NUTR - Nutrition

NUTR 221CS. Basic Human Nutrition. 3 Credits. (3 Lec) F,S,Su
Basic concepts of human nutrition which include carbohydrates, lipids, proteins, vitamins, minerals, absorption, digestion, metabolism, and energy utilization as they relate to health and food consumption at different stages of the life cycle.

NUTR 224. Careers in Nutrition and Dietetics. 1 Credit. (1 Lec)
PREREQUISITES: Sophomore status, NUTR 221 Basic Human Nutrition or Consent of Instructor Careers in Nutrition and Dietetics is an introduction to the career opportunities in the field of nutrition and healthcare for food and nutrition majors. Emerging health care delivery models, intraprofessional roles and reimbursement for nutrition services will be discussed. Emphasis on critical thinking, evidence-based practice and professional ethics.

NUTR 226. Food Fundamentals. 3 Credits. (3 Lec) F,S,Su
PREREQUISITE: NUTR 221CS. Principles of food composition, preparation, selection, food safety and storage with special reference to physical and chemical changes which occur during normal food handling. Includes an introduction to meal planning, sensory evaluation, and cultural food perspectives.

NUTR 227. Food Fundamentals Lab. 2 Credits. (1 Lec, 1 Lab)
PREREQUISITE: NUTR 226CS. Practical experiences which illustrate the principles of ingredient functionality, methods of preparation, preservation, food safety and sensory evaluation. Utilizes knowledge from NUTR 226.

NUTR 292. Independent Study. 1-3 Credits. (1 Ind; 6 cr max)
PREREQUISITE: Consent of instructor and approval of department head. Directed research and study on an individual basis.

NUTR 301. Food and Culture. 3 Credits. (3 Lec) F
PREREQUISITE: NUTR 221CS, NUTR 226, and NUTR 227. Food is an essential component of life and livelihoods everywhere. However, food patterns vary across the globe. Students will build cultural competency by examining and experiencing the concurrent influences of food and culture over the course of history.

NUTR 321. Nutrition in the Life Cycle. 3 Credits. (3 Lec) F
PREREQUISITE: NUTR 221CS. Nutritional needs and health concerns during the different stages of life: pregnancy, lactation, infancy, preschool years, middle childhood, adolescence, adulthood, and later maturity. Major service-learning project with agencies offering nutrition services.

NUTR 322. Food Service System Management. 3 Credits. (3 Lec) F
PREREQUISITE: NUTR 221CS, NUTR 226, and NUTR 227 or consent of instructor. Principles of quantity food procurement, production, and presentation. Emphasizes food safety and sanitation principles and organizational management for food and nutrition professionals.

NUTR 351. Nutrition and Society. 3 Credits. (3 Lec) F,S,Su
PREREQUISITE: NUTR 221CS. Social and cultural, economic, policy, and environmental factors in the community influencing nutritional status, and public health, techniques to assess community nutritional needs, and methodology for designing, implementing, and evaluating community nutrition programs, practices, and policies. Major service-learning project completed for a public or private agency.

NUTR 395. Pract: Quant Foods Prod & Mgmt. 3 Credits. (1 Lec, 2 Lab)
PREREQUISITE: NUTR 221CS, NUTR 226, NUTR 227, and NUTR 322 or consent of instructor. Hands-on food lab experience in culinary purchasing, production, analysis, and presentation activities. Applied food safety and sanitation principles. Application of organizational management theories in culinary businesses.

NUTR 401. Nutrition Assessment/Counsel. 3 Credits. (3 Lec) S

NUTR 411. Nutrition for Sports/Exercise. 4 Credits. (3 Lec, 1 Lab)
PREREQUISITE: KIN 221 or BIOH 201, and NUTR 221CS and junior standing. Nutrition for physical activity, sport performance, health and fitness. Nutritional needs are discussed for endurance, strength, low-body weight, team sport athletes and other physically active people. Energy balance and weight management examined.

NUTR 421. Macronutrient Metabolism. 3 Credits. (3 Lec) F
PREREQUISITE: NUTR 221CS, BCH 380, BIOH 211. Digestion, absorption, and metabolism of macronutrients, metabolic pathways utilizing carbohydrates, fats, and proteins, and changes that occur in metabolism under different physiological conditions.

NUTR 422. Micronutrient Metabolism. 3 Credits. (3 Lec) S
PREREQUISITE: BCH 380, BIOH 211, NUTR 221CS. Digestion, absorption, and metabolism of micronutrients, metabolic roles of vitamins and minerals, and changes that occur in metabolism under different physiological conditions.

NUTR 425. Medical Nutrition Therapy I. 3 Credits. (3 Lec) F
PREREQUISITE: NUTR 401 or consent of instructor. Examination of metabolic and physiological changes in selected conditions and implications for medical nutrition therapy. Extensive case studies utilized to facilitate critical thinking for appropriate nutritional care.

NUTR 426. Medical Nutrition Therapy II. 3 Credits. (2 Lec) S
PREREQUISITE: NUTR 401, NUTR 425, or consent of instructor. Application of principles of clinical nutrition. Further development of critical thinking skills and application of medical nutrition therapy concepts in the nutrition care process format.

NUTR 430. Food Processing. 3 Credits. (3 Lec) S
PREREQUISITE: NUTR 221CS, NUTR 226, NUTR 227, or consent of instructor. Food processing is critical to the safety, quality, and innovation of food products. From home-based food business to global food corporations, utilizing proper processing techniques for food production is crucial to the success of food enterprise. This course focuses on the impacts of thermal and non-thermal processing treatments on the microbiological, nutritional, and sensory qualities of food products. Required and recommended processing practices to meet the safety regulations and quality standards are discussed for the different food product categories. Students will be able to formulate a food processing plan to address the safety and quality goals of a chosen food product.

NUTR 435. Experimental Foods. 3 Credits. (3 Lec) F
PREREQUISITES: NUTR 221, NUTR 226, NUTR 227, STAT 216Q OR BIOH 318, NUTR 430. This course introduces the principles and procedures of food experiments including sensory, shelf life, and proximate analyses following current food regulations and standards.

NUTR 490R. Undergraduate Research. 1-6 Credits. (1 Ind; 12 cr max)
PREREQUISITE: Consent of instructor Directed undergraduate research/creative activity which may culminate in a research paper, journal article, or undergraduate thesis. Course will address responsible conduct of research. May be repeated.

NUTR 491. Special Topics. 1-4 Credits. (1-4 Lec; 12 cr max) On Demand
PREREQUISITE: Course prerequisites as determined for each offering and consent of instructor. Courses not required in any curriculum for which there is a particular one-time need, or given on a trial basis to determine acceptability and demand before requesting a regular course number.

NUTR 492. Independent Study. 1-3 Credits. (1 Ind; 6 cr max)
PREREQUISITE: Junior standing, consent of instructor, and approval of department head. Directed research and study on an individual basis.

NUTR 494. Seminar. 1 Credit. (1 Ind; 4 cr max)
PREREQUISITE: Junior standing. Preparation of an application for a dietetic internship or graduate program. Emphasizes resume and portfolio development, ethics, professionalism, and interviewing.

NUTR 496. Practicum Food Product Development. 1-3 Credits. (1 Lec, 2 Lab)
PREREQUISITE: NUTR 325 or NUTR 425 or consent of instructor Course discusses the principles and benchmarks of food product development, from ideation, formulation, cost analysis, sensory and texture test, scaling-up test, safety, and marketing planning, to processing, labeling, packaging, and launch.

NUTR 498. Internship. 2-12 Credits. (2 Ind) On Demand
PREREQUISITE: Consent of internship director in academic area. An individualized professional assignment arranged for specific discipline. Some academic areas will offer specific sections in sequence for their students. All students must receive department permission prior to registration, and register for a senior seminar in their major area.

NUTR 499. Capstone for Dietetics. 1 Credit. (1 Sem)
PREREQUISITE: NUTR 425, COREQUITE: NUTR 426 or consent of instructor. Emphasizes the use of evidence based research, professional communication skills, effective counseling and behavior change techniques in a wellness setting. Focus on contemporary issues and future trends in the field of dietetics.
NUTR 511. Exercise Metabolism and Health. 3 Credits. (3 Lec) S alternate years
to be offered even years PREREQUISITE: Knowledge in areas of anatomy and
physiology, upper division courses in one or combination of: exercise physiology,
biochemistry, or nutrition. This course examines how cellular demands influence
the need for carbohydrates, amino acids, lipids, vitamins, and minerals, how the
availability of these nutrients influences adaptations, and the influence of these
adaptations on exercise performance and disease risk.

NUTR 520. Advanced Diet and Disease Systems. 3 Credits. (3 Lec) F
PREREQUISITES: Graduate standing in Dietetic Systems MS and Internship
program. Community and population nutrition health theories as related to
nutrition-based intervention, education and program planning toward a goal of
disease prevention and health promotion.

NUTR 521. Advanced Macronutrient Metabolism. 3 Credits. (3 Lec)
Digestion, absorption, and metabolism of macronutrients, metabolic pathways
utilizing carbohydrates, fats, and proteins, and changes that occur in metabolism
under different physiological conditions.

NUTR 524. Adolescent Nutrition. 2 Credits. (2 Lec) S
This is an online course designed to provide teachers strategies for incorporating
nutrition education into their curriculum. Course participants explore nutrition
science relevant to adolescent health, gain exposure to quality education resources
and investigate school wellness issues and strategies.

NUTR 525. Advanced Medical Nutrition Therapy. 3 Credits. (3 Lec)
Online only PREREQUISITE: Graduate Standing in the MS in Dietetic Systems
Leadership. Integrate the theories and principles of medical nutrition therapy into
clinical practice. Students will apply critical thinking and knowledge of medical
nutrition therapy to a variety of different disease states and patient populations
including oncology, gastrointestinal disorders, liver disease, critical care, and
pediatrics.

NUTR 526. Nutrition for Fitness/Perform. 3 Credits. (3 Lec) F
PREREQUISITE: NUTR 221CS, BIOH 211, CHMY 121, BCH 380. Examine
energy metabolism and physical activity. Use nutrition strategies to meet the
energy, power output, and nutrient demands of exercise, and athletic performance.
Examine behavioral relationships that affect fitness and health, including disordered
eating and the female athlete triad, evaluation of nutrition information and dietary
supplements, with extensive use of internet resources.

NUTR 527. Critical Thinking, Research & Evidence Informed Practice-
Current Issues in Obesity. 3 Credits. (3 Lec) F
Online Only PREREQUISITES: Graduate standing in MS in Dietetic Systems
Leadership program Evaluate and review research on the etiology, consequences
treatment and prevention of obesity.

NUTR 528. Advanced Food Systems Management in Dietetics. 3 Credits. (3
Lec) F
Online only PREREQUISITE: Graduate standing in MS in Dietetic Systems
Leadership. Applied understanding of advanced topics in food service management
in a variety of settings. Course will provide a foundation in more complex topics
including human resources, management and leadership.

NUTR 530. Food Innovation & Entrepreneurship. 3 Credits.

NUTR 560. Food Systems Leadership for Nutrition Professionals. 3 Credits. (1
Lec, 2 Lab) F
PREREQUISITE: Enrollment in the Masters of Dietetic Systems Leadership or the
Non Degree Graduate Dietetic Internship Program. CO-REQUISITE: NUTR 598
- Internship for 3 credits This course prepares MDI students to understand the
relationship between food, agriculture and health systems. Students will gain
literacy in systems thinking through examination of food system topics through
farm to fork projects, discussions, readings, field trips and farm work.

NUTR 575. Research/Prof Paper/Project. 1-3 Credits. (1-3 Ind; 6 cr max) F,S,Su
PREREQUISITE: Graduate standing. A research or professional paper or project
dealing with a topic in the field. The topic must have been mutually agreed upon by
the student and his or her major advisor and graduate committee.

NUTR 588. Professional Development. 1-3 Credits. (1-3 Ind; 3 cr max) On
Demand
PREREQUISITE: Graduate standing, teaching experience and/or current
employment in a school organization, and consent of instructor. Courses offered on
a one-time basis to fulfill professional development needs of in-service educators.
A specific focus is given to each course which is appropriately subtitled.

NUTR 589. Graduate Consultation. 1-3 Credits. (1-3 Ind; 3 cr max) F,S,Su
PREREQUISITE: Graduate standing in nutrition major. This course may be used
only by students who have completed all of their course work (and thesis if on a
thesis plan) but who need additional faculty or staff time or help.
Font Notice

This document should contain certain fonts with restrictive licenses. For this draft, substitutions were made using less legally restrictive fonts. Specifically:

Times was used instead of Adobe Garamond Pro.

The editor may contact Leepfrog for a draft with the correct fonts in place.