

## KINESIOLOGY AND RECREATION (KNR)

250 McCormick Hall, (309) 438-8661  
KinRec.IllinoisState.edu

**School Director:** Dan Elkins. Office: 250 McCormick Hall.

**Graduate Program Director:** Noelle Selkow.

**Graduate Faculty:** Achen, Amorose, Begalle, Beggs, Brown, Coleman, Elkins, Garrahy, Henninger, Hurd, Jagodinsky, Lacy, Lagally, Laudner, Laurson, Mainieri, McLoda, Mulvaney, Pierce, Schlatter, Selkow, Smith, Stanek, Thomas, Torry, Warren, Williams.

### Programs Offered

M.S. in Kinesiology and Recreation includes sequences in Applied Community and Economic Development, Athletic Training, Biomechanics, Exercise Physiology, Physical Education Pedagogy, Psychology of Sport and Physical Activity, Recreation Administration, and/or Sport Management.

### Program Requirements

The Master of Science degree is a 33 hour program and consists of a 6 hour research core (KNR 497, 445\*), 21-24 hours of additional graduate-level coursework, and either 6 hours of Master's Thesis (KNR 499) or a minimum of 3 hours of a culminating experience (KNR 400 or 498). Since sequences are available in Kinesiology and Recreation, a plan of study is individually developed through faculty-student advisement. The plan of study must include 24 hours of Kinesiology and Recreation courses (including the research core). All master's degree sequences require a minimum of 50 percent of the non-thesis credit hours applied to the degree to be 400-level courses or above. Specific requirements for each sequence are detailed below.

\*The 6 hour research core for the Physical Education Pedagogy sequence consists of KNR 418 and 497.

### Applied Community and Economic Development Sequence:

The Applied Community and Economic Development (ACED) sequence is for returned Peace Corps Volunteers and students with equivalent domestic or international experience with other agencies.

This 33 hour sequence requires:

- 6 hour core: KNR 445 & 497
- 12 hours: KNR 381, 400, 466 or 475, and 473 or 474;
- 15 hours: ACED core ECO/POL/SOC 478, ECO 490A04, POL/SOC 470, and POL/SOC 477; KNR

498A30 or 498A90 (5 hours--the sequence ends with a required 11-month internship arranged through the Stevenson Center)

### Athletic Training Sequence:

This 33 hour sequence requires:

- 6 hour core: KNR 445 & 497
- 18 hours: KNR 484, 486, 487, 490, 494, 496
- 3-6 hours in a cognate area approved by the athletic training sequence coordinator
- a culminating experience consisting of either a 6-hour thesis or 3 hours of independent study

### Biomechanics Sequence:

This 33 hour sequence requires:

- 6 hour core: KNR 445 & 497
- 12 hours: KNR 342, 352, 482 & 490
- 6-9 hours in a cognate area approved by the biomechanics faculty advisor
- a culminating experience consisting of either a 6-hour thesis or 3-6 hours of independent study and/or professional practice

### Exercise Physiology Sequence:

This 33 hour sequence requires:

- 6 hour core: KNR 445 & 497
- 15 hours: KNR 415, 451, 457, 480, 481
- 6-9 hours in a cognate area approved by the exercise physiology faculty advisor
- a culminating experience consisting of either a 6-hour thesis or 3-6 hours of independent study

**Physical Education Pedagogy Sequence:** All courses for the physical education graduate sequence will be delivered 100% online. This degree does not lead to teacher licensure or a teaching endorsement in physical education.

This 33 hour sequence requires:

- 6 hour core: KNR 418 & 497
- 12 hours: KNR 417, 419, 421, 422
- 9-12 elective hours approved by the Physical Education sequence coordinator (i.e. KNR 423, 425, 426, 427, 428)
- a culminating experience consisting of either a 6-hour thesis or professional practice or 3-6 hours of independent study

**Psychology of Sport and Physical Activity Sequence:**

This 33 hour sequence requires:

- 6 hour core: KNR 445 & 497
- 9 hours: KNR 405, 406, 416
- 6-12 hours in a cognate area approved by the psychology of sport and physical activity faculty advisor
- a culminating experience consisting of either a 6-hour thesis or professional practice or 3-6 hours of independent study

**Recreation Administration Sequence:**

This 33-36 hour sequence requires:

- 6 hour core: KNR 445 & 497
- 21 hours: KNR 453, 466, 472, 473, 474, 475, 476
- 3 hours in a content area approved by the recreation administration faculty advisor
- a culminating experience consisting of either a 3-6 hour professional practice, a 6 hour thesis, or 3 hours of independent study.

**Sport Management Sequence:**

This 33 hour sequence requires:

- 6 hour core: KNR 445 & 497
- 21 hours: KNR 430, 440, 453, 455, 462, 466, 467
- 0-3 hours in a cognate area approved by a sport management faculty advisor
- a culminating experience consisting of either a 6-hour thesis or 3 hours of independent study or 3-6 hours of professional practice

**Kinesiology and Recreation Courses****305 BIOMECHANICS OF EXERCISE AND PHYSICAL ACTIVITY**

**3 sem. hrs.**

Analysis of exercise and physical activity based on principles of anatomy and mechanics of motion. Materials charge optional. Prerequisites: Major or minor only; KNR 164 and 282 or consent of the instructor.

**317 SOCIOLOGY OF SPORT**

**3 sem. hrs.**

The social institution of sport is examined using such sociological concepts as social organization, culture, socialization, deviance, social stratification, minority groups and collective behavior. Also offered as SOC 317.

**342 OCCUPATIONAL BIOMECHANICS**

**3 sem. hrs.**

Application of biomechanical principles to the solution of problems related to the interaction of the worker with the workplace. Materials charge optional. Prerequisite: KNR 282 or consent of the instructor.

**352 QUANTITATIVE ANALYSIS OF BIOMECHANICS**

**3 sem. hrs.**

Amplification of kinematics and kinetics of human movement; introduction to high speed videography, biomechanics instrumentation and computer analysis. Materials charge optional. Prerequisite: KNR 282 or consent of the instructor.

**353 BASIC ELECTROCARDIOGRAPHY AND CLINICAL EXERCISE TESTING**

**3 sem. hrs.**

Theory and application of electrocardiographic analysis in the functional and diagnostic assessment of individuals. Materials charge optional. Prerequisites: KNR 181, 182, 280, or consent of the instructor.

**361 PATHOLOGY AND PHARMACOLOGY IN ATHLETIC TRAINING**

**3 sem. hrs.**

Relevant biomedical conditions and afflictions and associated pharmacological interventions for the athletic training student. Materials charge optional. Prerequisites: KNR 181, 182. A minimum of 60 hours completed or consent of the instructor.

**381 SPECIAL STUDIES IN RECREATION, TOURISM, AND SPORT**

**1-3 sem. hrs.**

Special work in research interests of student and staff. Projects must be approved by the instructor. Multiple enrollments allowed for a maximum of 6 hours. Prerequisites: Consent of the instructor.

**400 INDEPENDENT STUDY**

**1-4 sem. hrs.**

Refer to Index for General Courses. Materials charge optional.

**405 APPLIED MOTOR LEARNING**

**3 sem. hrs.**

Motor learning and performance designed to apply theory to teaching practice in physical education. Prerequisite: KNR 257 or consent of the instructor.

**406 ADVANCED SPORT PSYCHOLOGY**

**3 sem. hrs.**

In-depth analysis and synthesis of current and foundational sport psychology topics through lectures, labs, and class projects.

**407 PSYCHOLOGY OF PHYSICAL ACTIVITY**  
**3 sem. hrs.**

Examination and analysis of theory, research, and practical applications of social-psychological principles to the promotion and maintenance of physical activity. Formerly KNR 489.38.

**408 CURRENT TOPICS IN YOUTH SPORT**  
**3 sem. hrs.**

In-depth examination and analysis of current knowledge, theory and practices related to the psychosocial development of youth in sport.

**415 EXERCISE AND CARDIORESPIRATORY FUNCTION**  
**3 sem. hrs.**

In-depth examination of effects of acute and chronic exercise on cardiorespiratory anatomy and physiology. Prerequisite: KNR 181, 182, 280, or consent of the instructor.

**416 MOTIVATION IN SPORT AND EXERCISE**  
**3 sem. hrs.**

Motivational factors affecting the performance of individuals in sport, physical education, and exercise domains will be examined. Prerequisite: Consent of the instructor.

**417 RESEARCH ON TEACHING IN PHYSICAL EDUCATION**  
**3 sem. hrs.**

Addresses research topics pertaining to teaching physical education by reading and synthesizing research for the development of a research project. Prerequisite: KNR 497 or consent of the instructor.

**418 MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION**  
**3 sem. hrs.**

Measure student learning and program effectiveness using assessment and descriptive/inferential statistics in a K-12 standards based physical education program. Not for credit if had KNR 445 STATISTICS IN APPLIED SCIENCE AND TECHNOLOGY. Prerequisites: KNR 497 or consent of the instructor.

**422 PROMOTING PHYSICAL ACTIVITY AND FITNESS EDUCATION**  
**3 sem. hrs.**

Exploration of current trends in physical activity and fitness programs and their impact on youth in various settings.

**423 SOCIOCULTURAL PERSPECTIVES IN PHYSICAL EDUCATION PEDAGOGY**  
**3 sem. hrs.**

Examination and critical analyses of research on sociocultural factors influencing the teaching-learning process in physical education settings.

**425 TECHNOLOGY INTEGRATION IN PHYSICAL EDUCATION**  
**3 sem. hrs.**

Study of teaching and learning implications while integrating technology in physical education. Design educational materials using technology.

**426 CLINICAL SUPERVISION IN PHYSICAL ACTIVITY SETTINGS**  
**3 sem. hrs.**

Evaluation of clinical supervision styles and skills. Focus on practicing clinical supervision and developing plans for teacher growth and development.

**427 AUTHENTIC ASSESSMENT IN CONTEMPORARY PHYSICAL EDUCATION PROGRAMS**  
**3 sem. hrs.**

Understanding and creating types of authentic assessment suitable for use in a K-12 physical education school setting.

**428 CONTEMPORARY TOPICS IN PHYSICAL EDUCATION**  
**3 sem. hrs.**

Addresses contemporary topics and issues pertaining to the enhancement of teaching and learning in physical education. Multiple enrollments allowed if content is different; maximum of 12 semester hours.

**430 THE SPORT INDUSTRY**  
**3 sem. hrs.**

Introduction to the sport industry with an emphasis on management principles and governance issues within sport organization.

**440 SEMINAR IN ADVANCED SPORT MARKETING AND SALES**  
**3 sem. hrs.**

Advanced marketing principles and practices with emphasis on the sales aspect of the sports industry. Prerequisite: KNR 466.

**445 STATISTICS IN APPLIED SCIENCE AND TECHNOLOGY**  
**3 sem. hrs.**

Descriptive and inferential statistics in the applied sciences; statistical analysis using current technology. Also offered as AGR/FCS/TEC 445. Prerequisite: KNR 497.

**451 LABORATORY TECHNIQUES AND CONDITIONING FOR PERFORMANCE ENHANCEMENT**  
**3 sem. hrs.**

Application of advanced laboratory techniques to assess performance potential and guide in development of specialized conditioning programs. Materials charge optional. Prerequisite: KNR 280 or consent of the instructor.

**453 FACILITY AND EVENT MANAGEMENT IN SPORT AND RECREATION****3 sem. hrs.**

Examination of practices in planning, designing, and operating facilities and events in sport and recreation.

**455 FISCAL MANAGEMENT IN SPORT AND RECREATION****3 sem. hrs.**

Fiscal management in sport and recreation industries, including financial management, economic principles, and general business and accounting concepts.

**457 LIFECOURSE EXERCISE PHYSIOLOGY****3 sem. hrs.**

Overview of the physiological effects of acute and chronic exercise on the pregnant woman, fetus, child and older adult. Prerequisite: KNR 280 is recommended.

**458 PHYSICAL ACTIVITY EPIDEMIOLOGY****3 sem. hrs.**

Overview of the general concepts of the epidemiology of physical activity, health-related fitness and disease. Materials charge optional.

**462 PRINCIPLES OF SPORT LAW****3 sem. hrs.**

Analysis of legal principles impacting organizations in sport industry, including torts, constitutional law, contracts, discrimination, and antitrust law.

**463 ADVANCED SPORT EVENT MANAGEMENT****3 sem. hrs.**

Application of sport management and marketing principles to field experience settings as students develop, plan, execute, and evaluate sport events. Prerequisite: KNR 453.

**466 MARKETING OF SPORT AND RECREATION****3 sem. hrs.**

Market research and planning, product development, promotions, media relations, and sponsorship in sport and recreation.

**467 ADVANCED TOPICS IN SPORT MANAGEMENT****3 sem. hrs.**

Intensive investigation of topics and issues affecting managers in the sport industry. Prerequisites: KNR 497; KNR 445 or concurrent registration.

**472 FOUNDATIONS OF LEISURE****3 sem. hrs.**

Introduction to the field of leisure services with an emphasis on history, governance, philosophy, and industry sectors.

**473 TRENDS AND ISSUES IN LEISURE SERVICES****3 sem. hrs.**

In-depth analysis of selected trends, issues and problems confronting leisure service and recreation practitioners in contemporary settings.

**474 CONCEPTS AND THEORIES OF LEISURE AND RECREATION****3 sem. hrs.**

An examination of concepts, theories and determinants of leisure and recreation. Application of relevant research to leisure programs and services. Prerequisite: Consent of the instructor for non-Kinesiology and Recreation majors.

**475 MANAGEMENT OF SPORT AND RECREATION****3 sem. hrs.**

Management practices and principles related to effective operation of sport and recreation delivery systems.

**476 LEADERSHIP DEVELOPMENT FOR LEISURE SERVICES PROFESSIONALS****3 sem. hrs.**

Examination and development of leadership behaviors and principles associated with effective leisure services professionals.

**480 EXERCISE AND BODY COMPOSITION****3 sem. hrs.**

Theory and practice in the assessment and interpretation of exercise and body composition including age, gender, and racial variations. Materials charge optional. Prerequisite: KNR 280 or consent of the instructor.

**481 WORK METABOLISM****3 sem. hrs.**

An investigation of the metabolic changes that occur during exercise stress in physical education and sport activities. Prerequisite: KNR 280 or consent of the instructor.

**482 ADVANCED BIOMECHANICS OF HUMAN MOVEMENT****3 sem. hrs.**

Emphasis is on problems of human movement from both theoretical and experimental aspects utilizing contemporary methodology. Materials charge optional. Prerequisite: KNR 342 or 352 or consent of the instructor.

**484 EVIDENCE-BASED SPORTS MEDICINE****3 sem. hrs.**

Introduction to clinical epidemiology and evaluation of the efficacy of prevention, diagnostic, and treatment strategies in sports medicine. Prerequisites: KNR 445 and 497.

**486 ADVANCED ASSESSMENT AND TREATMENT OF MUSCULOSKELETAL INJURIES****3 sem. hrs.**

Detailed analysis of the advanced evaluation and treatment of musculoskeletal pathologies involving the upper and lower extremities. Prerequisites: KNR 387 and 388 or consent of the instructor.

**487 ADVANCED SEMINAR IN SPORTS MEDICINE****3 sem. hrs.**

Advanced study and discussion of contemporary issues in the field of sports medicine. Formerly SPORTS MEDICINE: MEDICAL ASPECTS. Not for credit if had KNR 485.

**490 INJURY BIOMECHANICS****3 sem. hrs.**

In-depth analysis of biomechanical principles and pathomechanics related to the prevention, evaluation, and treatment of athletic related injuries. Prerequisite: KNR 282 or consent of the instructor.

**491 INTERNSHIP IN COLLEGE TEACHING IN HEALTH, KINESIOLOGY, AND RECREATION****3 sem. hrs.**

Credit in this course is given in the School of Teaching and Learning. (See TCH 491.)

**494 MODERN MANUAL THERAPY I****3 sem. hrs.**

Detailed analysis and application of manual therapy techniques for evaluating and treating myofascial restrictions. Prerequisite: Acceptance into Athletic Training Sequence or consent of the instructor.

**496 MODERN MANUAL THERAPY II****3 sem. hrs.**

Detailed analysis and application of manual therapy techniques in the evaluation and treatment of various pathologies associated with joint hypomobility. Prerequisite: Acceptance into Athletic Training Sequence or consent of the instructor.

**497 INTRODUCTION TO RESEARCH METHODOLOGY****3 sem. hrs.**

Introduction to and evaluation of research designs and published research. Enables students to improve their use and production of research.

**491 INTERNSHIP IN COLLEGE TEACHING IN HEALTH, KINESIOLOGY, AND RECREATION****3 sem. hrs.**

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**497 INTRODUCTION TO RESEARCH METHODOLOGY****3 sem. hrs.**

Introduction to and evaluation of research designs and published research. Enables students to improve their use and production of research.

**498 PROFESSIONAL PRACTICE KNR****1-9 sem. hrs.**

Refer to Index for General Courses. Materials charge optional.

**498A10 PROFESSIONAL PRACTICE IN EXERCISE SCIENCE****1-9 sem. hrs.**

Refer to Index for General Courses. Formerly PROFESSIONAL PRACTICE IN PHYSICAL EDUCATION.

**498A12 PROFESSIONAL PRACTICE IN SPORTS MEDICINE AND ATHLETIC TRAINING****1-9 sem. hrs.**

Refer to Index for General Courses.

**498A30 PROFESSIONAL PRACTICE IN PARKS AND RECREATION****1-9 sem. hrs.**

Refer to Index for General Courses. Materials charge optional.

**499 MASTER'S THESIS****1-6 sem. hrs.**

Refer to Index for General Courses.

**499A90 INDEPENDENT RESEARCH FOR THE MASTER'S THESIS FINAL TERM****1-6 sem. hrs.**

Refer to Index for General Courses.