NUTRITION AND HEALTH SCIENCES (NUTR)

NUTR 805 Research Methods
Prerequisites: Graduate standing
Description: Philosophy, goals, and methodologies related to research in nutritional science. Survey and application of basic research tools.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Grading Option: Grade Pass/No Pass Option

NUTR 806 Advanced Teaching Strategies
Crosslisted with: ALEC 805, TEAC 805
Description: Contemporary and innovative teaching strategies, emphasizing learner-centered instruction, suitable to teaching in college and postsecondary institutions, outreach programs public schools, and other settings. Students participate in active learning as they apply learning theory in practice, prepare and demonstrate teaching methods, and plan for instruction in discipline areas of their choice.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Grading Option: Grade Pass/No Pass Option
Prerequisite for: ALEC 400, ALEC 800; TEAC 905, ALEC 905

NUTR 807 Principles of Epidemiology for Nutrition and Public Health
Crosslisted with: NUTR 407
Prerequisites: NUTR 250 and 3 cr hrs Statistics.
Description: Application of basic concepts of epidemiology to nutrition and public health to include epidemiological research design, estimating outcome measures and determining cause and effect and effectiveness of interventions to prevent and treat disease.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Grading Option: Grade Pass/No Pass Option

NUTR 810 Transdisciplinary Obesity Prevention
Crosslisted with: CYAF 810
Prerequisites: NUTR 455 or equivalent; Graduate standing
Description: Using a transdisciplinary team of faculty and guest lecturers, students will be introduced to the interrelationship of obesity and dietary components, behavior, exercise and sports science, physical activity, health promotion, genetics, nutrigenomics, child development, family dynamics, cultural issues, epidemiology, population disparity, educational leadership, public policy and other related topics.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Grading Option: Graded
Prerequisite for: NUTR 910, CYAF 910

NUTR 812 Multimedia Applications for Education and Training
Crosslisted with: ALEC 412, ALEC 812
Description: Practical applications in developing and evaluating multimedia resources for students. Surveys new applications, creates and develops various instructional materials, and reviews current practice against relevant theory. Use current software packages to develop materials for various audiences.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Grading Option: Grade Pass/No Pass Option

NUTR 820 Molecular Nutrition
Prerequisites: BIOC 831
Description: Roles for nutrients in signal transduction, gene expression, intracellular trafficking and cell death.
Credit Hours: 2
Max credits per semester: 2
Max credits per degree: 2
Grading Option: Grade Pass/No Pass Option

NUTR 821 Molecular Nutrition Techniques
Prerequisites: BIOC 831
Notes: NUTR 820 recommended.
Description: Basic techniques for molecular studies in nutritional sciences.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Grading Option: Grade Pass/No Pass Option

NUTR 829A Food Security: A Global Perspective
Prerequisites: Junior standing
Description: Overview of the technical and sociocultural dimensions of global food insecurity.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Grading Option: Grade Pass/No Pass Option

NUTR 830 Nutritional Anthropology
Crosslisted with: ANTH 430, ANTH 830, NUTR 430
Prerequisites: ANTH 242 or equivalent.
Description: Anthropological approaches to the study of nutrition. Background to nutrition science; bio-cultural aspects of obesity, fertility, lactose intolerance, and infant feeding practices; biological differences in nutritional requirements, fertility, and mortality; interpretation of nutritional deficiencies in skeletal remains; reconstructing prehistoric diets from archaeological evidence; and evaluation of relationships between dietary patterns and dental remains in fossil record.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Grading Option: Grade Pass/No Pass Option
Groups: Biological Anthropology
NUTR 834 Food and Nutrition in Biocultural Perspective

**Description:** This seminar-style course takes a multidisciplinary, holistic, comparative approach to examine the complex transformation of biological hunger into what is culturally defined as cuisine. Because food patterns are the result of unique combinations of elements, including ecological, historical, cultural, political, colonial, and illness and disease factors, a broad approach is essential. We consider how edibles are transformed and examine the impact of dietary patterns on health, growth and development, and rates of malnutrition globally.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Grading Option:** Graded

NUTR 841 Functional Properties of Food

**Crosslisted with:** FDST 441, FDST 841, NUTR 441

**Prerequisites:** NUTR 245 and BIOC 401; or FDST 448.

**Description:** Relationship of structure and functionality of ingredients in food systems.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Grading Option:** Grade Pass/No Pass Option

**Prerequisite for:** NUTR 449

NUTR 845 Experimental Foods

**Crosslisted with:** FDST 445, FDST 845, NUTR 445

**Prerequisites:** NUTR 244 and 245; BIOC 401.

**Description:** Introduction to food research. Application of research techniques to selected problems.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Grading Option:** Grade Pass/No Pass Option

**Prerequisite for:** NUTR 449

NUTR 855 Teaching Learners to Learn

**Crosslisted with:** EDAD 855, EDPS 855, SPED 855, TEAC 855

**Description:** Effective teachers facilitate student learning. Facilitating student learning depends on understanding learning principles and on designing instruction that is compatible with learning principles. Instructors can provide learning-compatible instruction that helps students learn more effectively and ultimately teaches them how to learn. Assists teachers to teach in learning-compatible ways and helps them embed within their curriculum a program for teaching learners to learn.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Grading Option:** Grade Pass/No Pass Option

**Prerequisite for:** NUTR 449

NUTR 857 Classroom and Outreach Experiences in Food and Nutrition

**Description:** Supervised classroom or outreach experiences in educational or community settings.

**Credit Hours:** 1-3

**Min credits per semester:** 1

**Max credits per semester:** 3

**Max credits per degree:** 3

**Grading Option:** Grade Pass/No Pass Option

NUTR 858 Exercise, Sports & Performance Nutrition

**Prerequisites:** BIOS/NUTR 484/884.

**Description:** Synergistic effects of nutrition and exercise on physical performance, including the potential influences of dietary supplements.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Grading Option:** Grade Pass/No Pass Option

NUTR 859 Nutrition: A Focus on Life Stages

**Prerequisites:** 3 hours undergraduate nutrition and 6 hours undergraduate natural sciences

**Description:** Nutritional needs throughout the life span including pregnancy, lactation, growth and aging. Approaches to nutrition education for different ages.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Grading Option:** Grade Pass/No Pass Option

NUTR 860 Health Behavior Theories and Approaches

**Description:** Foundation course for developing expertise in public health theory as it applies to physical activity and nutrition and related core practices as an essential means to addressing today’s public health issues. Consideration of approaches for complex social problems. Exposure to behavioral theories and models as well as examples of their use in research and application. Understanding and positively influencing health behaviors with a focus on improving nutrition and physical activity, while gaining an appreciation for the gap and limitations that exist between theory and practice.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Grading Option:** Graded

NUTR 862 Health Policy

**Description:** Critical thinking about policy issues related to health. Identify and define policy issues and problems, formulate different policy options, predict factors that may affect implementation.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Grading Option:** Graded

NUTR 865 Clinical Exercise Physiology

**Crosslisted with:** NUTR 456

**Prerequisites:** NUTR 486/886 or equivalent.

**Description:** Cardiovascular, pulmonary, metabolic, pharmacologic, endocrinologic, renal, neurologic, inflammatory, and orthopedic aspects of clinical exercise physiology as they relate to exercise testing and programming.

**Credit Hours:** 3

**Max credits per semester:** 3

**Max credits per degree:** 3

**Grading Option:** Grade Pass/No Pass Option

**Offered:** FALL/SPR

NUTR 870 Cost Control for Foodservice

**Crosslisted with:** NUTR 470

**Prerequisites:** NUTR 370

**Description:** Principles of cost control for foodservice. Integration of cost control and foodservice/restaurant management principles which influence financial integrity. Utilization of the computer as a tool to enhance decision making capabilities.

**Credit Hours:** 2

**Max credits per semester:** 2

**Max credits per degree:** 2

**Grading Option:** Grade Pass/No Pass Option
NUTR 871 Vines, Wines and You
Crosslisted with: HORT 471, HORT 871, NUTR 471, HRTM 471, HRTM 871
Prerequisites: 6 hrs science or equivalent experience; 21 years of age or older
Notes: Proof of age is required.
Description: Origin, botany, historical and cultural significance of the grapevine and related species. Principles and practices of vineyard establishment, management and processing of grape products, importance and/or scope of grape and wine industry; global and local significance. Culinary applications, health, environmental and safety-related issues, business and industry relations and experience.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Grading Option: Grade Pass/No Pass Option

NUTR 873 Organization and Administration of Foodservice
Crosslisted with: NUTR 473
Prerequisites: NUTR 370.
Description: Organizational, administrative, and human relations concepts to foodservice. Utilization of computer applications in administration of a foodservice facility.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Grading Option: Grade Pass/No Pass Option
Prerequisite for: NUTR 973

NUTR 875 Applied Dietetic Practice and Concepts
Prerequisites: Admission to Dietetic Internship
Description: Scientific basis for clinical and community practice and current developments in foodservice systems in professional settings. Documenting professional development.
Credit Hours: 1-6
Min credits per semester: 1
Max credits per semester: 6
Max credits per degree: 6
Grading Option: Grade Pass/No Pass Option

NUTR 880 Introduction to Functional Electrocardiography
Crosslisted with: NUTR 480
Prerequisites: NUTR 486; NUTR/BIOS 484.
Description: Theory and application of electrocardiography in graded exercise testing.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Grading Option: Grade Pass/No Pass Option

NUTR 884 Physiology of Exercise
Crosslisted with: NUTR 484
Prerequisites: BIOS 213 or equivalent.
Description: Effects of physical activity on the circulatory, respiratory, and other physiological processes.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Grading Option: Graded
Prerequisite for: NUTR 486, NUTR 886; NUTR 858

NUTR 886 Exercise Testing and Exercise Programming in Adult Fitness and Cardiac Rehabilitation
Crosslisted with: NUTR 486
Prerequisites: NUTR/BIOS 484/884; EDPS 459/859 or STAT 218
Description: In-depth analysis and development of the techniques and knowledge prerequisite for certification in adult fitness and cardiac rehabilitation as prescribed by the American College of Sports Medicine.
Credit Hours: 4
Max credits per semester: 4
Max credits per degree: 4
Grading Option: Graded
Prerequisite for: NUTR 456, NUTR 856; NUTR 488

NUTR 891 Special Topics in Human Sciences
Crosslisted with: HUMS 891, SLPA 891, TEAC 891, TMFD 891, CYAF 891
Description: Aspects of human sciences not covered elsewhere in the curriculum.
Credit Hours: 1-3
Min credits per semester: 1
Max credits per semester: 3
Max credits per degree: 3
Grading Option: Grade Pass/No Pass Option

NUTR 894 Essentials of Strength Training & Conditioning
Crosslisted with: NUTR 494
Prerequisites: Junior Standing
Description: Overview of the scientific principles and practical applications of strength and conditioning that integrate physiological responses, adaptations, testing, exercise techniques, program design, and periodization for athletic performance.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Grading Option: Graded

NUTR 896 Independent Study
Crosslisted with: NUTR 496
Prerequisites: 12 hrs in major related areas; permission.
Notes: Supervised and evaluated by departmental faculty members.
Description: Individual projects in research, literature review, or creative production.
Credit Hours: 1-5
Min credits per semester: 1
Max credits per semester: 5
Max credits per degree: 5
Grading Option: Grade Pass/No Pass Option

NUTR 899 Masters Thesis
Prerequisites: Admission to masters degree program and permission of major adviser
Credit Hours: 1-10
Min credits per semester: 1
Max credits per semester: 10
Max credits per degree: 99
Grading Option: Pass No-Pass
NUTR 910 Research Planning and Grant Writing for Childhood Obesity
Crosslisted with: CYAF 910
Prerequisites: NUTR 810 or CYAF 810
Description: The purpose of this course is to examine the philosophy, goals, and methodologies related within the concept of childhood obesity research and to apply the principles of the transdisciplinary nature of childhood obesity prevention and treatment in transdisciplinary obesity prevention research and evaluation. The course will include acquisition of resources to address childhood obesity issues, exposure to funding opportunities, research design and grant development, translation of research or programmatic findings to community and professional audiences.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Grading Option: Graded
Prerequisite for: NUTR 911, CYAF 911

NUTR 911 Practicum: Experiential Learning Experiences in Childhood Obesity Prevention
Crosslisted with: CYAF 911
Prerequisites: NUTR 910 or CYAF 910 or concurrent
Notes: Practicum: Experiential Learning Experiences in Childhood Obesity Prevention is a section of the Nutrition and Health Sciences Practicum course.
Description: An applied, monitored, and supervised field based learning experience. Gain practical experience as they follow a negotiated and/or directed plan of study. The purpose of this course is to provide students with transdisciplinary experiential learning experiences related to childhood obesity prevention or treatment. Students will work with the course instructor to determine a practicum site that meets the student's interests and the requirements of the course. Students will work collaboratively with a transdisciplinary team of individuals at the practicum site to meet the course student learning outcomes through hands on experiences.
Credit Hours: 1
Max credits per semester: 1
Max credits per degree: 1
Grading Option: Graded

NUTR 920 Teaching Seminar and Practicum
Crosslisted with: CYAF 920, TMFD 920
Description: Supervised classroom experiences designed to develop competencies in teaching at the college level.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Grading Option: Grade Pass/No Pass Option

NUTR 921 Interdepartmental Nutrition Seminar
Crosslisted with: ASCI 921
Prerequisites: Permission
Description: Presentation and discussion of current literature and research in the field of nutrition.
Credit Hours: 1
Max credits per semester: 1
Max credits per degree: 1
Grading Option: Grade Pass/No Pass Option

NUTR 922 Lipid Metabolism and Metabolic Syndrome
Description: Concepts of lipid and lipoprotein metabolism; impact of genetic and nutrient factors on energy metabolism and homeostasis; development and prevention of metabolic disorders.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Grading Option: Grade Pass/No Pass Option

NUTR 925 Energy Metabolism
Crosslisted with: ASCI 925
Prerequisites: ASCI 821, BIOC 831, or NUTR 455 or 950
Notes: Offered odd-numbered calendar years.
Description: Critically evaluate how research in bioenergetics has contributed to scientific discoveries in the fields of nutrition, biochemistry, and physiology. Methodologies for determination of human and animal energy expenditure and body composition. Specifically, direct calorimetry, indirect calorimetry and comparative slaughter techniques. Emphasis on components of organ and tissue energy expenditures. Background information important in other nutrition courses.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Grading Option: Grade Pass/No Pass Option

NUTR 926 Carbohydrate and Lipid Nutrition
Crosslisted with: ASCI 926
Prerequisites: BIOC 831, ASCI 821 or NUTR 455 or 950
Notes: Offered even-numbered calendar years.
Description: Nutrition and metabolism of carbohydrates and lipids by animals and humans. Emphasis on fundamental principles and current concepts.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Grading Option: Grade Pass/No Pass Option

NUTR 927 Protein and Amino Acid Nutrition
Crosslisted with: ASCI 927
Prerequisites: ASCI 421/821 or NUTR 455 or 950; BIOC/BIOS/ CHEM 431/831
Notes: Offered even-numbered calendar years.
Description: Nutrition and metabolism of proteins and amino acids by animals and humans. Fundamental principles and current concepts.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Grading Option: Grade Pass/No Pass Option

NUTR 930 Sociological/Anthropological Research Methods in Education
Crosslisted with: CYAF 930, EDPS 930, TEAC 930
Description: Empirical and theoretical research into the sociocultural problems and the lived experiences of people across educational, family and community settings.
Credit Hours: 1-3
Min credits per semester: 1
Max credits per semester: 3
Max credits per degree: 15
Grading Option: Grade Pass/No Pass Option
Nutrition and Health Sciences (NUTR)
NUTR 954 Fundamentals of Nutrition Counseling
Prerequisites: 12 hours NUTR and 6 hrs social science
Description: Theories of behavior change and application to nutrition counseling. Practice in development of nutrition counseling skills. Current nutrition problems and applications to diverse clients.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Grading Option: Grade Pass/No Pass Option

NUTR 956 Community Nutrition
Prerequisites: NUTR 356
Description: Historical perspectives, research methodology, and assessment techniques.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Grading Option: Grade Pass/No Pass Option

NUTR 960 Nutrient Function During Exercise
Description: Exercise and its influence on human metabolism and nutrition via biochemical and physiological pathways. Current research topics and trends addressing the interrelationships between exercise and energy, macronutrients, and micronutrients.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Grading Option: Grade Pass/No Pass Option

NUTR 973 Organizational Administration in Food Service and Restaurant Management
Prerequisites: NUTR 873
Description: Investigation of foodservice/restaurant organizations and administration. Critical evaluation of current literature.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Grading Option: Grade Pass/No Pass Option

NUTR 986 Graduate Seminar
Prerequisites: Permission
Credit Hours: 1-2
Min credits per semester: 1
Max credits per semester: 2
Max credits per degree: 2
Grading Option: Grade Pass/No Pass Option

NUTR 990 Nutrition and Health Sciences Seminar
Description: Presentation and discussion of topics and research, by faculty, graduate students, and guest speakers, related to areas of expertise within Nutrition and Health Sciences
Credit Hours: 1
Max credits per semester: 1
Max credits per degree: 1
Grading Option: Graded
Offered: FALL/SPR
NUTR 999 Doctoral Dissertation

Prerequisites: Admission to doctoral degree program and permission of supervisory committee chair

Credit Hours: 1-24
Min credits per semester: 1
Max credits per semester: 24
Max credits per degree: 99
Grading Option: Pass No-Pass