NUTRITION AND HEALTH SCIENCES (NUTR)

NUTR 100 Healthy Living
Description: Various risk factors and personal behaviors that affect health. Practical methods for self-assessments and improving and maintaining physically active and healthy eating habits designed to enhance awareness of short- and long-term risks and to achieve a higher level of wellness. Use of "Blackboard" required.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC
Prerequisite for: NUTR 252; NUTR 256

NUTR 131 The Science of Food
Crosslisted with: CHEM 131, FDST 131
Description: General scientific concepts in biology, chemistry, and physics using food as a model. What food is from both chemical and nutritional perspectives, and the fate of food from when it leaves the farm to when it becomes a part of the individual. Assists students in making intelligent decisions about many food related controversial issues (e.g., food irradiation, food additives, health foods).
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC
Prerequisite for: FDST 301
ACE: ACE 4 Science

NUTR 145 Food Literacy
Prerequisites: NUTR majors only
Description: Food safety and sanitation, proper use of basic kitchen equipment, food identification, proper handling and preparation, menu planning, food purchasing, and sensory evaluation.
Credit Hours: 1
Max credits per semester: 1
Max credits per degree: 1
Format: LAB

NUTR 150 Career Preparation in Nutrition and Health Sciences
Description: Process of career preparation and planning. Philosophy and goals of academic programs, curricula, certifications, career opportunities and graduate programs in the Department of Nutrition and Health Sciences.
Credit Hours: 2
Max credits per semester: 2
Max credits per degree: 2
Format: LEC

NUTR 205 Asian Martial Culture
Description: Theoretical and experiential analysis of the martial arts of Asia from historical, anthropological, educational, philosophical, cultural, religious, political, and sociological perspectives and their impact on contemporary Asian and global society.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

NUTR 213 Meat Specifications and Procurement
Crosslisted with: ASCI 213
Notes: ASCI/NUTR 213 is for those students who have an interest in a career in Culinary Science, Meat Science, and/or Dietetics.
Description: Selecting and purchasing meat for the hotel, restaurant, institutional industry, and the retail markets.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

NUTR 230 Peer Health Education
Prerequisites: Permission
Notes: NUTR 230 requires serving as a Wellness Advocate in the University living units to gain experience in utilizing the information learned.
Description: The role of Wellness Advocate in the promotion of the health and wellness needs of college students. Techniques for promoting the adoption of lifestyle choices for lifelong health and well being.
Credit Hours: 1-2
Min credits per semester: 1
Max credits per semester: 2
Max credits per degree: 2
Format: LEC

NUTR 244 Scientific Principles of Food Preparation
Prerequisites: Sophomore standing; FACS or HRTM or NUTR major
Description: Chemical, physical, sensory, and nutritional principles of food preparation.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

NUTR 245 Scientific Principles of Food Preparation Laboratory
Prerequisites: Must enroll in both NUTR 244 (lecture) and NUTR 245 (lab)
Description: Application of chemical, physical, sensory, and nutritional principles of food preparation.
Credit Hours: 1
Max credits per semester: 1
Max credits per degree: 1
Format: LAB

NUTR 250 Human Nutrition and Metabolism
Prerequisites: 4 hours chemistry or biological sciences
Description: Introduction to nutrient function in the body, nutrient chemistry and energy metabolism. Role of nutrients in health and disease.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC
Prerequisite for: NUTR 344; NUTR 355; NUTR 400

NUTR 251 Nutrition Through the Life Cycle
Prerequisites: NUTR 250 or parallel.
Description: Influence of normal physiological stress on nutritional requirements throughout the life cycle: pregnancy, lactation, growth, and aging.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC
NUTR 252 Nutrient and Fitness Assessment  
**Prerequisites:** NUTR 100, NUTR majors only  
**Description:** Introduction to and practical application of tools frequently used to estimate fitness levels and dietary intake; association among physical activity, nutrition, and health; health screening and risk classification; principles of assessment and various assessment strategies.  
**Credit Hours:** 3  
**Max credits per semester:** 3  
**Max credits per degree:** 3  
**Format:** LEC

NUTR 253 Cultural Aspects of Food and Nutrition  
**Prerequisites:** NUTR 100 or 250.  
**Description:** The influences of culture on food and nutrition practices.  
**Credit Hours:** 3  
**Max credits per semester:** 3  
**Max credits per degree:** 3  
**Format:** LEC  
**ACE:** ACE 9 Global/Diversity

NUTR 255 Special Topics in Health  
**Prerequisites:** NUTR 201.  
**Description:** Series of minicourses devoted to specific content areas of health.  
**Credit Hours:** 2  
**Max credits per semester:** 2  
**Max credits per degree:** 2  
**Format:** LEC

NUTR 256 Addressing Health Disparities through Health Literacy  
**Prerequisites:** NUTR 100  
**Description:** Understanding of health disparities existing at national and local levels through a social justice lens and the role of health literate communication in reducing health disparities, as well as its limitations.  
**Credit Hours:** 3  
**Max credits per semester:** 3  
**Max credits per degree:** 3  
**Format:** LEC  
**Prerequisite for:** NUTR 400

NUTR 298 Special Topics in Nutritional Science and Dietetics  
**Prerequisites:** As announced by department.  
**Description:** Topics vary.  
**Credit Hours:** 1-6  
**Min credits per semester:** 1  
**Max credits per semester:** 6  
**Max credits per degree:** 6  
**Format:** LEC

NUTR 299 Independent Study  
**Prerequisites:** 6 hrs in major department or closely related areas and permission.  
**Notes:** Work 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  
**Format:** IND

NUTR 302 Health Information: Science, Media, and the Consumer  
**Prerequisites:** Junior standing and NUTR major  
**Description:** Critical evaluation, interpretation and communication of consumer health messages.  
**Credit Hours:** 3  
**Max credits per semester:** 3  
**Max credits per degree:** 3  
**Format:** LEC

NUTR 343 Meat CulinologyTMII: Foodservice Applications  
**Crosslisted with:** ASCI 343  
**Prerequisites:** ASCI/NUTR 210 or ASCI/NUTR 213 or ASCI/NUTR 310.  
**Description:** Cookery principles and methods role in maintaining meat yield and quality characteristics. Cookery techniques to maximize guest satisfaction and insure foodservice and/or restaurant financial integrity. Flavor enhancement and cookery technology application in center of the plate concept development.  
**Credit Hours:** 3  
**Max credits per semester:** 3  
**Max credits per degree:** 3  
**Format:** LEC

NUTR 344 Nutrition and Food for Optimal Health  
**Prerequisites:** NUTR 250; NUTR majors only; or permission  
**Description:** Integration of current dietary guidelines, nutrient assessment methodologies, scientific principles of food preparation, financial accountability, concepts of healthy menu planning, and preparation techniques in promotion of healthy living.  
**Credit Hours:** 4  
**Max credits per semester:** 4  
**Max credits per degree:** 4  
**Format:** LEC  
**Prerequisite for:** NUTR 452; NUTR 453

NUTR 351 School Health Issues  
**Description:** Prevalence and etiology of health behaviors among children and teens. Organization, development, and legal aspects of school health programming.  
**Credit Hours:** 3  
**Max credits per semester:** 3  
**Max credits per degree:** 3  
**Format:** LEC

NUTR 352 Social Marketing in Health Communication  
**Prerequisites:** Junior standing. NUTR majors only.  
**Description:** Application of the social marketing framework to analyze public health problems and design program solutions.  
**Credit Hours:** 3  
**Max credits per semester:** 3  
**Max credits per degree:** 3  
**Format:** LEC

NUTR 355 Introduction to Sports Nutrition  
**Prerequisites:** BIOS 213; NUTR 250  
**Description:** Understanding of fundamental principles of sports nutrition. Tools and knowledge to evaluate scientific literature and to develop evidence-based diet and supplementation strategies aimed at maximizing athletic performance.  
**Credit Hours:** 3  
**Max credits per semester:** 3  
**Max credits per degree:** 3  
**Format:** LEC
NUTR 356 Nutrition Education in the Community
Prerequisites: NUTR 100 and 250; NUTR 251 or parallel.
Description: Overview of community nutrition. Assessment of community needs and services; policy formation; techniques for developing and delivering theory-based nutrition education.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

NUTR 370 Food Production Management
Description: Application of food production and purchasing principles in foodservice management.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

NUTR 371 Applied Food Production Laboratory
Prerequisites: NUTR 244 and 245.
Description: Application of theoretical knowledge and quality assessment is provided in university or community laboratory setting.
Credit Hours: 1
Max credits per semester: 1
Max credits per degree: 1
Format: LAB

NUTR 372 Food Safety and Sanitation
Crosslisted with: FDST 372
Description: Various factors that result in food illness: food allergy, natural toxins, parasites, microbial and viral food borne infections and food borne intoxications. Students will assess hazards, identify critical control points and establish monitoring and system verification procedures.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

NUTR 384 Biomechanics of Human Movement
Prerequisites: Junior standing; BIOS 214
Description: Anatomical and mechanical principles as related to human movement.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

NUTR 399 Independent Study
Prerequisites: Permission.
Credit Hours: 1-6
Min credits per semester: 1
Max credits per semester: 6
Max credits per degree: 6
Format: IND

NUTR 400 Planning and Implementation of Health Promotion Programs
Prerequisites: NUTR 250, NUTR 256, and junior standing
Description: Theory-based process of developing health promotion/education programs. Principles of planning, implementing and evaluating health education interventions will be taught using evidence-based research.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC
Prerequisite for: NUTR 404; NUTR 487

NUTR 401 Health Behavior
Prerequisites: Junior standing.
Description: Social, psychological, and cultural factors that influence the adoption, maintenance, and modification of health behaviors in communities.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC

NUTR 404 Evaluation and Research Related to Health Promotion
Prerequisites: NUTR 400
Description: Introduction to research, study designs, and data collection methods in health and behavior-change related studies, including exercise, nutrition, and health education. Emphasis on understanding research literature and development of research/grant proposals.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC
Prerequisite for: NUTR 406

NUTR 406 Management and Administration of Health Promotion Programs
Prerequisites: NUTR 404
Description: Overview of systems approach to the management of resources needed to plan, implement, and evaluate a health education/promotion program including financial, human, curricula, and physical resources. Qualities of effective leadership will be explored and evaluated.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC
Prerequisite for: NUTR 408

NUTR 407 Principles of Epidemiology for Nutrition and Public Health
Crosslisted with: NUTR 807
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
Format: LEC
NUTR 408 Community Health Advocacy  
**Prerequisites:** NUTR 406  
**Description:** Health policy and law in the United States. Development of health advocacy skills through engagement with local community health organizations and decision-makers.  
**Credit Hours:** 3  
**Max credits per semester:** 3  
**Max credits per degree:** 3  
**Format:** LEC

NUTR 429A Food Security: A Global Perspective  
**Crosslisted with:** ANTH 429A, ANTH 829A, AGRO 429A, AGRO 829A, HORT 429A, HORT 829A, NRES 429A, NRES 829A, NUTR 829A  
**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  
**Format:** LEC

NUTR 430 Nutritional Anthropology  
**Crosslisted with:** ANTH 430, ANTH 830, NUTR 830  
**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  
**Format:** LEC  
**Groups:** Biological Anthropology

NUTR 441 Functional Properties of Food  
**Crosslisted with:** FDST 441, FDST 841, NUTR 841  
**Prerequisites:** NUTR 245 and BIOC 321; 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  
**Format:** LEC

NUTR 445 Experimental Foods  
**Crosslisted with:** FDST 445, FDST 845, NUTR 845  
**Prerequisites:** NUTR 244 and 245; BIOC 321.  
**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  
**Format:** LEC

NUTR 449 Culinology Research Experience  
**Prerequisites:** Senior standing; NUTR 441 or 445 or FDST 448; Culinology major.  
**Description:** Supervised individual professional Culinology research experience in product development.  
**Credit Hours:** 3  
**Max credits per semester:** 3  
**Max credits per degree:** 3  
**Format:** FLD

NUTR 450 Medical Nutrition Therapy I  
**Prerequisites:** BIOC 321 and 321L, or BIOC/BIOS/CHEM 431; BIOS 213 or ASCI 240.  
**Description:** Nutrition assessment, nutrition support, documentation of nutrition services and medical terminology.  
**Credit Hours:** 3  
**Max credits per semester:** 3  
**Max credits per degree:** 3  
**Format:** LEC  
**Prerequisite for:** NUTR 452

NUTR 452 Medical Nutrition Therapy II  
**Prerequisites:** NUTR 344 and 450  
**Description:** Nutrition in the disease state. Physiological and biochemical basis of medical nutrition therapy.  
**Credit Hours:** 3  
**Max credits per semester:** 3  
**Max credits per degree:** 3  
**Format:** LEC  
**ACE:** ACE 10 Integrated Product

NUTR 452L Medical Nutrition Therapy II Laboratory  
**Prerequisites:** Must enroll in both NUTR 452L and NUTR 452  
**Description:** Application of nutrition care process.  
**Credit Hours:** 1  
**Max credits per semester:** 1  
**Max credits per degree:** 1  
**Format:** LAB  
**ACE:** ACE 10 Integrated Product

NUTR 453 Nutrition and Fitness Communication Strategies  
**Prerequisites:** NUTR 344  
**Description:** Application of behavior change and counseling theories to individual clients. Data assessment and interpretation, and developing goals and/or outcomes to facilitate health behavior changes.  
**Credit Hours:** 3  
**Max credits per semester:** 3  
**Max credits per degree:** 3  
**Format:** LEC  
**Prerequisite for:** NUTR 488

NUTR 454 Peer Nutrition Education  
**Prerequisites:** Junior standing; COMM 109; NUTR 100.  
**Description:** Practical experience in developing skills in nutrition for health promotion and nutrition education.  
**Credit Hours:** 2  
**Max credits per semester:** 2  
**Max credits per degree:** 2  
**Format:** LEC
NUTR 455 Advanced Nutrition
Prerequisites: BIOC 321 and 321L, or BIOC/BIOS/CHM 431; BIOS 213 or ASCI 240, or parallel.
Description: Biochemical and physiological aspects of human nutrition. Nutrient transport, storage and utilization under various metabolic states and relationships to the development of chronic diseases.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC
ACE: ACE 10 Integrated Product

NUTR 456 Clinical Exercise Physiology
Crosslisted with: NUTR 856
Prerequisites: BIOS 214; NUTR/BIOS 484/884; NUTR 486/886
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
Format: LEC

NUTR 457 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
Format: FLD

NUTR 470 Cost Control for Foodservice
Crosslisted with: NUTR 870
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
Format: LEC

NUTR 471 Vines, Wines and You
Crosslisted with: HORT 471, HORT 871, NUTR 871, 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
Format: LEC

NUTR 473 Organization and Administration of Foodservice
Crosslisted with: NUTR 873
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
Format: LEC

NUTR 480 Introduction to Functional Electrocardiography
Crosslisted with: NUTR 880
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
Format: LEC

NUTR 484 Physiology of Exercise
Crosslisted with: BIOS 484, BIOS 884, NUTR 884
Prerequisites: 12 hrs biological sciences, including BIOS 213 or equivalent; BIOS 210 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
Format: LEC
Prerequisite for: NUTR 370, NUTR 486, NUTR 386

NUTR 486 Exercise Testing and Exercise Programming in Adult Fitness and Cardiac Rehabilitation
Crosslisted with: NUTR 886
Prerequisites: BIOS 484, BIOS 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
Format: LEC
Prerequisite for: NUTR 488

NUTR 487 Community Health and Wellness Practicum
Prerequisites: NUTR 400. Community Health and Wellness majors only.
Notes: Background check will be required.
Description: Application of health education concepts and skills in a practical setting while serving as a health education resource person.
Credit Hours: 4
Max credits per semester: 4
Max credits per degree: 4
Format: FLD

NUTR 488 Practicum in Exercise and Health Behavior Planning
Prerequisites: NUTR 453 and 486/886
Description: Practical experience in exercise testing and analysis and planning of health and fitness programs for individuals.
Credit Hours: 3
Max credits per semester: 3
Max credits per degree: 3
Format: LEC
ACE: ACE 10 Integrated Product
NUTR 490 Professional Preparation for Careers in Dietetics
**Prerequisites:** Senior standing.
**Description:** Professional requirements in order to become a registered dietitian. Types of supervised practice experiences available and assistance in application process. Career options, professional organizations, and current issues in the dietetic profession.
**Credit Hours:** 1
**Max credits per semester:** 1
**Max credits per degree:** 1
**Format:** LEC

NUTR 492 Nutrition Problems
**Prerequisites:** NUTR 455 or equivalent, and permission.
**Description:** Individual problems may be selected from diet therapy, animal feeding, metabolism studies, or surveys.
**Credit Hours:** 1-6
**Min credits per semester:** 1
**Max credits per semester:** 6
**Max credits per degree:** 6
**Format:** IND

NUTR 493 Workshop Seminar
**Credit Hours:** 1-12
**Min credits per semester:** 1
**Max credits per semester:** 12
**Max credits per degree:** 12
**Format:** LEC

NUTR 494 Essentials of Strength Training & Conditioning
**Crosslisted with:** NUTR 894
**Prerequisites:** NUTR 384; 484 or concurrent.
**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
**Format:** LEC

NUTR 496 Independent Study
**Crosslisted with:** NUTR 896
**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
**Format:** IND

NUTR 497Z Student Teaching Multicultural
**Crosslisted with:** TEAC 497Z, SPED 497Z
**Description:** Supervised teaching experiences in schools. Accompanying seminar focuses on: teacher certification, teacher and student rights and responsibilities, proper conduct of teachers, selected legal aspects of education, methods of communicating with parents and community members, and current issues which impact education.
**Credit Hours:** 1
**Max credits per semester:** 1
**Max credits per degree:** 1
**Format:** FLD

NUTR 498 Research Experiences
**Prerequisites:** Senior standing and permission.
**Description:** Participation in an ongoing research project. Select from foods, human nutrition education, small animal, or survey research areas.
**Credit Hours:** 1-5
**Min credits per semester:** 1
**Max credits per semester:** 5
**Max credits per degree:** 5
**Format:** IND

NUTR 499H Honors Thesis
**Prerequisites:** Good standing in the University Honors Program or by invitation.
**Description:** Conduct a scholarly research project and write a University Honors Program or undergraduate thesis.
**Credit Hours:** 3
**Max credits per semester:** 3
**Max credits per degree:** 3
**Format:** LEC