

EXERCISE AND NUTRITION SCIENCES

The School of Exercise and Nutrition Sciences offers the following undergraduate programs:

Bachelor of Science in Exercise Science

Applied Exercise Physiology Concentration

Designed to prepare students for employment in commercial, corporate, clinical, community and government agencies with interest in the areas of physical activity and health promotion. The program prepares students to sit for certification examinations such as The American College of Sports Medicine Exercise Physiologist Certified and the National Strength and Conditioning Association Certified Strength and Conditioning Specialist.

Pre-Professional Concentration

Students choosing this pre-professional concentration can obtain the necessary pre-requisite courses for graduate programs including Physical Therapy, Occupational Therapy, Physician Assistant, Athletic Training, Doctor of Chiropractic, medical school and many other health profession advanced degrees.

Bachelor of Science in Sport Coaching and Athletic Leadership

A Bachelor's degree in Sport Coaching and Athletic Leadership paves the way to a variety of career opportunities in the sport and recreation industry that involve leadership, management, coaching and programming.

Bachelor of Science in Food and Nutrition Sciences

Students obtaining a Bachelor of Science degree in Food and Nutrition Sciences will qualify for the food industry in food marketing, entrepreneurship, quality control, quality assurance, and food product design. Program graduates have acquired the expertise to meet the challenges of the food industry. Employment is generally with food manufacturers and related businesses with an emphasis on marketing and the consumer. This program provides the pre-requisites to the Dietetics - GP Master of Public Health at The University of Akron.

- Athletic Coaching, Minor (<https://bulletin.uakron.edu/undergraduate/colleges-programs/health-professions/sport-science-wellness-education/sport-studies-coach-education-minor/>)
- Exercise Science, Applied Exercise Physiology, BS (<https://bulletin.uakron.edu/undergraduate/colleges-programs/health-professions/sport-science-wellness-education/exercise-science-physiological-sciences-bs/>)
- Exercise Science, Pre-Professional Concentration, BS (<https://bulletin.uakron.edu/undergraduate/colleges-programs/health-professions/sport-science-wellness-education/exercise-science-pre-physical-therapy-bs/>)
- Food and Nutrition Sciences, BS (<https://bulletin.uakron.edu/undergraduate/colleges-programs/health-professions/sport-science-wellness-education/food-environmental-nutrition-bst/>)

- Health & Wellness Coaching, Certificate (<https://bulletin.uakron.edu/undergraduate/colleges-programs/health-professions/sport-science-wellness-education/health-wellness-coaching/>)
- Nutrition, Minor (<https://bulletin.uakron.edu/undergraduate/colleges-programs/health-professions/sport-science-wellness-education/nutrition-minor/>)
- Sport Coaching and Athletics Leadership, BS (<https://bulletin.uakron.edu/undergraduate/colleges-programs/health-professions/sport-science-wellness-education/sport-studies-coaching-education-bs/>)
- Sport Coaching Leadership, Certificate (<https://bulletin.uakron.edu/undergraduate/colleges-programs/health-professions/sport-science-wellness-education/sport-coaching-leadership-certificate/>)
- Sports Medicine, Minor (<https://bulletin.uakron.edu/undergraduate/colleges-programs/health-professions/sport-science-wellness-education/sports-medicine-minor/>)

General Studies - Physical Education (PHED)

PHED 102 Physical Education Activities I: Fitness, Leisure, & Healthy Life Style (3 Units)

Introduction to fitness and leisure activities, as well as healthy life style. Knowledge of developing programs that lead to fitness, leisure and healthy life style for individuals as well as groups. (Formerly 5550:102)

PHED 120 Archery (0.5 Units)

Participation in individual and group sports. Individual can acquire knowledge and skill in activities which may be of value and satisfaction throughout life. (Formerly 5540:120)

PHED 121 Badminton (0.5 Units)

Participation in individual and group sports. Individual can acquire knowledge and skill in activities which may be of value and satisfaction throughout life. (Formerly 5540:121)

PHED 122 Basketball (0.5 Units)

Participation in individual and group sports. Individual can acquire knowledge and skill in activities which may be of value and satisfaction throughout life. (Formerly 5540:122)

PHED 123 Bowling (0.5 Units)

Participation in individual and group sports. Individual can acquire knowledge and skill in activities which may be of value and satisfaction throughout life. (Formerly 5540:123)

PHED 126 Fitness and Wellness (1 Unit)

Participation in individual and group sports. Individual can acquire knowledge and skill in activities which may be of value and satisfaction throughout life. (Formerly 5540:126)

PHED 127 Golf (1 Unit)

Participation in individual and group sports. Individual can acquire knowledge and skill in activities which may be of value and satisfaction throughout life. (Formerly 5540:127)

PHED 128 Gymnastics (Apparatus) (0.5 Units)

Participation in individual and group sports. Individual can acquire knowledge and skill in activities which may be of value and satisfaction throughout life. (Formerly 5540:128)

PHED 129 Gymnastics (Tumbling) (0.5 Units)

Participation in individual and group sports. Individual can acquire knowledge and skill in activities which may be of value and satisfaction throughout life. (Formerly 5540:129)

PHED 130 Physical Education Activities for Children (2 Units)

For a physical education majors only. Participation in methods, activities and issues relating to pre-K through elementary physical education programs. One lecture and two laboratory periods per week. (Formerly 5550:130)

PHED 131 Indoor Soccer (0.5 Units)

Participation in individual and group sports. Individual can acquire knowledge and skill in activities which may be of value and satisfaction throughout life. (Formerly 5540:131)

PHED 132 Karate (1 Unit)

Participation in individual and group sports. Individual can acquire knowledge and skill in activities which may be of value and satisfaction throughout life. (Formerly 5540:132)

PHED 133 Lifeguard Training (2 Units)

Participation in individual and group sports. Individual can acquire knowledge and skill in activities which may be of value and satisfaction throughout life. (Formerly 5540:133)

PHED 134 Modern Dance (0.5 Units)

Participation in individual and group sports. Individual can acquire knowledge and skill in activities which may be of value and satisfaction throughout life. (Formerly 5540:134)

PHED 135 Racquetball (0.5 Units)

Participation in individual and group sports. Individual can acquire knowledge and skill in activities which may be of value and satisfaction throughout life. (Formerly 5540:135)

PHED 136 Rugby (0.5 Units)

Participation in individual and group sports. Individual can acquire knowledge and skill in activities which may be of value and satisfaction throughout life. (Formerly 5540:136)

PHED 138 Scuba (1 Unit)

Participation in individual and group sports. Individual can acquire knowledge and skill in activities which may be of value and satisfaction throughout life. (Formerly 5540:138)

PHED 139 Self Defense (1 Unit)

Participation in individual and group sports. Individual can acquire knowledge and skill in activities which may be of value and satisfaction throughout life. (Formerly 5540:139)

PHED 140 Skiing (Cross-Country) (0.5 Units)

Participation in individual and group sports. Individual can acquire knowledge and skill in activities which may be of value and satisfaction throughout life. (Formerly 5540:140)

PHED 141 Skiing (Downhill) (0.5 Units)

Participation in individual and group sports. Individual can acquire knowledge and skill in activities which may be of value and satisfaction throughout life. (Formerly 5540:141)

PHED 142 Soccer (0.5 Units)

Participation in individual and group sports. Individual can acquire knowledge and skill in activities which may be of value and satisfaction throughout life. (Formerly 5540:142)

PHED 143 Social Dance (0.5 Units)

Participation in individual and group sports. Individual can acquire knowledge and skill in activities which may be of value and satisfaction throughout life. (Formerly 5540:143)

PHED 145 Squash Rackets (0.5 Units)

Participation in individual and group sports. Individual can acquire knowledge and skill in activities which may be of value and satisfaction throughout life. (Formerly 5540:145)

PHED 146 Swimming (Beginning) (1 Unit)

Participation in individual and group sports. Individual can acquire knowledge and skill in activities which may be of value and satisfaction throughout life. (Formerly 5540:146)

PHED 147 Swimming (Intermediate) (1 Unit)

Participation in individual and group sports. Individual can acquire knowledge and skill in activities which may be of value and satisfaction throughout life. (Formerly 5540:147)

PHED 149 Team Handball (0.5 Units)

Participation in individual and group sports. Individual can acquire knowledge and skill in activities which may be of value and satisfaction throughout life. (Formerly 5540:149)

PHED 150 Tennis (Beginning) (0.5 Units)

Participation in individual and group sports. Individual can acquire knowledge and skill in activities which may be of value and satisfaction throughout life. (Formerly 5540:150)

PHED 151 Volleyball (0.5 Units)

Participation in individual and group sports. Individual can acquire knowledge and skill in activities which may be of value and satisfaction throughout life. (Formerly 5540:151)

PHED 152 Water Polo (0.5 Units)

Participation in individual and group sports. Individual can acquire knowledge and skill in activities which may be of value and satisfaction throughout life. (Formerly 5540:152)

PHED 153 Water Safety (1 Unit)

Participation in individual and group sports. Individual can acquire knowledge and skill in activities which may be of value and satisfaction throughout life. (Formerly 5540:153)

PHED 154 Wrestling (0.5 Units)

Participation in individual and group sports. Individual can acquire knowledge and skill in activities which may be of value and satisfaction throughout life. (Formerly 5540:154)

PHED 155 Basic Kayaking (1 Unit)

Participation in individual and group sports. Individual can acquire knowledge and skill in activities which may be of value and satisfaction throughout life. (Formerly 5540:155)

PHED 170 Varsity Baseball (1 Unit)

Participation in individual and group sports. Individual can acquire knowledge and skill in activities which may be of value and satisfaction throughout life. Permission of coach necessary for enrollment in varsity sports (170-181). Varsity sports are one credit each. (Formerly 5540:170)

PHED 171 Varsity Basketball (1 Unit)

Participation in individual and group sports. Individual can acquire knowledge and skill in activities which may be of value and satisfaction throughout life. Permission of coach necessary for enrollment in varsity sports (170-181). Varsity sports are one credit each. (Formerly 5540:171)

PHED 172 Varsity Cross Country (1 Unit)

Participation in individual and group sports. Individual can acquire knowledge and skill in activities which may be of value and satisfaction throughout life. Permission of coach necessary for enrollment in varsity sports (170-181). Varsity sports are one credit each. (Formerly 5540:172)

PHED 173 Varsity Football (1 Unit)

Participation in individual and group sports. Individual can acquire knowledge and skill in activities which may be of value and satisfaction throughout life. Permission of coach necessary for enrollment in varsity sports (170-181). Varsity sports are one credit each. (Formerly 5540:173)

PHED 174 Varsity Golf (1 Unit)

Participation in individual and group sports. Individual can acquire knowledge and skill in activities which may be of value and satisfaction throughout life. Permission of coach necessary for enrollment in varsity sports (170-181). Varsity sports are one credit each. (Formerly 5540:174)

PHED 175 Varsity Soccer (1 Unit)

Participation in individual and group sports. Individual can acquire knowledge and skill in activities which may be of value and satisfaction throughout life. Permission of coach necessary for enrollment in varsity sports (170-181). Varsity sports are one credit each. (Formerly 5540:175)

PHED 176 Varsity Softball (1 Unit)

Participation in individual and group sports. Individual can acquire knowledge and skill in activities which may be of value and satisfaction throughout life. Permission of coach necessary for enrollment in varsity sports (170-181). Varsity sports are one credit each. (Formerly 5540:176)

PHED 177 Varsity Swimming (1 Unit)

Participation in individual and group sports. Individual can acquire knowledge and skill in activities which may be of value and satisfaction throughout life. Permission of coach necessary for enrollment in varsity sports (170-181). Varsity sports are one credit each. (Formerly 5540:177)

PHED 178 Varsity Tennis (1 Unit)

Participation in individual and group sports. Individual can acquire knowledge and skill in activities which may be of value and satisfaction throughout life. Permission of coach necessary for enrollment in varsity sports (170-181). Varsity sports are one credit each. (Formerly 5540:178)

PHED 179 Varsity Track (1 Unit)

Participation in individual and group sports. Individual can acquire knowledge and skill in activities which may be of value and satisfaction throughout life. Permission of coach necessary for enrollment in varsity sports (170-181). Varsity sports are one credit each. (Formerly 5540:179)

PHED 180 Varsity Wrestling (1 Unit)

Participation in individual and group sports. Individual can acquire knowledge and skill in activities which may be of value and satisfaction throughout life. Permission of coach necessary for enrollment in varsity sports (170-181). **Varsity sports are one credit each. (Formerly 5540:180)

PHED 181 Varsity Volleyball (1 Unit)

Participation in individual and group sports. Individual can acquire knowledge and skill in activities which may be of value and satisfaction throughout life. Permission of coach necessary for enrollment in varsity sports (170-181). Varsity sports are one credit each. (Formerly 5540:181)

PHED 182 Varsity Riflery (1 Unit)

Participation in individual and group sports. Individual can acquire knowledge and skill in activities which may be of value and satisfaction throughout life. Permission of coach necessary for enrollment in varsity sports (170-181). Varsity sports are one credit each. (Formerly 5540:182)

PHED 183 Varsity Cheerleading (1 Unit)

Participation in individual and group sports. Individual can acquire knowledge and skill in activities which may be of value and satisfaction throughout life. Permission of coach necessary for enrollment in varsity sports (170-181). Varsity sports are one credit each. (Formerly 5540:183)

PHED 190 Special Topics: General Studies Physical Education (0.5-2 Units)

Weight training, self-defense for the blind, water safety instruction, beginning yoga, tai chi, billiards, intermediate and advanced bowling, intermediate and advanced golf, advanced self-defense. (Formerly 5540:190)

PHED 193 Orientation to Physical and Health Education (3 Units)

Introduction to physical and health education to students who pursue state license in teaching physical and health education. It's also the required course before the admission to the college of education. (Formerly 5550:193)

PHED 194 Sports Officiating (2 Units)

Knowledge of rules for interscholastic sports and officiating techniques. (Formerly 5550:194)

PHED 195 Foundations of Physical Education (3 Units)

Concepts analysis of games and play and application of these concepts to the teaching/learning process in physical education at all ages. (Formerly 5550:195)

PHED 199 Special Topics: General Studies Physical Education (0.5-2 Units)

See department for course description. (Formerly 5540:199)

PHED 201 Water Safety Instructor (2 Units)

This course is designed to train students to teach swimming and water safety courses from Pre-K to adult. (Formerly 5540:201)

PHED 202 Diagnosis of Motor Skills (3 Units)

This course introduces athletic trainers and physical education majors to the sciences of diagnosing motor skills. (Formerly 5550:202)

PHED 203 Measurement & Evaluation in Physical Education (3 Units)

Statistical procedures needed for analysis and interpretation of tests. Evaluation procedures, testing instruments, and techniques for administering tests are discussed and practiced. Three hours lecture. (Formerly 5550:203)

PHED 204 Individual and Team Sports (2 Units)

Intro to individual and team sports that are commonly taught in schools. Course presents knowledge, fundamental skill development, psychomotor skills analysis for the content areas. (Formerly 5550:204)

PHED 205 Team Sports (2 Units)

The purpose of this course is to teach students how to teach team sports. (Formerly 5550:205)

PHED 207 Introduction to Rock Climbing (1 Unit)

This course teaches basic rock-climbing skills. No previous experience in necessary. (Formerly 5540:207)

PHED 211 First Aid & Cardiopulmonary Resuscitation (2 Units)

Based on American Red Cross standards for first aid and cardiopulmonary resuscitation. Instruction and skills practice for sudden illness/emergencies is provided. Two hours lecture. (Formerly 5550:211)

PHED 212 First Aid and CPR for Professional Rescuer (2 Units)

Prerequisite: Permission of instructor. First aid and cardiopulmonary resuscitation for health care professionals based upon American Red Cross standards. Instruction and skills practice for sudden illness/emergencies is provided. (Formerly 5550:212)

PHED 245 Adapted Physical Education (3 Units)

Identification of atypical movement among various exceptional individuals, with adapted physical education programming experience in a laboratory setting. (Formerly 5550:245)

PHED 306 PE Act IV: Badminton/Golf (2 Units)

Course presents knowledge, fundamental skill development, and psychomotor skill analysis for the content areas of badminton and golf. One hour lecture, two hours lab. Students must be in the Sport Science and Wellness Program to take 300/400 level courses. (Formerly 5550:306)

PHED 307 Physical Education Activities V (2 Units)

Course presents knowledge, fundamental skill development, and psychomotor skill analysis for the content areas of tennis and volleyball. One hour lecture, two hours lab. Students must be in the Sport Science and Wellness Program to take 300/400 level courses. (Formerly 5550:307)

PHED 308 PE Act IV: Dance & Tumbling (2 Units)

Course presents knowledge, fundamental skill development, and psychomotor skill analysis for the content areas of dance and tumbling. One hour lecture, two hours lab. Students must be in the Sport Science and Wellness Program to take 300/400 level courses. (Formerly 5550:308)

PHED 335 Movement Experiences for Children (3 Units)

Prerequisites: PHED 130, PHED 193, and PHED 235. Course focuses on use of fundamental motor skill analysis to structure movement lessons for children from early childhood through elementary years. One hour lecture, two hours lab. (20 clinical hours, 10 field hours.) Students must be in the Sport Science and Wellness Program to take 300/400 level courses. (Formerly 5550:335)

PHED 336 Motor Learning & Development for Early Childhood (2 Units)

Physical fitness, fundamental motor skills, motor development and learning for early childhood, birth to age eight. Creating an environment of motor experiences for young children (10 field hours). Students must be in the Sport Science and Wellness Program to take 300/400 level courses. (Formerly 5550:336)

PHED 428 Nutrition for Teachers and Coaches (3 Units)

Covers nutritional basics and topics related to teaching physical education/health and coaching athletes, including basic nutrition, eating disorders, meal preparation, and trends in nutrition. (Formerly 5550:428)

PHED 436 Foundations & Elements of Adapted Physical Education (3 Units)

Principles, components, and strategies necessary in providing motor activities for handicapped students via application of a neuro-developmental model and alternate methods. Three hours lecture. Students must be in the Sport Science and Wellness Program to take 300/400 level courses. (Formerly 5550:436)

PHED 446 Instructional Techniques in Secondary Physical Education & Health (3 Units)

Prerequisites: PHED 102, PHED 193, PHED 204, and PHED 205. Instructional strategies for teaching secondary students in physical and health education. A variety of instructional models will be introduced appropriate to the learners' age and development. It is a required course for the physical education licensure. Two hours lecture, two hours lab (30 clinical hours). Students must be in the Sport Science and Wellness Program to take 300/400 level courses. (Formerly 5550:446)

PHED 447 Instructional Techniques for Children in Physical Education & Health Education (3 Units)

Prerequisites: PHED 130 and PHED 193. Instructional strategies for teaching children in physical and health education. A variety of instructional models will be introduced appropriate to the learners' age and development. Required for the physical education licensure. (30 clinical hours). Students must be in the Sport Science and Wellness Program to take 300/400 level courses. (Formerly 5550:447)

PHED 451 Assessment & Evaluation in Adapted Physical Education (3 Units)

Investigation, analysis, and selection of appropriate assessment instruments, as well as methodology for determining instructional objectives and activities for handicapped students. Three hours lecture. Students must be in the Sport Science and Wellness Program to take 300/400 level courses. (Formerly 5550:451)

PHED 452 Foundations of Sport Science, Physical and Health Education (3 Units)

Prerequisite: Admission to the Sport Science and Wellness Program. Overview of the emergence of sport science, physical and health education as a profession and the supporting role of underlying scholarly and scientific disciplines. Three hours lecture. Students must be in the Sport Science and Wellness Program to take 300/400 level courses. (Formerly 5550:452)

PHED 490 Workshop in Physical Education (1-3 Units)

Practical, intensive and concentrated involvement with current curricular practices in areas related to physical education. Students must be in the College of Education to take 300/400 level courses. (Formerly 5550:490)

PHED 494 Student Teaching Colloquium for Physical & Health Education (2 Units)

Corequisite: PHED 495. Students meet during student teaching to discuss concerns about student teaching and analyze previous learning as it relates to their future as a professional educator. Students must be in the Sport Science and Wellness Program to take 300/400 level courses. (Formerly 5550:494)

PHED 495 Student Teaching for Physical & Health Education (11 Units)

Prerequisites: Approval of the Student Teaching Committee, considered based upon approved application to student teaching, passing OAE subject test, and approved portfolio. Corequisite PHED 494. Planned teaching experience in schools selected and supervised by the Office of Student Teaching. (Formerly 5550:495)

PHED 497 Independent Study: Physical Education (1-6 Units)

Prerequisite: Permission of adviser. Analysis of specific topic related to a current problem in physical education or sport and exercise science. May be repeated for a maximum of 12 credits. *Students must be in the Sport Science and Wellness Program to take 300/400 level courses. (Formerly 5550:497)

Sport Studies/Sport Science (SPRT)

SPRT 100 Career Explorations Into Sport (3 Units)

Introduction to field of sport coaching and athletics leadership. Course explores the history, philosophy, and current principles of sport industry within a practical, career-oriented framework. (Formerly 5550:100)

SPRT 160 Introduction to Coaching (3 Units)

This course will provide a foundational understanding of the philosophy, styles, and practical skills that are essential for effective coaching in various sports. (Formerly 5550:160)

SPRT 200 Motor Learning and Performance (3 Units)

This course is designed to introduce key concepts of motor learning, motor performance, and methods of motor skill diagnosis related to sport skills. (Formerly 5550:235)

SPRT 202 Methods of Coaching and Evaluation (3 Units)

Prerequisite: SPRT 200. Instructional methods, techniques and strategies for coaching sport to a wide range of athletes. A variety of instructional models and evaluation techniques will be introduced and practiced.

SPRT 203 Practice and Theory in Coaching (3 Units)

Prerequisite: SPRT 160. This course will focus on the coaching profession and developing a personal coaching philosophy. In addition, the course information will combine sport science theory and research with the practical knowledge and tactics of expert coaches in the five essential categories of coaching education and professional practice.

SPRT 204 Sport History Appreciation (3 Units)

This course is designed to introduce students to sport in American history. An exploration of the people, organizations and institutions that shaped the development of sport are examined. (Formerly 5550:362)

SPRT 206 Coaching Basketball (3 Units)

An introduction to coaching basketball. Discussion of the important technical and tactical elements of coaching basketball. (Formerly 5550:206)

SPRT 207 Coaching Track and Field (3 Units)

An introduction to coaching track and field. Discussion of the important technical, tactical and psychological elements of coaching track and field. (Formerly 5550:207)

SPRT 208 Coaching Football (3 Units)

An introduction to coaching football. Discussion of the important technical and tactical elements of coaching football. (Formerly 5550:208)

SPRT 209 Coaching Baseball (3 Units)

An introduction to coaching baseball. Discussion of the important offensive, defensive, and technical and tactical elements of coaching baseball. (Formerly 5550:209)

SPRT 210 Navigating Social Issues in Sport (3 Units)

This course is designed to explore the role that sports and athletes play in our cultural sense of justice. Historical intersections of sport and society will be investigated.

Gen Ed: Complex Issues Facing Society

SPRT 301 Sports Medicine for Coaches (3 Units)

Prerequisites: SPRT 200 and SPRT 202. This course challenges the student to understand ways to provide and care for the safety of individuals they teach or coach. This course will equip students with the knowledge and skills to better understand and manage the health and well-being of their athletes.

SPRT 302 Psychology of Coaching (3 Units)

Prerequisite: SPRT 203. This course provides an overview of the fundamental concepts and principles of sports psychology, exploring the psychological factors that influence athletic performance, motivation, mental skills, and well-being in sports.

SPRT 310 Investigating Current Issues in Coaching and Leadership (3 Units)

Prerequisite: Junior or greater standing. The purpose of this course is to explore and evaluate current topics, events, and trends in the field of coaching and athletics leadership.

SPRT 366 Sport Media Relations (3 Units)

Prerequisite: SPRT 203. The focus of this course is to furnish students with an understanding of the history, fundamentals, and strategies applicable to media relations and communication in the sports industry as well as practical hands-on experience. (Formerly 5550:366)

SPRT 368 Sport Facility Management (3 Units)

Prerequisite: Junior or greater standing. This course has been designed to identify the systems approach for the effective management of the maintenance and operation of sport and recreation facilities. (Formerly 5550:368)

SPRT 370 Financial Aspects of Sport (3 Units)

The focus of this course is related to the important knowledge that administrators should have related to the field of the financial aspects of sport. (Formerly 5550:370)

SPRT 375 Sport Performance and Fitness Skills (3 Units)

Prerequisites: SPRT 200 and SPRT 202. An introductory course to teach the components and elements related to the physical aspects of sport performance. The course covers sport specific exercise prescriptions that aids injury prevention and performance enhancement. (Formerly 5550:375)

SPRT 395 Field Experience (1-6 Units)

Practical experience in an area related to physical education under supervision of faculty member. Student works with current physical education programs or exercise science settings. May be repeated for a maximum of 12 credits. Students must be in the Sport Science and Wellness Program to take 300/400 level courses. (Formerly 5550:395)

SPRT 401 Disabilities and Physical Activity (3 Units)

Prerequisite: Junior or greater standing. The purpose of this course is to introduce ways to interact with special needs populations through physical and healthy lifestyle activities.

SPRT 409 Sport Behavior (3 Units)

The focus of this course is the behavior of athletes and sport participants studied within the context of play, games, and sport. (Formerly 5550:409)

SPRT 410 Introduction to Sport Sociology (3 Units)

Prerequisite: Junior or greater standing. Provides information to students about the sociological aspects of sport. (Formerly 5550:410)

SPRT 420 Fundamentals of Management Strategies in Sport (3 Units)

Prerequisite: Junior or greater standing. This course seeks to explore, acquire, and discuss knowledge within the theoretical and applied management practices of sport, fitness, and instructional programs. (Formerly 5550:420)

SPRT 422 Sport and Event Planning Operations (3 Units)

Prerequisite: Junior or greater standing. This course provides students with a comprehensive understanding of the principles and practices involved in planning, organizing, and managing sports events and other special gatherings. Through a combination of theoretical knowledge and practical skills, students will develop the expertise needed to create successful and memorable events. (Formerly 5550:422)

SPRT 424 Sports Leadership (3 Units)

Prerequisite: SPRT 203. Introduces students to current issues related to leadership, management, and supervision related to sport. Examines current sport leadership research and governance structure of leisure, recreational, amateur, and professional sport organizations. (Formerly 5550:424)

SPRT 450 Business of Coaching (3 Units)

Prerequisite: SPRT 203. The purpose of the course is to provide the student with workable knowledge of the administrative principles and procedures necessary for coaches and athletic leadership in schools and/or recreational sport settings. (Formerly 5550:450)

SPRT 453 Principles of Coaching (3 Units)

Prerequisite: Admission to the Sport Science and Wellness Program. Basics for becoming a successful coach. Discussion of principles applying to most sports, players and coaches. Ten clinical hours required. Students must be in the Sport Science and Wellness Program to take 300/400 level courses. (Formerly 5550:453)

SPRT 460 Practicum in Sport Coaching and Leadership (2 Units)

Prerequisite: Junior or greater standing. Hands on experience and observation that integrates students' classroom learning with real-life experiences.

SPRT 462 Legal Aspects and Ethics in Sport (3 Units)

Prerequisite: Junior or greater standing. This course will provide an overview of legal and ethical elements of greatest concern to specialists in sport and physical activities. Case studies will be used to discuss and illustrate points. (Formerly 5550:462)

SPRT 480 Special Topics in Coaching and Leadership (3 Units)

Special topics in sport coaching and athletic leadership are presented. Special topics courses may be repeated with a change in topic for no more than 6 credits.

Outdoor Education (ODED)

ODED 430 Senior Honors Project: Outdoor Education (1-6 Units)

(May be repeated for a total of six credits) Prerequisites: Senior standing in Honors Program and permission of student's preceptor. Carefully defined individual study demonstrating originality and sustained inquiry. (Formerly 5560:430)

ODED 450 Application of Outdoor Education to the School Curriculum (4 Units)

Provides knowledge, skills and techniques useful in application of outdoor education to school curriculum. (Formerly 5560:450)

ODED 452 Resources & Resource Management for Teaching Outdoor Education (4 Units)

Methodologies unique to outdoor education which incorporate a multisensory approach to learning. Instructional materials and resources which permit expansion of curriculum beyond the school building. (Formerly 5560:452)

ODED 454 Resident Outdoor Education (2 Units)

Skills, program considerations, and organizational techniques unique to an extended, overnight, resident outdoor education program. Off-campus location for four days and three nights. (Formerly 5560:454)

ODED 456 Outdoor Pursuits (4 Units)

Investigation and participation in practical experiences in outdoor pursuits. (Formerly 5560:456)

ODED 460 Outdoor Education Practicum (2 Units)

Prerequisites: ODED 452 and ODED 454. Closely supervised practical experience in conjunction with regularly scheduled classroom meetings. Laboratory experience consists of active participation with an established outdoor education program. (Formerly 5560:460)

ODED 464 Wilderness Education Association Outdoor Leadership (3 Units)

This is the Wilderness Education Association Standard Program for Outdoor Leadership Certification. (Formerly 5560:464)

ODED 497 Independent Study (1-3 Units)

Prerequisites: Permission of adviser and supervisor of independent study. Provides varied opportunities for a student to gain first-hand knowledge and experience with existing outdoor education programs. (Formerly 5560:497)

Health Education (HEDU)

HEDU 101 Personal Health (2 Units)

This course applies the current principles and facts pertaining to healthful, effective living, personal health problems, and needs of the student. Two hours lecture. (Formerly 5570:101)

HEDU 201 Foundations in Health Education (3 Units)

Prerequisite: HEDU 101. History and philosophy of health education as a discipline; professionalism and administration in health education are considered. (Formerly 5570:201)

HEDU 202 Stress Management (3 Units)

Prerequisite: Sophomore standing. Course provides knowledge about the relationship between stress, physiological, psychological illness and disease, also how to manage stress in life activities. (Formerly 5570:202)

HEDU 322 Current Topics in Health Education (3 Units)

Prerequisites: HEDU 101, HEDU 201, and HEDU 420. Skills needed to do research, teach, and present current health education topics in a factual and comfortable manner in schools and community. Three hours lecture. Students must be in the Sport Science and Wellness Program to take 300/400 level courses. (Formerly 5570:322)

HEDU 375 Program Planning and Evaluation (2 Units)

Prerequisites: HEDU 101 and HEDU 201. This course addresses the process of planning and evaluating health education programs within the school and community. (Formerly 5570:375)

HEDU 395 Field Experience: Health Education (1-3 Units)

Prerequisite: Permission of the advisor. On-site field experience will be conducted in an area related to pre-K-12 health education under the supervision of a faculty member. Students must be in the Sport Science and Wellness Program to take 300/400 level courses. (Formerly 5570:395)

HEDU 400 Environmental Aspects of Health Education (3 Units)

Prerequisite: Major or minor in health education and admission to the Sport Science and Wellness Program. A study of the interrelationships of ecosystems and a healthful environment. This course investigates many aspects of the environment and their influences upon the quality of human life. Students must be in the College of Education to take 300/400 level courses. (Formerly 5570:400)

HEDU 420 Community and Personal Health (3 Units)

Introduction of current public and personal health issues. Organizations and their roles in public and personal health programs. Students must be in the Sport Science and Wellness Program to take 300/400 level courses. (Formerly 5570:420)

HEDU 421 Comprehensive School Health (3 Units)

Prerequisites: HEDU 101, HEDU 201, and HEDU 320. This course explains and presents comprehensive school health curricula for pre-k to 12. The three components of a comprehensive school health program are presented. (Formerly 5570:421)

HEDU 423 Methods & Materials Teaching Health Education (3 Units)

Prerequisites: HEDU 101, HEDU 201, HEDU 420, EDFN 210, EDFN 211, EDCI 310, EDCI 311. Planning, organization, use of instructional resources and delivery of health education content and teaching process (pre K-12). Students must be in the Sport Science and Wellness Program to take 300/400 level courses. (Formerly 5570:423)

HEDU 430 Senior Honors Project: Health Education (1-6 Units)

(May be repeated for a total of six credits) Prerequisites: Senior standing in Honors Program and admission to the Sport Science and Wellness Program. Carefully defined individual study demonstrating originality and sustained inquiry. Students must be in the Sport Science and Wellness Program to take 300/400 level courses. (Formerly 5570:430)

HEDU 460 Practicum in Health Education (2-6 Units)

Prerequisite: Permission of the advisor. The practicum in Health Education is an on-site participation in a community health organization, agency or resource. Students must be in the Sport Science and Wellness Program to take 300/400 level courses. (Formerly 5570:460)

HEDU 497 Independent Study: Health Education (1-2 Units)

Prerequisite: Permission of the advisor. Analysis of a specific topic related to a current problem in health education. May include investigative procedure, research or concentrated practical experience. (Formerly 5570:497)

Nutrition and Dietetics (NUTR)**NUTR 120 Career Decisions in Nutrition (1 Unit)**

Exploration of the nutrition/dietetics/food industry profession, including academic/internship routes, career opportunities, professional concepts and attributes. Self-assessment and goal setting with beginning portfolio development. (Formerly 7760:120)

NUTR 132 Early Childhood Nutrition (3 Units)

Emphasis on nutrition as component of Early Childhood programs. Nutrition principles discussed in relation to self and young children. Prenatal and infant nutrition studied. Food as learning experience, menu planning, purchasing, sanitation, food labeling, storage and parent involvement included. For Family and Child Development Option, and an educational technology student. (Formerly 7760:132)

NUTR 133 Nutrition Fundamentals (3 Units)

Study of basic nutrition concepts, contemporary issues, controversies; emphasis on macro/micro nutrient requirements for healthy individuals; analysis of a student's dietary intake. Online section available. (Formerly 7760:133)

Ohio Transfer 36: Yes

Gen Ed: Natural Science

NUTR 141 Food for the Family (3 Units)

Prerequisite: Permission of instructor. Application of nutrition to meal planning; problems in selecting, budgeting and preparing food; meal service. (Formerly 7760:141)

NUTR 200 Sustainability, Foods and Environments (3 Units)

This course provides an introduction to the basic concepts of environmental sustainability and conservation in food production. A brief history of this issue is followed by an examination of population needs and the management of water, agricultural practices, animal husbandry, fertilizer use, and land management. Global warming, genetically modified plant and animal organisms (GMOs), and carbon footprint/fossil fuel use, are also considered. The demographic and geo-political features of North American populations (urban, suburban, rural) contextualize comparisons of conventional food production practices and sustainable practices, around the world. (Formerly 7760:200)

NUTR 228 Introduction to Medical Nutrition Therapy (3 Units)

Prerequisites: NUTR 133, CHEM 114, and CHEM 115. Introduction to Medical Nutrition Therapy will review basic metabolic and pathological conditions with emphasis on medical nutrition therapy strategies. (Formerly 7760:228)

NUTR 250 Food Science Lecture (3 Units)

Prerequisites: NUTR 133, NUTR 120, CHEM 114, and CHEM 115. Corequisite: NUTR 251. Study of the chemical and physical structure of food. Scientific and aesthetic principles involved in the selection, storage and preparation of foods. (Formerly 7760:250)

NUTR 251 Food Science Lab (1 Unit)

Prerequisites: NUTR 133, NUTR 120, CHEM 114, and CHEM 115 or permission from instructor. Corequisite: NUTR 250. Application of the scientific and sensory principles involved in the selection, storage and preparation of foods. (Formerly 7760:251)

NUTR 252 An Introduction to French Cuisine (1 Unit)

A beginners guide to the food from France. The influence of history, geography, religion, technology and personalities on French cuisine. Emphasis placed on discussion and speakers, with some hands-on experience. Designed for anyone with a general interest in the foods of France.

NUTR 253 Women & Food (1 Unit)

Food and dining play a pivotal role in defining our humanity and shaping our interpersonal connections. Throughout this course, we will delve into the socio-cultural aspects surrounding food. Our focus will extend to examining the intersection of women, food, and health, including the imperative of making informed dietary decisions amid challenges such as food scarcity.

NUTR 310 Food Systems Management I (4 Units)

Prerequisites: NUTR 250 and [ACCT 201 or COMM 211]. Corequisite: NUTR 315. Basic theoretical concepts in the management of dietetic food service systems and the practical application of principles and procedures in quantity food production and service. (Formerly 7760:310)

NUTR 314 Food Systems I Field Experience (2 Units)

Prerequisites: ACCT 201 and NUTR 250. Corequisite: NUTR 310. Development of quantity food preparation in community and health care agencies; identification of functions and resources involved in the food service systems. (Formerly 7760:314)

NUTR 315 Food Systems Management I Supervised Experiential Learning (2 Units)

Prerequisite: Admission to the Dietetics program and NUTR 250. Corequisite: NUTR 310. Development of quantity food preparation and supervisory skills in community agencies; identification of functions and resources involved in the management of food service systems. (Formerly 7760:315)

NUTR 316 Science of Nutrition (4 Units)

In-depth characterization of composition, metabolism, physiological functions and interrelationships of nutrients. Analysis and interpretation of current literature; assessment of nutrition counseling techniques. (Formerly 7760:316)

NUTR 321 Experimental Foods (3 Units)

Prerequisites: NUTR 250, CHEM 114, and CHEM 115. Theory and methods in the experimental study of foods. Sensory evaluation and instrumental analysis of food quality. Individual research emphasized. Lecture/Laboratory. (Formerly 7760:321)

NUTR 328 Medical Nutrition Therapy I (3 Units)

Prerequisites: [NUTR 133 or NUTR 316], NUTR 426, and NUTR 443. Analysis of health care concepts and the medical nutrition therapy relationship. Consideration of nutritional implications of pathological conditions and alterations to diet for specific health issues or disorders. (Formerly 7760:328)

NUTR 329 Medical Nutrition Therapy I Supervised Experiential Learning (2 Units)

Prerequisites: Admission to the Dietetics program, [NUTR 133 or NUTR 316], NUTR 426, and NUTR 443. Corequisite: NUTR 328. Analysis of therapeutic health-care concepts. Consideration of nutritional implications of pathological conditions; construction of diets for specific disorders. (Formerly 7760:329)

NUTR 340 Meal Management (3 Units)

Emphasis is on meal design, nutritional adequacy, and budgeting as well as food preparation techniques. (Formerly 7760:340)

NUTR 400 Nutrition Education Skills with the General Public (3 Units)

Prerequisites: Admission to the Dietetics program and [NUTR 133 or NUTR 316]. Theory and development of communication and education skills with the general public. (Formerly 7760:400)

NUTR 401 Nutrition Counseling Skills (3 Units)

Prerequisites: Admission to a nutrition program and NUTR 400. This course discusses theory and development of counseling skills. Skills essential to dietetics practice and discussed in this course include but are not limited to; interpersonal communication; interviewing; nutrition counseling and coaching. (Formerly 7760:401)

NUTR 403 Advanced Food Preparation (3 Units)

Prerequisite: NUTR 141 or NUTR 250. Study of advanced techniques of food preparation. Introduction to and interpretation of classic and foreign cuisines. Emphasis on individualized experiences, skill development and evaluation of procedures and results. (Formerly 7760:403)

NUTR 412 Introduction to Regulatory Affairs (3 Units)

Organization and management in administration of food service systems; problems in administration of food service systems; problems in control of labor, time and cost. Field experience in food production. Study of regulations affecting the food industry, such as food labeling, nutrition labeling, food safety, and adulteration. Course includes discussion of regulatory agencies and their impact on the food industry. (Formerly 7760:412)

NUTR 413 Food Systems Management II (3 Units)

Prerequisite: NUTR 310. Advanced concepts in management of dietetic service systems relating to achievement of nutritional care goals. (Formerly 7760:413)

NUTR 414 Enology: The Art and Science of Wine (1 Unit)

Prerequisite: Students must be 21 years of age by the first day of instruction to fully participate. An introduction to the multi-dimensional approaches to viticulture and the methodology of wine-making, perspectives on manufacturing, and marketing of wines. The influence of history, geography, and technology on wines of the world as well as the wine-making movement in Northeast Ohio. Emphasis will be placed on the development and refinement of sensory evaluation techniques.

NUTR 415 Advanced Regulatory Affairs (3 Units)

Prerequisite: NUTR 412. This course is designed to provide in depth information and teach advanced skills that are required for food industry professionals to comply with government agency's regulations affecting the food industry, such as food labeling, nutrition labeling, claims, food adulteration and litigation trends. Course includes discussion of regulatory agencies and the Canadian food inspection agency.

NUTR 416 The Science of Brewing and Fermentation (1 Unit)

Prerequisite: Students must be 21 years of age by the first day of instruction. An introduction to the fundamental scientific principles behind brewing and fermentation within the context of the vibrant craft beer scene in Northeast Ohio. This course explores the elements of brewing and fermentation processes while also fostering community connections through potential visits to local breweries.

NUTR 417 Applied Flavor Science (1 Unit)

Prerequisite: Junior or greater standing. This course will provide the students with an understanding of the applied flavor science and how flavor ingredients impact sensory perception of food.

NUTR 421 Special Problems in Nutrition and Dietetics (1-3 Units)

Additional study or apprentice experience in specialized field or preparation; group and individual experimentation. (Formerly 7760:421)

NUTR 424 Nutrition in Life Cycle (3 Units)

Prerequisite: NUTR 316 or NUTR 426. Study of the physiological basis for nutritional requirements; interrelating factors which affect growth, development, maturation and nutritional status from conception through the elderly years. (Formerly 7760:424)

NUTR 426 Human Nutrition (3 Units)

Prerequisites: NUTR 133, ANAT 207, ANAT 211, CHEM 114, and CHEM 115. Application of principles nutrition, metabolism and assessment. Analyses and interpretation of current literature. Open to dietetics majors only. (Formerly 7760:426)

NUTR 428 Medical Nutrition Therapy II (3 Units)

Prerequisite: NUTR 328. Continuation of 328. Medical Nutrition Therapy I with emphasis on more complex metabolic and pathological conditions with nutrition therapy strategies. (Formerly 7760:428)

NUTR 429 Medical Nutrition Therapy II Supervised Experiential Learning (2 Units)

Prerequisites: Admission to a nutrition program and NUTR 329. Corequisite: NUTR 428. Supervised practice experience in health care facilities with application of principles of medical nutrition therapy learned in NUTR 328 and NUTR 428. (Formerly 7760:429)

NUTR 430 Computer Assisted Food Service Management (3 Units)

Use of computer programs in application of management concepts for food service systems. (Formerly 7760:430)

NUTR 431 Health Care Business and Research for Dietetics (3 Units)

Prerequisite: Admission to the Dietetics program. This course will discuss the procedure for best developing and implementing a new nutrition business. Coding and billing in health care will be addressed as well as exhibiting ethical behaviors of practice. Research is conducted in various areas of dietetics. The development and implementation of a research study will be discussed in addition to identifying outcomes and the appropriate statistical methods to use in research. (Formerly 7760:431)

NUTR 443 Nutrition Assessment (3 Units)

Prerequisites: NUTR 133, NUTR 228, BIOL 202, BIOL 203, CHEM 112, and CHEM 113. Application of principles of nutrition and assessment. Analysis and interpretation of current literature. Open to dietetics majors only. (Formerly 7760:443)

NUTR 444 Long Term Care Supervised Experiential Learning (4 Units)

Prerequisites: Admission to the Dietetics program, NUTR 328 and NUTR 329. Supervised Experiential Learning in long term care facilities for application of principles of nutritional care and foodservice operation. (Formerly 7760:444)

NUTR 447 Senior Seminar (1 Unit)

Prerequisite: Senior standing in the nutrition program. This course is designed to teach students the understanding and skills to be successful seeking employment post-graduation. Topics ranging from resume writing, job searching and networking are covered. (Formerly 7760:447)

NUTR 470 Food Industry: Analysis & Field Study (3 Units)

Prerequisite: NUTR 250. Role of technology in extending the food supply. Chemical, physical and biological effects of processing and storage, on-site tours of processing plants. (Formerly 7760:470)

NUTR 474 Cultural Dimensions of Food (3 Units)

An examination of cultural, geographical and historical influences on development of food habits. Emphasis on evolution of diets; effects of religion, education, and gender roles. (Formerly 7760:474)

Gen Ed: Global Diversity

NUTR 476 Developments in Food Science (3 Units)

Prerequisite: NUTR 250. Advanced study of the chemistry and physics of food components affecting characteristics of food. Critical evaluation of current basic and applied research emphasized. (Formerly 7760:476)

NUTR 480 Community Nutrition I (3 Units)

Prerequisites: NUTR 316 or NUTR 426. Corequisite: NUTR 481 for CP students only. Major food and nutrition related problems in the community. Emphasis on community assessment, program implementation and evaluation, and rationales for nutrition services. (Formerly 7760:480)

NUTR 481 Community Nutrition I-Supervised Experiential Learning (2 Units)

Prerequisite: Admission to a nutrition program. Corequisite: NUTR 480. Field placement in area agencies offering nutrition services. Study of the agency's goals, organization, and philosophy of nutritional care. (Formerly 7760:481)

NUTR 482 Community Nutrition II (3 Units)

Prerequisite: NUTR 480. Corequisite: NUTR 483 for CP students only. Activities engaged in by community nutritionist. Emphasis on controversies, cultural differences, educational approaches, grantsmanship, marketing, and working with the media. (Formerly 7760:482)

NUTR 483 Community Nutrition II-Supervised Experiential Learning (2 Units)

Prerequisites: Admission to a nutrition program and NUTR 481. Corequisite: NUTR 482. A second field placement in an area agency offering nutrition services. Study of the agency's goals, organization, and philosophy of nutritional care. (Formerly 7760:483)

NUTR 484 Health and Wellness Clinical (4 Units)

Prerequisite: CP Students only, NUTR 481. Corequisites: NUTR 413 and NUTR 482. A field placement in agencies or facilities offering health and wellness services as they related to nutrition. Credit/Noncredit. (Formerly 7760:484)

NUTR 485 Seminar in Health Professions (1-3 Units)

Prerequisite: Permission of instructor. Exploration and evaluation of current developments in selected areas. (Formerly 7760:485)

NUTR 486 Staff Relief: Dietetics (2 Units)

Prerequisites: CP senior only. Opportunity to function as an entry-level dietitian in area of administrative, therapeutic or community dietetics. The graduating senior CUP student spends three 40-hour weeks in a mutually agreeable agency primarily under direction of staff dietitians or coordinators. (Formerly 7760:486)

NUTR 487 Sports Nutrition (3 Units)

Prerequisites: NUTR 133, NUTR 426, BIOL 202, BIOL 203, CHEM 112, and CHEM 113. In-depth study of energy metabolism and utilization before, during, and after exercise. Factors affecting nutrient needs and peak performance of different athletic populations are emphasized. (Formerly 7760:487)

NUTR 488 Practicum in Dietetics (1-3 Units)

Prerequisite: Approval of advisor/instructor. Practical experience in application of the principles of nutrition. (Formerly 7760:488)

NUTR 489 Professional Preparation for Dietetics (1 Unit)

Historical aspects of dietetics and where the profession is going. Specialty areas of dietetic practice are explored. Students prepare the application for dietetic internship. (Formerly 7760:489)

NUTR 493 Nutrition for Athletes (3 Units)

Study of metabolism before, during, and after exercise. Factors affecting nutrient needs and peak performance of different athletic populations are emphasized. (Formerly 7760:493)

NUTR 499 Senior Honors Project in Nutrition and Dietetics (1-3 Units)

(May be repeated for a total of six credits) Prerequisites: Senior standing in Honors Program and approval of honors preceptor. Individual study supervised by adviser. Student and preceptor develop goals, objectives and methodology. (Formerly 7760:499)

NUTR 500 Nutrition Communication & Education Skills (4 Units)

Prerequisite: permission of instructor. Theory and development of communication and education skills essential to dietetics practice; interpersonal communication; interviewing; nutrition counseling, education techniques, media and current technology. (Formerly 7760:500)

NUTR 503 Advanced Food Preparation (3 Units)

Prerequisite: permission. Study of advanced techniques of food preparation. Introduction to and interpretation of classical and foreign cuisines. Emphasis on individualized experience, skill development and evaluation of procedures and results. (Formerly 7760:503)

NUTR 513 Food Systems Management II (3 Units)

Prerequisites: Acceptance into the graduate program or permission of the instructor. Advanced concepts in management of dietetic service systems relating to achievement of nutritional care goals. (Formerly 7760:513)

NUTR 524 Nutrition in Life Cycle (3 Units)

Prerequisite: permission of the instructor. Study of the physiological basis for nutritional requirements; interrelating factors which affect growth, development, maturation and nutritional status from conception through the elderly years. (Formerly 7760:524)

NUTR 526 Human Nutrition (3 Units)

Prerequisites: Acceptance into the graduate program or permission from the instructor. Corequisites: NUTR 543. Application of principles of nutrition, metabolism and assessment. Analysis and interpretation of current literature. (Formerly 7760:526)

NUTR 528 Nutrition in Medical Science II (5 Units)

Prerequisites: Acceptance into the graduate program or permission of instructor. Emphasizing nutritional implications of more complex metabolic and pathological conditions as well as nutrition support strategies. (Formerly 7760:528)

NUTR 529 Supervised Experiential Learning in Nutrition (3 Units)

Prerequisites: NUTR:624 and NUTR:616. Clinical experience in various clinical nutrition sites; application of principles of nutritional care. (Formerly 7760:529)

NUTR 543 Nutrition Assessment (3 Units)

Corequisites: NUTR 526. Application of principles of nutrition and assessment. Analysis and interpretation of current literature. Open to dietetics majors only. (Formerly 7760:543)

NUTR 544 Supervised Experiential Learning in Long Term Care (3 Units)

Prerequisites: NUTR:624 and NUTR:616. Clinical and foodservice experiences in long term care facilities for application of principles of nutritional care and foodservice management. (Formerly 7760:544)

NUTR 570 Food Industry: Analysis & Field Study (3 Units)

Prerequisite: permission. Role of technology in extending the food supply. Chemical, physical and biological effects of processing and storage, on-site tours of processing plants. (Formerly 7760:570)

NUTR 574 Cultural Dimensions of Food (3 Units)

An examination of cultural, geographical and historical influences on development of food habits. Emphasis on evolution of diets; effects of religion, education, gender roles, media. (Formerly 7760:574)

NUTR 576 Developments in Food Science (3 Units)

Prerequisite: Permission. Advanced study of the chemistry and physics of food components affecting characteristics of foods. Critical evaluation of current basic and applied research emphasized. (Formerly 7760:576)

NUTR 580 Community Nutrition (3 Units)

Socio-cultural aspects of community assessment, program implementation and evaluation, and rationales for nutrition services. (Formerly 7760:580)

NUTR 581 Community Nutrition I-Clinical (1 Unit)

Corequisite: NUTR 580. Field placement in area agencies offering nutrition services. Study of the agency's goals, organization, and philosophy of nutritional care. Credit/noncredit. (Formerly 7760:581)

NUTR 582 Community Nutrition II (3 Units)

Prerequisites: NUTR 580 (NUTR 581 for CP student only). Corequisite: NUTR 583 for CP student only. This course will focus on managing nutrition services for productivity (economic, community and labor resources, and evaluation), and educating the dietitians' 'various publics' about nutrition. (Formerly 7760:582)

NUTR 583 Supervised Experiential Learning in the Community (3 Units)

Prerequisites: NUTR:624 and NUTR:616. Field placement in area agencies offering nutrition services. Study of the agency's goals, organization, and philosophy of nutritional care. (Formerly 7760:583)

NUTR 585 Seminar in Health Professions (1-3 Units)

Prerequisite: Permission of instructor. Exploration and evaluation of current developments in selected areas. (Formerly 7760:585)

NUTR 587 Sports Nutrition (3 Units)

Prerequisite: Permission of instructor. In-depth study of energy metabolism and utilization before, during and after exercise. Factors affecting nutrient needs and peak performance of different athletic populations are emphasized. (Formerly 7760:587)

NUTR 588 Practicum in Dietetics (1 Unit)

Prerequisites: NUTR 529, NUTR 580, NUTR 610, NUTR 616, and NUTR 624. Practical experience in application of the principles of nutrition. (Formerly 7760:588)

NUTR 589 Professional Preparation for Dietetics (1 Unit)

Prerequisite: Open to those dietetics students in the Didactic Program or Graduate program who plan to apply for a Dietetic Internship. Historical aspects of dietetics and where the profession is going. Specialty areas of dietetic practice are explored. Students prepare the application for dietetic internship. (Formerly 7760:589)

NUTR 593 Nutrition for Athletes (3 Units)

Study of metabolism before, during, and after exercise. Factors affecting nutrient needs and peak performance of different athletic populations are emphasized. (Formerly 7760:593)

NUTR 604 Orientation to Graduate Studies in Health Professions (1 Unit)

Introduction to the concepts and processes necessary for graduate study in health professions. (Formerly 7760:604)

NUTR 610 Food Systems Management (3 Units)

Theoretical concepts in the management of dietetic food service systems, and application of principles and procedures to achieve nutritional goals. (Formerly 7760:610)

NUTR 616 Clinical Nutrition (3 Units)

Prerequisite: NUTR 624. Study of Medical Nutrition Therapy (MNT) and its relationship to metabolic and pathological conditions, as well as nutrition support strategies. (Formerly 7760:616)

NUTR 624 Advanced Human Nutrition (3 Units)

Prerequisites: Undergraduate or graduate-level courses in nutrition and biochemistry. In-depth study of human nutrition emphasizing metabolism physiological functions, and interrelationships of carbohydrate, protein and lipids and the determinants of human energy requirements. (Formerly 7760:624)

NUTR 625 Advanced Human Nutrition II (3 Units)

Prerequisite: NUTR 624 or equivalent. In-depth study of human nutrition with and emphasis in the utilization, physiological functions and interrelationships of vitamins and minerals. (Formerly 7760:625)

NUTR 680 Current Issues in Nutrition (3 Units)

Study of current issues in the field of nutrition science. Each semester that it is offered, this course will explore a specific issue relevant to current research and practice in the field of nutrition as it relates to biology, immunology, applied nutrition, and epidemiology. (Formerly 7760:680)

NUTR 685 Research Methods in Health Professions (3 Units)

A study of health sciences research methods emphasizing concept and theory development, quantitative and qualitative methodologies. (Formerly 7760:685)

NUTR 688 Practicum in Nutrition and Dietetics (3 Units)

Prerequisites: NUTR:529, NUTR:544, NUTR:580, NUTR:610, NUTR:616, and NUTR:624. Practical experience in application of the principles of nutrition. (Formerly 7760:688)

NUTR 690 Thesis Research/Reading (3 Units)

Prerequisite: Permission of thesis advisor. Supervised reading and research related to approved thesis topic. May be repeated once. (Formerly 7760:690)

NUTR 694 Masters Project (5 Units)

Prerequisite: Permission of advisor. The development, implementation and evaluation of a community-based supervised project which makes a significant contribution to the field and may lead to publication. (Formerly 7760:694)

NUTR 696 Individual Investigation in Nutrition and Dietetics (1-3 Units)

Prerequisite: Permission of advisor. Individual Investigation and analysis of a specific topic in student's area of specialization of interest under direction of a faculty advisor. (Formerly 7760:696)

NUTR 699 Masters Thesis in Health Professions (5 Units)

Prerequisite: permission of advisor. Supervised research in a specialized area of the health profession which makes a contribution to the field and may lead to publication. (Formerly 7760:699)

Exercise Science/Exercise Physiology (EXER)

EXER 125 Introduction to Exercise Science (1 Unit)

Overview for becoming a fitness professional. Information concerning choosing a career, national certification and professional organizations will be provided. (Formerly 5550:125)

EXER 150 Concepts in Health & Fitness (3 Units)

Introduction to basic health and fitness concepts and related topics. Attention will be given to individual fitness programs emphasizing such topics as aerobic and anaerobic exercises, muscle fitness, flexibility, nutrition, managing stress, and assessment methods and procedures. (Formerly 5550:150)

EXER 201 Kinesiology (3 Units)

Prerequisites: BIOL 200, [BIOL 201 or BIOL 202], BIOL 203. Application of basic principles of anatomy and mechanics to human movement. Three hours lecture with practical application and demonstrations. (Formerly 5550:201)

EXER 220 Health Promotion and Behavior Change (3 Units)

Prerequisite: EXER 150. Course will translate theories of behavioral science to equip health professionals with the knowledge and skills necessary to facilitate the initiation and adherence of physical activity and related health behaviors in individuals and groups. (Formerly 5550:220)

EXER 240 Principles of Sports Medicine (3 Units)

Prerequisites: [BIOL 200, BIOL 201, BIOL 202, and BIOL 203] or [ANAT 206, ANAT 207, ANAT 210, and ANAT 211]. This course is an introduction to sports medicine and corrective exercise principles and techniques. The class will include lecture content, access to NASM content, as well as laboratory activities. (Formerly 5550:240)

EXER 275 Clinical Assessment & Evaluation Lower Extremity (3 Units)

Prerequisites: [BIOL 200, BIOL 201, BIOL 202, and BIOL 203] or [ANAT 206, ANAT 207, ANAT 210, and ANAT 211], and EXER 240. This course will prepare the student to perform lower extremity assessment and evaluation using lecture and laboratory knowledge and skill. The NASM CES skills for evaluation and assessment will be a component of this course. (Formerly 5550:275)

EXER 300 Physiology of Exercise for the Older Adult (3 Units)

Prerequisite: EXER 302. Analysis of physiological effects of exercise on the elderly. Exercise programs adaptable for use by persons working with elderly. Three hours lecture. (Formerly 5550:300)

EXER 302 Physiology of Exercise (3 Units)

Prerequisites: [BIOL:200, BIOL:201, BIOL:202, and BIOL:203] or [ANAT:206, ANAT:207, ANAT:210, and ANAT:211] and admission to an exercise science major. Course will present basic and applied science that describes, explains and uses the body's response to exercise and adaptation to exercise training. Course includes lecture and laboratory. (Formerly 5550:302)

EXER 327 Exercise Leadership (3 Units)

Prerequisite: EXER 302. Students learn principles of teaching safe and effective exercises designed to enhance physical fitness. Course will assist students in preparing for a group exercise certification. (Formerly 5550:327)

EXER 330 Exercise and Weight Control (3 Units)

Prerequisite: EXER 302. This course will provide an overview of the epidemiology, pathophysiology, disease implications, underlying etiologic factors and preventive and therapeutic interventions for obesity. The course will introduce different theories and treatments of obesity, assessment of obesity, dietary habits, and physical activity interventions. Students will examine the importance of healthy weight management through physical activity and diet across the lifespan. An overview of eating disorders and nutritional ergogenic aids will be presented. Course will also include an overview of the role of the exercise physiologist in diagnosis and treatment of weight management. (Formerly 5550:330)

EXER 342 Clinical Assessment & Evaluation Upper Extremity (3 Units)

Prerequisites: [BIOL 200, BIOL 201, BIOL 202, and BIOL 203] or [ANAT 206, ANAT 207, ANAT 210, and ANAT 211], and EXER 240. This course is a component of the Sports Medicine Minor. It is designed to integrate the clinical assessment of the upper extremity. Students will gain knowledge, skills, and abilities in assessment, evaluation, and the National Academy of Sports Medicine (NASM) Corrective Exercise Specialist (CES) principles. (Formerly 5550:342)

EXER 352 Strength & Conditioning Fundamentals (3 Units)

Prerequisites: [BIOL:200 and BIOL:201 and BIOL:202 and BIOL:203] or [ANAT:206 and ANAT:210 and ANAT:207 and ANAT:211]. This course is designed to provide students with theoretical and practical knowledge of the physiological, biomechanics and administrative aspects of designing and supervising strength and conditioning programs for various populations. (Formerly 5550:352)

EXER 400 Musculoskeletal Anatomy I: Upper Extremity (3 Units)

Prerequisites: [BIOL:200 and BIOL:202] or [ANAT:206 and ANAT:207]. This course includes lecture/laboratory activities to provide the student a comprehensive learning experience in upper extremity musculoskeletal anatomy. (Formerly 5550:400)

EXER 401 Musculoskeletal Anatomy II: Lower Extremity (3 Units)

Prerequisites: [BIOL 200 and BIOL 202] or [ANAT 206 and ANAT 207]. Pre/Corequisite: EXER 201. This course includes lecture laboratory activities to provide the student a comprehensive learning experience in lower extremity musculoskeletal anatomy. (Formerly 5550:401)

EXER 403 Exercise Testing (3 Units)

Prerequisite: EXER 302. This course will cover knowledge and skills necessary to conduct and interpret fitness and clinical exercise testing. EKG interpretation is emphasized in this course. (Formerly 5550:403)

EXER 404 Exercise Prescription (3 Units)

Prerequisite: EXER 403. This course is designed to prepare the exercise science student to include people with all medical and physical backgrounds in physical fitness. It is imperative that students can safely and effectively modify an existing fitness program to enable individuals with or without special conditions to participate-without changing the quality or nature of the activity. (Formerly 5550:404)

EXER 406 Advanced Strength and Conditioning (3 Units)

Prerequisite: EXER 352. Strength and conditioning programs for heterogeneous populations. The course covers high-level sport specific exercise prescriptions that aids injury prevention and performance enhancement. (Formerly 5550:406)

EXER 410 Exercise in Special Populations (3 Units)

Prerequisites: EXER 302 and EXER 403. This course will provide an overview of the epidemiology, pathophysiology, disease implications, underlying etiologic factors and discuss preventative and therapeutic interventions for a multitude of special populations. This course will introduce different theories, and exercise prescription methods to be implemented in "real life" experiences. (Formerly 5550:355)

EXER 411 Health & Wellness Coaching (4 Units)

Prerequisite: Departmental permission. This course meets the National Board of Health and Wellness Coaching's (NBHWC) published standards for health and wellness coach training programs and meets partial requirements for national certification exam eligibility. The course will facilitate the development of skills in coaching techniques based on behavior change theories and models, including establishing a positive client-centered approach, exploring client values and strengths, and cultivating client's intrinsic motivation to make lasting lifestyle changes.

EXER 412 General Medical Aspects (3 Units)

Prerequisites: [BIOL 200 and BIOL 202] or [ANAT 206 and ANAT 207]. This course covers topics relevant to students who are preparing to be health care practitioners of physically active individuals. The course material covers common systemic disease pathology including characteristics of diseases, diagnostic and laboratory testing, and clinical decision-making tools with respect to general medical conditions. The material is presented in a systematic manner using a problem-based learning approach. Students will gain clinical reasoning and problem-solving skills with course activities such as labs, evidence-based practice, and current medical information. (Formerly 5550:412)

EXER 418 Cardiorespiratory Function (3 Units)

Prerequisite: EXER 302. This course is designed to study the normal structure and function of the respiratory system and how it is affected by different types of disease. (Formerly 5550:418)

EXER 426 Nutrition for Sports (3 Units)

This course will provide an explanation of the consumption, absorption, and recommendation for diet of athletes and the physically active individual. (Formerly 5550:426)

EXER 430 Senior Honors Project: Exercise Science (1-6 Units)

Prerequisite: Senior standing in Honors Program. (May be repeated for a total of six credits) Carefully defined project demonstrating originality and sustained inquiry. (Formerly 5550:430)

EXER 438 Cardiac Rehab Principles (3 Units)

Prerequisite: EXER:302. Pre/Corequisite: EXER:403. This course will teach students the core competencies for cardiac rehab professionals, based upon the American Association of Cardiovascular and Pulmonary Rehabilitation Specialists (AAVCPR). (Formerly 5550:438)

EXER 440 Injury Management for Teachers & Coaches (2 Units)

Prerequisites: PHED 211. This course challenges the student to understand ways to provide and care for the safety of individual they teach or coach. (Formerly 5550:440)

EXER 445 Therapeutic Exercise & Rehabilitation (3 Units)

Prerequisites: [BIOL 200, BIOL 201, BIOL 202, and BIOL 203] or [ANAT 206, ANAT 207, ANAT 210, and ANAT 211]. This course will allow students to use knowledge and skills from other minor courses as well as the National Academy of Sports Medicine (NASM) Corrective Exercise Specialist (CES) knowledge and skills to create exercise and rehabilitation programming. (Formerly 5550:445)

EXER 449 Organization & Administration for Health Care Professionals (3 Units)

Prerequisites: Senior level status and permission only. This class is a requirement for Athletic Trainers and Exercise Science majors. This class presents the skills necessary for supervising a health care facility. (Formerly 5550:449)

EXER 460 Practicum in Exercise Science (1-6 Units)

Prerequisites: Senior standing in the School of Exercise and Nutrition Sciences. Supervised practical experience with personnel in a discipline or profession related to exercise science. May be repeated for a maximum of 12 credits. (Formerly 5550:460)

EXER 465 Psychology of Injury Rehabilitation (2 Units)

Prerequisites: BIOL 200, BIOL 201, BIOL 202, and BIOL 203. This course will address the cognitive and affective aspects of injury and rehabilitation of injury. Specifically the stages of rehabilitation and techniques to aid in the rehabilitation process. (Formerly 5550:465)

EXER 470 Injury Pathology & Therapeutic Interventions (3 Units)

Prerequisites: BIOL 200, BIOL 201, BIOL 202, and BIOL 203. This course will discuss common musculoskeletal pathology and surgical procedure associated with a physically active population. (Formerly 5550:470)

EXER 480 Special Topics: Exercise Science (1-4 Units)

Prerequisite: Admission into College of Health and Human Sciences. (May be repeated with a change in topic) Special topics in exercise science presented. May be repeated with change in topic. (Formerly 5550:480)

EXER 485 Exercise Science Capstone (2 Units)

Prerequisites: EXER:302 and EXER:403. The course will provide structured experiences to improve the knowledge, skills and abilities of an entry level exercise physiologist. This course will supplement existing coursework by addressing gaps in learning competencies towards being a successful exercise professional. A review of certification materials is also an important component of the course. (Formerly 5550:485)