Lab Contact Hours.
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. Enrollment restricted to students in the MS in Human Nutrition program
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Standard Letter

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: consent of graduate advisor
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. Prerequisite: Graduate standing
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. Prerequisite: NUTR 5399A
3 Credit Hours. 3 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Credit/No Credit

NUTR 5599A. 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. Prerequisite: NUTR 5399A
5 Credit Hours. 5 Lecture Contact Hours. 0 Lab Contact Hours.
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. Prerequisite: NUTR 5399A
9 Credit Hours. 9 Lecture Contact Hours. 0 Lab Contact Hours.
Grade Mode: Credit/No Credit