Human Sciences

The Master of Science in Human Sciences in the College of Health and Human Sciences offers a broad, interdisciplinary program, preparing students for careers in exercise, nutrition, recreation, and sport professions. The program leads to a Master of Science in Human Sciences degree with three concentrations in Exercise Science, Nutrition and Dietetics*, and Sport and Recreation Studies. In addition, the fourth concentration is an Interdisciplinary concentration that allows students to create a program of study specific to their career goals.

Students must complete a minimum of 30 credit hours including a research core, a professional development course, and concentration-specific courses. The research core requires 3 credit hours of research methods, 3 credit hours of statistics or analytics, and 3-6 credit hours of a culminating project. For the culminating projects students will choose from one of four options: thesis, research paper, professional development project, or internship. If the thesis or research project option is selected, submission of the completed paper must comply with the rules of the Graduate School. Additional requirements for the degree are specific to the respective concentrations of Exercise Science, Nutrition and Dietetics, Sport and Recreation Studies, and Interdisciplinary. All students must maintain a minimum 3.0 (4.0 point scale) grade point average and earn a C or better in all graduate-level classes to be eligible to graduate.

All students must submit a Program of Study with a Graduate Faculty member in the first semester of graduate school. All Program of Study forms will be approved by the Graduate Program Committee prior to the beginning of the second semester of graduate school.

Master of Science (M.S.) in Human Sciences

Required Courses

Human Sciences Core (10 - 13 credit hours)

- KIN 500: Research Methods (3 CH)
- PH 513: Analytics (3 CH)
- Variable: Culminating Project (3-6 CH)
- SHUS 503: Human Sciences Seminar (1 CH)

Professional Development (choose 1-3 credit hour course)

- FN 581: Nutrition Seminar (1 CH)
- PH 506: Communicating Public Health (3 CH)
- PH 508: Leadership in Public Health (2)

Select One Of The Following Concentrations:

Exercise Science Concentration  (12-15 credit hours of KIN graduate courses; an additional 3-6 credit hours of approved courses are also required)

Interdisciplinary Concentration  (15-18 credit hours of human sciences approved course work)

*Nutrition and Dietetics Concentration (15-18 credit hours)
1. Nutrition & Dietetics: 12 credit hours from approved FN courses and additional 3-6 elective credit hours are also required.


The Master of Science Degree in Human Sciences with a concentration in Nutrition and Dietetics is coordinated with the Dietetic Internship Program. The curriculum is designed to provide advanced study in nutrition and dietetics and provide a minimum of 1000 hours of supervised practice (dietetic internship). Students who successfully complete the M.S. in Human Sciences’ coursework and a minimum of 1000 hours of the accredited dietetic internship must be verified by the program director to then be eligible to take the registration examination for dietitians. The Accreditation Council for Education in Nutrition and Dietetics (ACEND®) sets Standards of Education for entry-level dietetics education. ACEND® is the only accrediting agency for dietetics education programs recognized by the United States Department of Education (USDE). Continued recognition by the USDE since 1974 affirms that ACEND® is a reliable authority as to the quality of dietetics education program that it accredits. Programs accredited by ACEND® meet the education requirements established by Commission of Dietetic Registration (CDR). The Dietetic Internship program at SIU has been granted accreditation through 2028 by ACEND®. To be eligible for admission into the program, students need a Verification Statement for having completed a Didactic Program in Dietetics issued by an ACEND®-accredited program director. Admission to the Dietetics Internship program is separate from admission to the SIU Graduate School, please see the Dietetic Internship Coordinator for information on admission to this program.

Sport and Recreation Administration Concentration  (15-21 credit hours of KIN, REC, or other approved courses)

Accelerated Master's Program

The accelerated M.S. in Human Sciences allows motivated and high achieving students to complete a program leading to completion of an undergraduate degree and Master of Science degree in Human Sciences in five years in a specific concentration area (e.g., Exercise Science, Nutrition, Sport & Recreation Studies). Nine credit hours are double counted toward an undergraduate and a master’s degree. Students will apply for the accelerated program in their junior year.

Human Sciences Courses

FN515 - Energy and Protein Utilization (Same as ANS 515) Energy and protein utilization including digestion, absorption, and metabolism as related to mammalian physiology. Prerequisite: course in organic chemistry. Credit Hours: 3

FN516 - Minerals and Vitamins (Same as ANS 516) Basic and applied principles of mineral and vitamin metabolism. Emphasis on metabolic functions, reaction mechanisms and interrelationships. Prerequisite: course in organic chemistry. Credit Hours: 3

FN520 - Advanced Medical Nutrition Therapy I This is the first in a 2-course sequence of the in-depth study of the application of nutrition to the management of disease states with emphasis on current treatment and complex metabolic abnormalities. Prerequisite: HND 470 with a C or better or transfer equivalent. Credit Hours: 3

FN530 - Advanced Nutritional Assessment and Education Community assessment methods, specifications or particular tools used and how these tools can be applied to particular conditions of concern in community nutrition. The methods of education for individuals and populations using dietary, biochemical, anthropometrics and physical assessment data will be taught. Restricted to major or consent of instructor. Credit Hours: 3

FN540 - Community and Public Health Nutrition This course provides a comprehensive introduction to community and public health nutrition focusing on the health of communities and nations, the most significant public health nutrition programs, nutrition surveillance systems and interventions, practices and processes of local and global food markets, global food systems and legislative and regulatory policies.
The course will be structured upon the use of a socioecological framework, examining multiple levels of influence on dietary intake, food choices and related health incomes. Credit Hours: 3

**FN574 - Advanced Medical Nutrition Therapy II** This is the second in a 2-course sequence of the in-depth study of the application of nutrition to the management of disease states with emphasis on current treatment and complex metabolic abnormalities. Prerequisite: FN 520 with a grade of B- or better. Credit Hours: 3

**FN580A - Nutrition Practicum in the Community-Clinical Rotation** Designed to provide practicum experiences in dietetics for students completing the Master's in Food and Nutrition. Restricted to Food and Nutrition majors or consent of instructor. Credit Hours: 3

**FN580B - Nutrition Practicum in the Community-Management Rotation** Designed to provide practicum experiences in dietetics for students completing the Master's in Food and Nutrition. Restricted to Food and Nutrition majors or consent of instructor. Credit Hours: 3

**FN580C - Nutrition Practicum in the Community-Public Health Nutrition Rotation** Designed to provide practicum experiences in dietetics for students completing the Master's in Food and Nutrition. Restricted to Food and Nutrition majors or consent of instructor. Credit Hours: 3

**FN581 - Dietetic Internship Prep Class** This course is for one credit hour. It is designed to discuss current topics and literature in dietetics, nutrition, medical nutrition therapy, nutrition programs, and other related topics. Graduate Seminar provides a forum for student and faculty presentations, and review of current research efforts. This course encourages integration of the knowledge gained from the didactic and experiential learning prior to food service management, medical nutrition therapy, and community nutrition practicum experiences. This course also provides graduate students an opportunity to further develop and strengthen their skills in organization, preparation and presentation of scientific information relevant to nutrition and/or foods to an informed audience of students and faculty as well as constructively evaluate their peers' presentations. This course prepares Dietetic Interns to meet ACEND Core Competencies. Restricted to graduate students in Food and Nutrition. Credit Hours: 1

**FN590 - Readings in Food and Nutrition** Individual readings in food and nutrition under graduate faculty guidance. Special approval needed from the instructor. Credit Hours: 1-3

**FN591 - Nutrition Experiential Learning** This course will provide nutrition experiential learning by providing hands-on and simulated experiences. This course will provide the students the ability to practice approaches and interventions as a part of interdisciplinary care to create integrated care plans. Restricted to Food and Nutrition majors or consent of instructor. Credit Hours: 1-3

**FN592 - Global Research in Agriculture** Research interest in animals unique to certain regions of the world is a growing field to graduate students interested in world sustainable agricultural practices. This class is designed for students interested in taking research based information and skills from Southern Illinois University and applying it to projects with animals native to certain regions of the world to improve productivity and sustainability. This course provides graduate students interested in global and sustainable research the opportunity to conduct their research and training on regional animals not traditionally found in North America (eg. camels, water buffalo, kangaroo,... etc). Credit Hours: 1-3

**FN593 - Individual Research** Investigation of a problem in food and nutrition under the supervision of an approved graduate faculty member. Graded S/U only. Credit Hours: 1-3

**FN599 - Thesis** Credit is given for a Master's thesis when it is accepted and approved by the thesis committee. Graded S/U only. Credit Hours: 1-6

**FN601 - Continuing Enrollment** For those graduate students who have not finished their degree programs and who are in the process of working on their dissertation, thesis, or research paper. The student must have completed a minimum of 24 hours of dissertation research, or the minimum thesis, or research hours before being eligible to register for this course. Concurrent enrollment in any other course is not permitted. Graded S/U or DEF only. Credit Hours: 1

**KIN400 - Psychology of Injury** This course will explore the theory and research related to the psychological aspects of injury and injury rehabilitation. The focus is on theory and application. Case
studies will be used to explore assessment and intervention approaches relevant for different levels of athletic training, sports medicine and sport psychology professionals. Credit Hours: 3

**KIN402 - Exercise Programming for Cancer Survivors and Caregivers** The primary goal of this course is to give both graduate and undergraduate students the necessary tools to successfully prescribe and administer safe and effective exercise programs and assessments for cancer survivors and caregivers as a staff member for the Strong Survivors Exercise and Nutrition Program for Cancer Survivors and Caregivers. The course will also give students a baseline of knowledge that will help prepare them to sit for cancer exercise trainer certification exams. Special approval needed from the instructor. Credit Hours: 2

**KIN408 - Advanced Exercise Prescription** Advanced exercise prescription provides an analysis of physical fitness as it relates to the total well-being of the individual. The course contains specific units on fitness parameters, hypokinetic disease, stress, current levels of physical fitness, but emphasizes the creation of training programs. The course contains exercise prescription for healthy, at risk, overweight and chronically ill populations. Prerequisite: KIN 382 and KIN 320. Credit Hours: 3

**KIN416 - Introduction to Team Building** The purpose of this course is to acquaint students, teachers, coaches and administrators with the “team building model”. The course will focus on icebreakers, trust and communication initiatives, problem solving skills and processing. The goal of this introductory course is for the participants to become familiar and acquire team building skills, to develop a workable team building model and initiate the plan in the classroom or workplace. Credit Hours: 3

**KIN420 - Advanced Exercise Physiology** The general physiological effects of motor activity upon the structure and function of body organs; specific effect of exercise on the muscular system. Prerequisite: PHSL 201 and KIN 320. Credit Hours: 3

**KIN421 - Principles of Skeletal Muscle Action** The neural, physiological and mechanical basis of skeletal muscle action and plasticity in relation to the expression of strength and power. Prerequisite: PHSL 201 and KIN 320. Credit Hours: 3

**KIN428 - Physical Activity and Exercise for Older Adults** (Same as GRON 428) This course is designed to introduce the student to physical changes of the older person with reference to activity and exercise and to teach the student about rational activity and exercise programs for the older person with consideration of the care and prevention of typical injuries that may occur with such programs. Credit Hours: 3

**KIN464 - Legal and Ethical Aspects of Sport** This course provides an extensive overview of legal and ethical issues in sport. This course introduces the different fields of law and issues (Federal Amendment, torts, contracts, labor relations) as they relate to sport. In addition, this course examines the basic philosophical issues concerning ethics and moral reasoning and how these issues relate to sport. Furthermore, this course is designed to help future sport administrators develop an ethical decision-making process. Topics discussed include the concepts of morality, personal philosophy regarding social responsibility, theories of ethics, professional code of ethics, etc. Credit Hours: 3

**KIN493A - Individual Research-Dance** The selection, investigation, and writing of a research topic under supervision of an instructor. Written report required. Special approval needed from the instructor. Credit Hours: 2-4

**KIN493B - Individual Research-Kinesiology** The selection, investigation, and writing of a research topic under supervision of an instructor. Written report required. Special approval needed from the instructor. Credit Hours: 2-4

**KIN493C - Individual Research-Measurement** The selection, investigation, and writing of a research topic under supervision of an instructor. Written report required. Special approval needed from the instructor. Credit Hours: 2-4

**KIN493D - Individual Research-Motor Development** The selection, investigation, and writing of a research topic under supervision of an instructor. Written report required. Special approval needed from the instructor. Credit Hours: 2-4
KIN493E - Individual Research-Physiology of Exercise The selection, investigation, and writing of a research topic under supervision of an instructor. Written report required. Special approval needed from the instructor. Credit Hours: 2-4

KIN493F - Individual Research-History and Philosophy The selection, investigation, and writing of a research topic under supervision of an instructor. Written report required. Special approval needed from the instructor. Credit Hours: 2-4

KIN493G - Individual Research-Motor Learning The selection, investigation, and writing of a research topic under supervision of an instructor. Written report required. Special approval needed from the instructor. Credit Hours: 2-4

KIN493H - Individual Research-Psycho-social Aspects The selection, investigation, and writing of a research topic under supervision of an instructor. Written report required. Special approval needed from the instructor. Credit Hours: 2-4

KIN493I - Individual Research-Sport Management The selection, investigation, and writing of a research topic under supervision of an instructor. Written report required. Special approval needed from the instructor. Credit Hours: 2-4

KIN494A - Practicum in Kinesiology Supervised practical experience at the appropriate level in selected kinesiology activities in conjunction with class work. Work may be in the complete administration of a tournament, field testing, individual or group work with special populations, administration of athletics or planning kinesiology facilities. Special approval needed from the instructor. Credit Hours: 1

KIN494B - Practicum in Kinesiology Supervised practical experience at the appropriate level in selected kinesiology activities in conjunction with class work. Work may be in the complete administration of a tournament, field testing, individual or group work with special populations, administration of athletics or planning kinesiology facilities. Special approval needed from the instructor. Credit Hours: 1

KIN500 - Techniques of Research Study of research methods and critical analysis of research literature specifically applied to the areas of sport exercise and motor performance. Special approval needed from the instructor. Credit Hours: 3

KIN501 - Foundations of Sport and Fitness Management An introduction to broad concepts and issues regarding the management of health clubs, corporate fitness programs; and various components of amateur and professional sport organizations. Students will investigate foundational aspects of sport and fitness management, examine requirements for operating successful programs, and gain insight into various career opportunities. Credit Hours: 3

KIN502 - Methods of Interview Research This course will familiarize students with the theory and techniques of interview research and demonstrate the application of this research method to practice. Students will engage in a group interview project focusing on a selected issue and an individual project utilizing interview research in their specialty area. No prerequisites required. Credit Hours: 3

KIN503 - Seminar in Kinesiology Making a systematic analysis of problems and issues encountered in the conduct of kinesiology. Selection of a problem or issue that is a concern to Kinesiology and suggestion of solutions. Credit Hours: 2

KIN504 - Psychological Aspects of Sport This course presents the theoretical and empirical foundations of sport psychology. Operating from a conceptual rather than an applied framework, this class develops an understanding of social psychological phenomena and processes related to participation in sport and physical activity (e.g., personality, anxiety, arousal, achievement motivation, social facilitation, aggression, pro-social behavior, group dynamics). Credit Hours: 3

KIN505 - Topical Seminar in Kinesiology Students may concentrate on different topics each semester dependent upon both the interests of the students and the expertise of the graduate faculty. Special approval needed from the instructor. Credit Hours: 3

KIN506 - Medical Aspects of Exercise This course is a presentation/discussion style course in which students will examine and discuss the principles of exercise testing and prescription for individuals from a wide variety of disease/disability backgrounds. Discussion will include issues of caution/contradiction
for various forms of exercise, the role of exercise as a therapeutic modality and exercise as a means of preventive medicine. Prerequisite: KIN 420. Credit Hours: 3

**KIN507 - Organizational Behavior in Sport** This course provides students with an examination of fundamental theories and practices related to behavior of individual and groups in sport organizations. The focus will be on the practical application of the theories to the actions of sport and physical activity managers. Special emphasis will be on: ethics in organizations, leadership, managerial decision making, motivation, organizational commitment, and managing a diverse work force. Credit Hours: 3

**KIN508 - Administration of Athletics** Designed to present a broad view of the role, structure and governance of interscholastic and intercollegiate athletics programs. This course will enable students to develop and comprehend current knowledge, theories and practices in athletic management which operate within a framework of state and national governance policies and rules. Credit Hours: 3

**KIN510 - Motor Development** In-depth study of the development of gross motor skills from infancy through adolescence, the biological and environmental variables that affect motor development, and individual differences in attaining motor proficiency. In addition, selected current issues in motor development will be examined. No prerequisite. Credit Hours: 3

**KIN511 - Biomechanical Analysis of Human Movement** Biomechanical concepts will be reviewed, as well as discussion concerning tissue mechanics, and the integration of the neural control of movement. Importance will be placed on application of mechanical principles when analyzing basic human movements. Includes completion of a topical research paper. Prerequisite: KIN 321 or equivalent. Credit Hours: 3

**KIN512 - Biomechanics of Human Motion** Methods of data collecting and analyzing the biomechanics of human motion under normal and pathological conditions are covered. Students complete a biomechanical study for a one segment motion. Credit Hours: 3

**KIN513 - Social Aspects of Sport and Physical Activity** This course presents the theoretical and empirical foundations of sport sociology. It is a survey course designed to introduce you to a variety of topics concerned with sociological aspects of sport and physical activity. A research-based approach is used to explore the relationship of sport to various social institutions, as well as the role of social processes in sport and physical activity contexts. Credit Hours: 3

**KIN514 - Research and Practice in Applied Sport Psychology** This course examines current research and practice in applied sport psychology. Emphasis will be placed on moving from theory into practice on sport-specific individual differences, motivational approaches, and interventions. Credit Hours: 3

**KIN515 - Body Composition and Human Physical Performance** Physical dimensions of the human body as they influence motor performance and are modified by protracted physical exercise. Prerequisite: KIN 420 or equivalent. Credit Hours: 3

**KIN517 - Athletic and Kinesiology Facilities Design, Construction, and Maintenance** This course examines the principles and states of planning to manage an Athletic and Kinesiology facility. Basic principles of design, construction, maintenance and how to manage facilities based upon program characteristics. Credit Hours: 3

**KIN520 - Metabolic Analysis of Human Activity** Metabolic principles pertinent to human physical performance with emphasis on sport, exercise and occupational activity analysis. A detailed study of oxygen utilization, oxygen debt, mechanisms of oxygen transport as they relate to physiological homeostasis in localized and total body motor activity. Emphasis on the laboratory study of aerobic and anaerobic performance. Prerequisite: KIN 420 or equivalent. Credit Hours: 3

**KIN525 - Motor Learning-Theories of Research** This course will provide a theory and research foundation for understanding motor skill acquisition and factors that influence the learning of motor skills. This foundation is important to develop research that will increase understanding of motor skill learning, and to design effective practice conditions that enhance learning. Various topics related to the cognitive and motor processes influencing motor skill learning will be discussed. Credit Hours: 3

**KIN530 - Exercise Psychology** This course explores the theory and research related to the psychological and social aspects of exercise and how exercise may impact the individual's psychological
health and behavior. The focus is on theory and application. It covers theories and models of exercise behavior, psychosocial outcomes of exercise, social factors in exercise behavior, and physical activity interventions. Credit Hours: 3

**KIN540 - Sport Promotions** This course provides the theoretical foundation of promotions specific to the sport industry. It will include professional applications to profit and non-profit sport organizations. Credit Hours: 3

**KIN550 - Legal Aspects of Sport and Physical Activity** A course designed to acquaint student with legal research and the role that law plays in governing the kinesiology, sport and fitness industries. The student will actively research various theories of law and how they affect the nature of kinesiology, sport fitness activity, the participants and consumers. An additional focus will be on specific situations that give rise to injury and subsequent law suits. Credit Hours: 3

**KIN555 - Internship in Sport Management** The internship is a culminating experience directly related to the student's intended employment or area of interest. It will, therefore, normally be taken after the predominance of course work is completed. The internship may be completed in any appropriate setting as judged by the faculty associated with the area of sport management. All conditions of placement, conduct and evaluation of the internship will be under the jurisdiction of the appropriate faculty. Graded S/U only. Special approval needed from the instructor. Credit Hours: 1-6

**KIN560 - Gender and Sport: Sociological and Psychological Perspectives** (Same as WGSS 560) This course explores psychological and sociological dimensions underlying the concept of gender and critically examines how gender relates to sport and physical activity. Students will be introduced to non-traditional as well as traditional research that addresses the issue of gender in various physical activity contexts. Credit Hours: 3

**KIN580 - Financial Aspects of Sport** The primary goal of this course is to provide students with a basic knowledge and understanding of the principles, processes, and strategies related to the financial aspects of sport organizations, which consist of professional sport franchises, college athletic departments, community recreation programs, etc. The focus will be on the many conventional and innovative revenue acquisition methods applicable to sport oriented organizations. In addition to the basic accounting concepts and budgeting techniques, this course will address current topics in the field of sport financing, including: tax support, municipal and corporate bonds, economic impact analysis, fundraising, licensing, ticket sales, concessions, and corporate sponsorships. Credit Hours: 3

**KIN590 - Readings in Kinesiology** Supervised readings in selected subjects. Special approval needed from the instructor. Credit Hours: 1-4

**KIN592 - Research in Kinesiology** Plan, conduct, and report assigned research studies. Masters students may take up to three credit hours. Doctoral students must enroll for a minimum of six credit hours. Graded S/U only. Prerequisite: KIN 500 or equivalent. Special approval needed from the instructor. Credit Hours: 2-8

**KIN599 - Thesis** Graded S/U. Prerequisite: KIN 500 or equivalent. Credit Hours: 1-6

**KIN601 - Continuing Enrollment** For those graduate students who have not finished their degree programs and who are in the process of working on their dissertation, thesis, or research paper. he student must have completed a minimum of 24 hours of dissertation research, or the minimum thesis, or research hours before being eligible to register for this course. Concurrent enrollment in any other course is not permitted. Graded S/U or DEF only. Credit Hours: 1

**KIN699 - Postdoctoral Research** Must be a Postdoctoral Fellow. Concurrent enrollment in any other course is not permitted. Credit Hours: 1

**PH402 - Death Education** Designed to prepare educators to conduct learning experiences about death and dying in a variety of school, college, medical care, and community settings. Stress will be placed on developing brief, functional curricula and usable, imaginative, teaching-learning materials and on evaluating resource materials for use in educating at various levels of maturity. Credit Hours: 3

**PH403 - Health Advocate Training** Provides students with knowledge and skills in the areas of peer health education, health advocacy, and referral. Instruction includes health care information from a
wellness point of view. Prepares students for practicum in health advocate program. Credit will not count toward a master's degree in health education. Special approval needed from the instructor. Credit Hours: 3

PH407 - Substance Use Prevention Designed to prepare educators to plan, implement and evaluate substance use prevention programs. Emphasizes incidence/prevalence, etiology, risk factors, short- and long-term effects of substance use. Key elements of effective prevention programs are reviewed. Meets requirements of Illinois state law concerning drug education. Credit Hours: 3

PH410 - Human Sexuality (Same as WGSS 411) Provides detailed information on dimensions of sexuality; characteristics of healthy sexuality; anatomy and physiology; gender roles; relationships; sexually transmitted infections/diseases; contraceptive issues and concerns; sexual victimizations; and sexuality through the life cycle. Credit Hours: 3

PH411 - Emergency Medical Technician in the Wilderness Placement of trained emergency medical technicians into a wilderness situation and having them adopt previously learned skills and newly developed skills. Prerequisite: PH 334 or PH 434. Credit Hours: 6

PH412S - Driving Task Analysis: An Introduction An introductory course that deals with the highway transportation system, traffic problems, the driving task, perception and implementation of the driver education classroom program. Observation of a teaching environment is included. A valid driver's license is required. Credit Hours: 3

PH413S - Injury Prevention and Safety Introduces the concepts and topics of injury prevention and safety. Course areas include: school, farm, consumer, fire, home, traffic, occupational, recreational, and disaster. Credit Hours: 3

PH414 - Sexuality Education Focuses on knowledge/skills needed to address complex issues of sexuality education. Discussion will include challenges/resources for all health education settings and related disciplines. Purposes/goals, the nature of sexuality education teachers/learners, and "best practice" will be covered. Emphasis on developing competencies essential for professional practice. Credit Hours: 3

PH415 - Health Counseling This course teaches basic communication skills and intervention strategies for helping people make positive health related lifestyle changes. It is not a course in therapeutic counseling; it focuses on helping average people to function in the healthiest way possible. Credit Hours: 3

PH430 - Health and Injury Control in a Work Setting (Same as IMAE 430) Assesses the health and injury control programs present in a work setting. Emphasis given to employee programs in health, wellness, and injury control that are effective. Field trips to work sites are included. Credit Hours: 3

PH434 - Advanced First Aid and Emergency Care Meets the needs of those in positions where advanced first aid and emergency care is required. A nationally recognized First Aid and CPR "First Responder" certification may be obtained with successful completion of the course. Purchase of first aid kits and protective equipment are necessary. Prerequisite: PH 334 or consent of instructor. Students will be required to pay a laboratory fee of $20. Credit Hours: 4

PH435 - Work Site Safety and Health Evaluation This course covers methods of inspecting and evaluating health and safety hazards at a work site including analysis of specific job assignments. It also introduces the student to injury and incident investigation techniques. The course will include hands-on work site evaluation. Credit Hours: 2

PH440 - Health Issues in Aging (Same as GRON 440) Course content includes demographic trends; physiological changes associated with aging; health care and consumer challenges; cultural differences; psychological effects of aging; housing; long-term care; retirement; care giving; and formal, informal, and community-based support systems. Credit Hours: 3

PH441 - Women’s Health The course deals with a wide variety of health concerns of American women as consumers in the current health marketplace. Major categories of topics include health products, health services, and sources of health information of particular interest to women. Emphasis is also
placed on current health related issues of women. The major purpose of the course is to provide a basis for informed decision-making by the female consumer. Credit Hours: 3

**PH442S - Developing Vehicle Operational Skills: Driver Education Laboratory Experiences**

Learning activities will focus on preparing the prospective driver educator to conduct activities that develop operational skills for a novice driver. Emphasis is placed on laboratory organization and administration, maintaining a learning environment, developing laboratory instructional modules, and conducting learning experiences. Prerequisite: PH 412S. Credit Hours: 3

**PH443S - Developing Classroom Skills: Driver Education Classroom Experience**

Learning activities will focus on preparing the prospective driver educator with the skills to teach in the driver education classroom with application to classroom organization, maintaining a safe learning environment, developing instructional modules, and conducting learning experiences. Prerequisite: PH 412S with a grade of C. Credit Hours: 3

**PH445 - Advanced Driver Education Instructor Training**

Prepares prospective instructors of advanced driving techniques. Emphasis is placed upon safe driving practices, vehicle dynamics, emergency vehicle operation, in-car response to simulated driving emergencies, and instructional techniques. Special approval needed from the instructor. Credit Hours: 3

**PH461 - Health Education Workshop**

A different focal theme each year; e.g., mood modifying substances, ecology, human sexuality, emotional and social health dimensions. Information, ideas, and concepts are translated into teaching-learning materials and approaches; continuing opportunity for interaction between prospective and experienced teachers. Credit Hours: 1-12

**PH470S - Highway Safety as Related to Alcohol and Other Drugs**

Relationship between alcohol and other drugs and traffic accident causes. A review of education programs designed to minimize drug related accidents. Restricted to advanced standing or consent of instructor. Credit Hours: 3

**PH471 - Public Health Instructional Strategies**

This course is designed for graduate students who are teaching assistants in Public Health. The purpose of the course is to enhance professional skills of those who are responsible for teaching health education, general education, and first aid. Credit Hours: 2

**PH476 - Stress Management**

A study of the physiological, emotional and sociological stressors and their underlying mechanisms in states of disease and health. Particular emphasis is placed upon prevention and control of stress via self assessment techniques and proficiency in self control techniques such as biofeedback, autogenic training, meditation and progressive muscle relaxation. Credit Hours: 3

**PH480S - Traffic and Driver Education Program Development**

Acquaints students with curriculum innovation, current philosophy, learning and teaching theories, and instructional designs. Students will develop learning packages and modules. Prerequisite: PH 443S or consent of instructor. Credit Hours: 3

**PH484 - Preventing Violence in Educational Settings**

Designed to prepare educators, administrators, and other professionals to plan, implement, and evaluate violence prevention, conflict resolution, and crisis intervention programs in educational settings. Incidence/prevalence, etiology, and risk/protective factors related to youth violence will be examined. Current theories and models related to program planning and implementation will be applied to design coordinated, integrated school/community programs. Based on current research, key elements of effective curricula and other program components will be reviewed. Credit Hours: 3

**PH490A - Field Experiences in Schools, Community Health**

Field observation, participation, and evaluation of current school or community health education or safety programs in agencies relevant to student interests. Prerequisite: all required health education courses. Special approval needed from the instructor. Credit Hours: 2-12

**PH490B - Advanced Field Experience in School, Community Health or Injury Prevention Education**

Advanced field observation, participation and evaluation of current school or community health education or injury prevention programs in agencies relevant to student interests. Prerequisite: grade of B or better in PH 490A. Special approval needed from the instructor. Credit Hours: 2-6
PH491 - Health Teaching/Learning: School and Community  Teaching and learning strategies at secondary school levels and in other community group settings. Opportunities to examine and observe a variety of educational strategies applicable to health education. Credit Hours: 3

PH496 - Industrial Hygiene  Provides a background in the recognition, evaluation, and control of toxic materials and hazardous physical agents in the work environment. Special approval needed from the instructor. Credit Hours: 4

PH499 - Rx: Education in Health Care Settings  Designed for members and potential members of the health care team to explore educational concepts and strategies applicable to a variety of health care settings. Includes rights and responsibilities of consumer and professional, determinants of health behavior, contrasting models of health care, communication skills, media and materials and planning, implementing and evaluating educational programs. Open to medical and dental personnel, nurses, health educators, dietitians, therapists, pharmacists, social workers, and related professionals. Credit Hours: 3

PH505 - Foundations of Public Health Knowledge  This course provides an overview of the interdisciplinary field of public health. History and ongoing evolution of public health services and delivery systems in the U.S., essentials of public health practice, and federal, state, and local public health functions are considered. Emerging health problems, changing population dynamics, and global health context will be examined. Credit Hours: 3

PH506 - Communicating Public Health  This course assists students in developing skills and identifying opportunities for communicating public health messages through the preparation of technical papers for public health, other health science-related, area-specific, and cross-disciplinary journals, as well as communicating other professional and lay publications. Additional skills relate to the development of press releases, letters to the editor, preparation of posters, development of oral presentations for diverse audiences, estimating readability of written materials, assessing health literacy, preparing pamphlets and other written materials, designing messages for distribution by mass media, including but not limited to social media and social marketing. Credit Hours: 3

PH507 - MPH Experiential Learning Seminar  This course will introduce Master of Public Health (MPH) students to public health resource identification and utilization to understand and engage in public health fieldwork and service. MPH students will develop a professional portfolio to build upon through the tenure of the program. Credit Hours: 1

PH508 - Leadership in Public Health  This course provides an overview of the core principles in Public Health Leadership. Major theories and concepts in leadership and methods for applying these to public health will be discussed. Credit Hours: 2

PH512 - Public Health Program Planning  This course will present theories/models for health promotion program planning and implementation in community/public health settings. Steps to program planning, including: logic models, needs assessment, community organizing, evaluation/assessment, and social marketing will be addressed. Credit Hours: 3

PH513 - Public Health Analytics I  An introduction to biostatistics; examination of theories of population projections; collection, organization, interpretation, summarization, and evaluation of data relative to public health happenings with emphasis on graphic presentation. Credit Hours: 3

PH514 - Public Health Analytics II  The application of technology to engage communities and individuals in behavioral and environmental change processes. The course will focus on the use of technology to describe the magnitude of health problems and their sources; analyze risk factors; identify community strengths from which strategies may be defined and tools created to intervene, prevent problems, and promote health and well-being; and continuously evaluate, refine, and implement what works. Prerequisite: PH 513 with a grade of B or better or consent of instructor. Credit Hours: 3

PH515 - Contemporary Issues in Health-Related Fields  This course is designed to expand the conceptual framework for health education research, practice, and professional development by examining contemporary issues in health and related fields. It includes reading, analyzing, interacting,
and reflecting about selected critical issues and future concerns as they relate to the health education profession as well as individual, community, and societal health-related needs. Credit Hours: 3

**PH520 - Special Topics/Independent Study** An area of study to be determined by students in consultation with the health education faculty that goes beyond the current health education course offerings. 1-3 credits; may be repeated twice for maximum of 6 hours. Special approval needed from the instructor. Credit Hours: 1-3

**PH525 - Applied Theoretical Foundations of Public Health** Examines health-related motivation and behavior through the study of relevant psychological, sociological, and educational theory and research. Emphasis is on application of behavioral and behavior-change theories and constructs in designing effective health education and promotion programs. Credit Hours: 3

**PH526 - Evidence-based Research and Evaluation in Public Health** Introduction to research and evaluation. Includes survey and analyses of health testing and research/evaluation procedures, uses and limitations of knowledge and attitude tests, behavioral inventories, checklists, questionnaires, interviews, and other techniques. Credit Hours: 1-3

**PH530S - Research in Traffic Safety** A study of unique problems related to traffic safety and a review and evaluation of contemporary studies. Restricted to graduate standing or consent of instructor. Credit Hours: 3

**PH532 - Public Health Administration: Principles and Practices** This course is designed to provide a broad overview of key administrative issues in public health, including building and sustaining a public health workforce, disease control and prevention, emergency preparedness, legal issues, and financial considerations. Attention will be given to the application of management concepts and principles related to public health organizations at the national, state, and local levels. Credit Hours: 3

**PH533B - Foundations of Public Health II** This course will provide a broad overview of quantitative research in public health, including research designs, research questions, assumptions, limitations, data collection methods, sampling, instrument development, and data analysis and interpretation. Discussion of health-related theories/models and ethical considerations will be integrated throughout the course. Credit Hours: 4

**PH536 - Professional Preparation in Public Health** Considers national, state and local factors influencing professional preparation, accreditation and certification processes. Emphasis upon influences of official and non-official agencies. Historical perspective, the present status, and future directions of the profession. Credit Hours: 3

**PH541 - Issues in Health Care** Examination of current and continuing issues in the provision, administration, financing, and regulation of health care services. Prerequisite: PH 583 with grade of C or better or consent of instructor. Credit Hours: 3

**PH550S - Current Developments in Traffic and Safety Education** Current problems, trends and research studies in traffic and safety education are reviewed, critiqued and evaluated. Restricted to graduate standing or consent of instructor. Credit Hours: 3

**PH555S - Traffic Safety Management** Course deals with highway safety legislation and other acts related to traffic safety. Application of safety management techniques, procedures and structure of federal and state agencies are emphasized. Special approval needed from the instructor. Credit Hours: 3

**PH561 - Advanced Public Health Workshop** A different focal theme each year; e.g., technology and health education; coordinated school health programs; social marketing; mental health. Information, ideas and concepts are translated into teaching/learning materials and approaches; continuing opportunity for interaction between prospective and experienced health educators. Credit Hours: 1-12

**PH571 - Professional Development for Teaching Assistants** This course is designed to assist graduate teaching assistants to develop and improve skills necessary for performing their responsibilities. Emphasis will be placed on teaching/learning processes; classroom strategies and skill development; responding to diverse student populations; communication across the curriculum; teaching outside the classroom; identifying campus and community resources, support services, media, and technologies;
evaluation and assessment. Restricted to graduate teaching assistants. Special approval needed from the instructor. Credit Hours: 3

**PH583 - U.S. Health System: Organization, Delivery, and Policy** This course examines dynamics and trends in organization, financing, and delivery of health care in the United States. Specific current health policy issues and the political, social, and economic forces that affect them are analyzed. Practical implications for public health professionals will be considered. Credit Hours: 3

**PH585 - Global Health Issues** This course is designed to introduce students to current health concerns in economically developing nations by examining socioeconomic, cultural, and political issues impacting health. Basic epidemiologic principles will be used to study disease and adverse health conditions in developing countries as well as understand and critique possible intervention strategies. Implications for health educators working in international settings will be discussed. Credit Hours: 3

**PH588 - Current Issues in Environmental Health** This course will address core principles and concepts of environmental health disciplines, analyze environmental factors impacting human and ecological health, and explore environmental health tools through their application to current issues of concern to government agencies. Credit Hours: 3

**PH592 - Practicum in Safety and Industrial Health** Students are assigned full-time to a safety agency or industry for experience in either safety or industrial health. Restricted to those specializing in safety industrial health. Special approval needed from the instructor. Credit Hours: 8

**PH593 - Principles of Epidemiology in Public Health** This course will present principles and practices related to the study, prevention and control of health-related conditions in the human population. Emphasis will be placed on understanding the principal concepts of epidemiology, including aspects of disease distribution, epidemiologic methods, risk assessment of disease and injury, descriptive and analytic epidemiologic methods and study designs, and application of epidemiologic data to the prevention and control of disease and injury. Format for the class will include lecture and small group seminars. Credit Hours: 3

**PH597 - Seminar in Public Health** Advanced graduate students discuss individual health projects and present research problems. Each will present a dissertation prospectus. The course will cross two semesters. The first semester will require class attendance. The second will require attending dissertation prospectus and defense meetings and writing individual reports. Prerequisite: PH 533B. Credit Hours: 2

**PH598 - Grant Writing in Public Health** Consideration is given to funding sources, proposal guidelines, procedures for support, budgetary requirements and evaluation procedures. Students examine different types of funded projects, develop a research proposal and analyze the art of grantsmanship and political action. Credit Hours: 3

**PH599 - Thesis** Credit Hours: 1-6

**PH599A - MPH Applied Practical Experience (APE) Seminar** The purpose of the MPH Applied Practice Experience Seminar is to prepare students for their applied practice experience and for a future as a public health professional. This seminar serves as one of the prerequisites for enrolling in the MPH Applied Practical Experience (PH 599B). Through this semester, students will prepare the components of the applied practice experience learning agreement. This seminar provides students with useful skills needed to complete an applied practice experience and to work in a public health or community setting. Students will have a specific topic, project(s) and/or site in mind prior to taking this course, which is typically taken in the second semester of Year 1. Prerequisite: PH 507 with a grade of B or better. Credit Hours: 1

**PH599B - MPH Applied Practical Experience (APE)** Master of Public Health (MPH) students will demonstrate competency attainment through applied practice experiences. All MPH students are required to complete a 240-hour experience with a community-based component. The Applied Practice Experience (APE) provides a practical experience in a public health setting where students apply skills and knowledge they gained during didactic courses to attain at least five competencies. Dual degree students have opportunities to integrate and apply their learning from both degree programs through applied practice experiences. Students meet the APE requirements by supporting the Program's mission.
PH599C - MPH Integrative Learning Experience  During the final semester(s) of study, students are required to complete an integrative learning experience (ILE) that demonstrates synthesis of foundational and program competencies. ILEs require two products: 1) a high-quality written product and 2) a presentation on the ILE. Prerequisite: PH 599B with a grade of B or better. Credit Hours: 3

PH600 - Dissertation  Credit Hours: 1-16

PH601 - Continuing Enrollment  For those graduate students who have not finished their degree programs and who are in the process of working on their dissertation, thesis or research paper. The student must have completed a minimum of 24 hours of dissertation research, or the minimum thesis, or research hours before being eligible to register for this course. Concurrent enrollment in any other course is not permitted. Graded S/U or DEF only. Credit Hours: 1

PH603 - Ph.D. Seminar in Population Health  This course is a discussion of current topics and literature in Population Health. Provides a forum for PhD students and faculty presentations and review of current research efforts. Encourages integration of content knowledge to prepare for careers in the field. Restricted to admission to PhD program in Population Health or consent of instructor. Credit Hours: 1

PH699 - Postdoctoral Research  Must be a Postdoctoral Fellow. Concurrent enrollment in any other course is not permitted. Credit Hours: 1

REC401 - Fundamentals of Environmental Education  (Same as AGRI 401 and FOR 401) An experiential course designed to help students interested in conservation education understand and apply teaching principles for both inside and outside the classroom. The class includes certification in a nationally recognized environmental education program, and is suitable for students in natural resource, agriculture, recreation and education fields. Requires field trip transportation fee and supplemental expenditures not to exceed $25 per course registration. Offered alternate (odd) years. Credit Hours: 3

REC404 - Foundations of Recreational Therapy  An introductory course in the practice of recreational therapy. Concepts, history, and growth of RT as a healthcare profession, theories, treatment approaches in RT, an overview of the APIE process, and other professional issues will be introduced. This course covers the NCTRC exam content area of Foundation Knowledge. This course is ONLINE. Credit Hours: 3

REC405 - RT Implementation: Cognitive, Intellectual, and Developmental Disabilities  This course is designed to provide students with the skills to implement recreational therapy interventions for individuals with cognitive, intellectual, and developmental disorders. Students will learn how to complete activity assessments, select evidence-based interventions, and facilitate interventions. Travel to local agencies may be required. This course covers the NCTRC exam content area of implementation. Credit Hours: 3

REC406 - RT Implementation: Physical Disorders & Chronic Illness  This course is designed to provide students with the skills to implement recreational therapy interventions for individuals with physical disorders or chronic illness. Students will learn how to complete activity assessments, select evidence-based interventions, and facilitate interventions. Travel to local agencies may be required. This course covers the NCTRC exam content area of implementation. Credit Hours: 3

REC407 - RT Implementation: Psychiatric & Behavioral Disorders  This course is designed to provide students with the skills to implement recreational therapy interventions for individuals with psychiatric or behavioral disorders. Students will learn how to complete activity assessments, select evidence-based interventions, and facilitate interventions. Travel to local agencies may be required. This course covers the NCTRC exam content area of implementation. Credit Hours: 3

REC423 - Environmental Interpretation  (Same as AGRI 423 and FOR 423) Principles and technique of natural and cultural interpretation. Two hours lecture, three hours laboratory. Prerequisite: ten hours biological science or ten hours of recreation. Requires field trip transportation fee not to exceed $40 per course registration. Credit Hours: 3

REC425 - Planning and Design of Recreational Facilities  An examination of major design considerations for a variety of recreation facilities such as recreation centers, recreation sport complexes,
parks, visitors centers, and natatoriums. Special attention will be given to long range facility planning. Prerequisite: REC 300, REC 301, REC 303. Restricted to senior or graduate standing. Credit Hours: 3

**REC426 - Outdoor Adventure Land Based Pursuits** This course provides a combination of theoretical background and technical aspects of outdoor adventure based pursuits in a vertical environment and will emphasize hands-on skill development such as movement on rock, rope systems, anchors, rappelling and belaying, protection placement, and lead climbing philosophy. Taught biennially. Course fee and field trips required. Fee: $100. Credit Hours: 3

**REC427 - Outdoor Adventure Water Based Pursuits** This course provides a combination of theoretical background and technical aspects of outdoor adventure based pursuits in a water environment and will emphasize hands-on skill development such as equipment nomenclature, strokes, rescues, and reading/recognizing water features. Taught biennially. Course fee and field trips required. Fee: $100. Credit Hours: 3

**REC428 - Outdoor Adventure Challenge Based Pursuits** This course provides a combination of theoretical background and technical aspects of outdoor adventure based pursuits in a challenge environment and will emphasize hands-on skill development spotting/belaying, equipment management, program design/sequencing, facilitation strategies, and course design and maintenance. Taught biennially. Course fee and field trips required. Fee: $100. Credit Hours: 3

**REC429 - Planning, Logistics, & Risk Management in Outdoor Recreation** This course provides an experiential approach in addressing the planning, logistics, and safety and risk management needed to design, implement, and prepare outdoor adventure based expeditions. Fulfills portions of the Wilderness Education Association's Planning and Logistics/Safety and Risk Management core competencies. Taught Biennially. Credit Hours: 3

**REC430 - Outdoor Living Skills** This course provides a foundation to basic outdoor living skills in backcountry environments. Topics include basic camping skills, equipment and clothing selection, weather, health and sanitation, travel techniques, navigation, and decision making. Course fees and field trip required. Course fee: $100. Credit Hours: 3

**REC431 - Expedition Leadership** This course focuses on professional leadership of highly adventurous wilderness trips. Emphasis is on development of leadership through sound judgment, decision-making, and teaching in a backcountry/wilderness environment on an extended expedition. Fulfills the Wilderness Education Association's Education and Leadership core competency. Taught biennially. REC 429 & REC 430 recommended before taking REC 431. Course fee and field trips required. Trip fees not to exceed $750. Credit Hours: 3

**REC432 - Environmental Issues and Ethics in Outdoor Recreation** This course will address the management and issues related to outdoor recreation and the importance of developing a land ethic that will ensure future use of outdoor resources. The history, background, and development of the recreation ecology movement will be addressed. Fulfills the WEA's Environmental Integration core competency and LNT's Master Educator curriculum. Taught Biennially. Course fee and field trip required. Fee: $35. Credit Hours: 3

**REC433 - Adventure Education** This course provides a practical and theoretical background of adventure education. Topics that will be addressed and applied include the use of challenge and adventure in various situations, experiential education, activity sequencing, utilizing peak experiences, leadership styles and development, debriefing, and framing. Taught Biennially. Field trips required. Credit Hours: 3

**REC434 - Wilderness First Responder** This course addresses the practice of advanced medical techniques in a wilderness environment. The Wilderness First Responder is recognized as the industry standard for those who work in the backcountry or remote environments. Wilderness First Responder certification offered with successful completion. Course fee and field trips required. Fee: $30. Credit Hours: 3

**REC435 - Advanced Outdoor Leadership** This course focuses on advanced leadership techniques for outdoor leaders. Emphasis is on evaluation and assessment of leaders in backcountry/wilderness
environments. Utilizes the Wilderness Education Association's assessment and evaluation curriculum. Field trip required. Special approval needed from the instructor. Credit Hours: 3

**REC436 - Introduction to Adventure Therapy** This course introduces the theory and practice of adventure therapy programming utilized by recreation professionals, social workers, psychologists, addiction counselors, and healthcare professionals. Topics include: history of adventure therapy, current trends and issues, risk management, facilitation techniques, and program assessment. Credit Hours: 3

**REC445 - Outdoor Recreation Management** This course addresses the philosophies and principles underlying the growth and development of outdoor recreation management. Outdoor recreation is examined in terms of historical values, long range planning, site design, visitor needs, and environment impact. Course fee and field trip required. A fee of up to $14 may be required. Credit Hours: 3

**REC446 - Backcountry and Wilderness Trail Stewardship** This course provides a hands-on approach to aspects of volunteer trail stewardship in planning, implementing, and evaluating basic and advanced trail features and building projects. Rules, regulations, and potential hazards associated with working, traveling, and camping in the backcountry will be addressed. Students will be exposed to trail building tools and their proper usage and care. Field trips required. Special approval needed from the instructor. Credit Hours: 3

**REC460 - Administration of Recreational Therapy Services** Administration of recreation therapy programs in a variety of services areas. Topics will include: the US Healthcare system, organizational planning, personnel management, and advocacy for the profession. This course includes the NCTRC exam content areas of Administration of TR/RT Service and Advancement of the Profession. Prerequisite: REC 404 with a grade of C or better or concurrent enrollment. Credit Hours: 3

**REC461 - Assessment and Documentation for Recreational Therapy** This course is designed to provide students with the skills to assess client needs, design treatment plans, and complete documentation as an entry level recreational therapist (RT). Students will learn how to complete assessments of clients in a variety of treatment settings, write client goals and objectives, develop treatment plans, and write discharge plans. This course covers the NCTRC exam content areas of Assessment Process, and Documentation. Prerequisite: REC 404 with a grade of C or better. This course is ONLINE. Credit Hours: 3

**REC465 - Human Resources for Recreation Professions** An examination of current human resources topics in the recreation industry. Topics will include: planning and analysis, staffing, compensation, employee motivation, employee training, employee development, employee relations and compliance. Credit Hours: 3

**REC466 - Community Recreation** Designed to examine current administrative topics in public and nonprofit recreation. Topics include: history and philosophical foundations of public parks, administrative practices, planning, budgeting, working with boards and commissions, community engagement, land acquisition, programming, and current trends in community recreation. This course is ONLINE. Credit Hours: 3

**REC467 - Commercial Recreation** Trends in commercial recreation will be addressed in this class. Topics include: challenges and constraints in commercial recreation, starting a commercial recreation enterprise, financial management, marketing, operations, programming, and future trends in commercial recreation. This course is ONLINE. Credit Hours: 3

**REC468 - Campus Recreation** This course focuses on the administration, organization, planning, implementation, and evaluation of programs and facilities in the campus recreation field. Specific topics addressed include historical and philosophical aspects, administrative practices, competitive and non-competitive programming, future trends and issues, budgeting, public relations, professional associations, and examination of individual characteristics of campus recreation. This course is ONLINE. Credit Hours: 3

**REC500 - Modern Concepts of Leisure** This course explores the meaning of leisure, recreation, and play from a philosophical and psychological perspective. The historical and contemporary relationships among work, time, lifestyles and leisure are analyzed. In addition, the course attempts to develop
students' viewpoints toward these topics in order that they formulate a philosophy of leisure. Required of all majors. Credit Hours: 3

**REC501 - Personnel in Leisure Services** This course will examine administrative issues regarding personnel in leisure delivery systems. Topics include: leadership theory, selection and training, legislation, collective bargaining, motivation, performance appraisal, power and gender. Credit Hours: 3

**REC502 - Revenue Production for Leisure Service Organizations** An integrative view of revenue production for leisure service organizations. Numerous practices of generating income, such as fees and charges, facility rental, bonds, investments, and public/private cooperative development will be examined in relationship to their ability to aid an organization in achieving its stated objectives. Credit Hours: 3

**REC503 - Managing and Marketing Leisure Services** An examination of the critical functions of a manager in public and private leisure service organizations. Particular topics include goal and policy development, ethics, risk management, fiscal management, and facility operations. Special attention is given to the leisure service managers role in marketing recreation. Credit Hours: 3

**REC508 - Trends & Global Issues in Leisure Services** This course provides an examination of current issues, trends, and professional concerns in the recreation industry. Topics include: professional issues, programming trends, legislative issues, and other topics. Credit Hours: 3

**REC524 - Professional Skills in Recreational Therapy** This course focuses on professional skills necessary at the administrative and supervisory level. The NCTRC exam content area of advocacy for the profession will also be addressed. Specific focus areas will include recreational therapy education, practice, and research. Credit Hours: 3

**REC525 - Program Design in Recreational Therapy Practice** Planning, organizing, selecting, evaluating, and adapting activities to a variety of treatment settings. Topics include the TRAM model, comprehensive program design, specific program design, and WPO for the recreational therapy department. Credit Hours: 3

**REC526 - Recreational Therapy Practice Settings** This course focuses on current trends and issues in recreational therapy practice settings. Special attention will be on RT protocol development. This course includes the NCTRC content area of implementation. Credit Hours: 3

**REC550 - Research in Recreation** This course focuses on research concepts and methods (quantitative and qualitative). Students will complete a critical analysis of significant research in recreation or therapeutic recreation, and will develop a tentative research proposal. Prerequisite: REC 500. Credit Hours: 3

**REC560A - Seminar in Recreation-Park & Community** Major issues and trends in recreation. Credit Hours: 3

**REC560B - Seminar in Recreation-Campus Recreation** Major issues and trends in recreation. Credit Hours: 3

**REC560C - Seminar in Recreation-Commercial Recreation** Major issues, trends, and cultural, economic, and social significance. Prerequisite: REC 500 or consent of department. Credit Hours: 3

**REC565 - Environmental Issues in Outdoor Recreation** Seminar in environmental issues and problems that affect outdoor recreation. Content includes history of the environmental movement in relation to outdoor recreation and specific problems affecting recreation on national parks, forest, and wildlife refuges. Special approval needed from the instructor. Credit Hours: 3

**REC575 - Project in Recreation** A project is a culmination of the Master's degree. It can be either a practice-based service product or an applied research study that does not require a thesis format. Examples of projects may include grant proposals, program development, curriculum development, landscape design, manuals, visual productions, web page development, organizing special events or fund raising. Special approval needed from the instructor. Credit Hours: 3
REC580 - Readings in Leisure and Recreation  Readings in selected topics in leisure and recreation under staff supervision. Not more than three hours may count toward Master's degree. Special approval needed from the instructor. Credit Hours: 1-3

REC596 - Internship in Recreation  A course on professional development in the recreation industry. This course is a combination of academic assignments and experiential learning. Students will be under the joint supervision of the academic course instructor, and a recreation professional. For graduate credit only. Special approval needed from the instructor. Credit Hours: 3

REC597 - Internship in Recreational Therapy  An introduction to professional development in recreational therapy. This course is required for eligibility to sit for the NCTRC exam. This course is a combination of academic assignments and experiential learning. It is supervised by a CTRS at the site AND at the academic institution. For graduate credit only. Prerequisite: majority of RT coursework completed; Special approval needed from the department. Credit Hours: 3

REC599 - Thesis  Selecting, investigating, and writing on a research topic under the personal supervision of a member of the department. Designed to help the student to develop ability to design, conduct, analyze and interpret research related to recreation and therapeutic recreation. Special approval needed from the department. Credit Hours: 3

REC601 - Continuing Enrollment  For those graduate students who have not finished their degree programs and who are in the process of working on their dissertation, thesis, or research paper. The student must have completed a minimum of 24 hours of dissertation research, or the minimum thesis, or research hours before being eligible to register for this course. Concurrent enrollment in any other course is not permitted. Graded S/U or DEF only. Credit Hours: 1

SHUS503 - Seminar in Human Sciences  A discussion of current topics and literature in Human Sciences. Provides a forum for student and faculty presentations and review of current research efforts. Encourages integration of content knowledge to prepare for careers in the field. Restricted to major or consent of instructor. Credit Hours: 1

SHUS594 - Professional Development Project  Supervised independent work leading to the production of a professional development project that can be utilized in the student's professional career. The exact nature of the project is to be determined by the student and the respective graduate advisor. An additional graduate faculty member in the student's area of study also must approve the project before the student begins work. Graded S/U only. Special approval needed from the instructor. Credit Hours: 3

Human Sciences Faculty

Graduate Faculty in Food and Nutrition

AbuGhazaleh, Amer A., Professor, Ph.D., South Dakota State University, 2002; 2004. Dairy nutrition.
Banz, William J., Professor and Chair, Ph.D., University of Tennessee, 1995; 1995. Human nutrition, nutritional physiology.
Null, Dawn C., Assistant Professor, Ph.D., R.D.N., Southern Illinois University, 2012; 2017. Human nutrition, food insecurity, environmental nutrition.

Emeriti Faculty

Ashraf, Hea-Ran Lee, Professor, Emerita, Ph.D., Iowa State University, 1979; 1980.
Endres, Jeannette M., Professor, Emerita, Ph.D., St. Louis University, 1972; 1975.
Roth, Sara Long, Professor, Emerita, Ph.D., Southern Illinois University Carbondale, 1991; 1990.
Welch, Patricia, Professor, Emerita, Ph.D., Southern Illinois University, 1982.
Graduate Faculty in Kinesiology

Anton, Philip M., Associate Professor, Ph.D., University of Northern Colorado-Greeley, 2006. Exercise and cancer rehabilitation.
Becque, M. Daniel, Associate Professor, Ph.D., University of Michigan, 1988. Exercise physiology.
Knapp, Bobbi, Associate Professor, Ph.D., University of Iowa, 2008. Gender and sport.
Park, Meungguk, Associate Professor, Ph.D., The Ohio State University, 2005. Sport marketing and promotion.
Partridge, Julie, Professor, Ph.D., University of Northern Colorado, 2003. Sport and exercise psychology.
Quisenberry, Sean, Assistant Professor, Ph.D., University of Tennessee, Knoxville, 2020. Human movement and biomechanics.
Wallace, Juliane, Associate Professor, Director, Ph.D., Iowa State University, 2004; 2004. Cardiovascular exercise physiology.
Yoh, Taeho, Professor, Ph.D., Florida State University, 2001. Sport marketing, corporate social responsibility, and sport and recreation for STEM education (STREAM).

Emeriti Faculty

Ackerman, Kenneth, Assistant Professor, Emeritus, M.A., Michigan State University, 1959.
Blackman, Claudia J., Assistant Professor, Emerita, M.S.Ed., Southern Illinois University, 1968.
Brechtelsbauer, Kay, Assistant Professor, Emerita, Ph.D., Southern Illinois University Carbondale, 1980.
Good, Larry, Associate Professor, Emeritus, Ed.D., Temple University, 1968.
Knowlton, Ronald, Professor, Emeritus, Ph.D., University of Illinois, 1961.
Vogler, E. William, Professor, Emeritus, Ed.D., University of Utah, 1980.
West, Charlotte, Professor, Emerita, Ph.D., University of Wisconsin, 1969.
Wilson, Donna, Associate Professor, Emerita, M.F.A., University of Oklahoma, 1975.

Graduate Faculty in Recreation Professions

Colson, Tina, Senior Lecturer, M.S., Southern Illinois University, 2004.
Kim, Jun, Assistant Professor, Ph.D., University of Utah, 2013; 2015.

Emeriti Faculty

Glover, James M., Associate Professor, Emeritus, Ph.D., University of Maryland, 1980; 1984.
Glover, Regina B., Associate Professor, Emerita, Ph.D., University of Maryland, 1983; 1983.
McEwen, Douglas N., Professor, Emeritus, Ph.D., Michigan State University, 1973; 1975.

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