

Kinesiology

<http://ehs.siu.edu/kinesiology/>

COLLEGE OF EDUCATION AND HUMAN SERVICES

Graduate Faculty:

Ackerman, Kenneth, Assistant Professor, *Emeritus*, M.A., Michigan State University, 1959; 1969.

Anton, Philip M., Associate Professor, Ph.D., University of Northern Colorado, 2006; 2007. Exercise Physiology.

Becque, M. Daniel, Associate Professor, Ph.D., University of Michigan, 1988; 1990. Exercise Physiology.

Blinde, Elaine M., Professor, *Emerita*, Ph.D., University of Illinois, 1987; 1987.

Brechtelsbauer, Kay, Assistant Professor, *Emerita*, Ph.D., Southern Illinois University Carbondale, 1980; 1965.

Good, Larry, Associate Professor, *Emeritus*, Ed.D., Temple University, 1968; 1967.

Knapp, Bobbi, Associate Professor, Ph.D., University of Iowa, 2008; 2009. Sport Studies.

Knowlton, Ronald, Professor *Emeritus*, Ph.D., University of Illinois, 1961; 1961.

Olson, Michael, Associate Professor, Ph.D., Louisiana State University, 2006; 2006. Biomechanics.

Park, Meungguk, Associate Professor, Ph.D., The Ohio State University, 2005; 2005. Sport Management.

Partridge, Julie, Associate Professor, Ph.D., University of Northern Colorado, 2003; 2004. Sport and Exercise Psychology.

Porter, Jared, Associate Professor, Ph.D., Louisiana State University, 2008; 2008. Motor Behavior.

Potter, Marjorie Bond, Professor, *Emerita*, Ph.D., University of Southern California, 1958; 1961.

Vogler, E. William, Professor, *Emeritus*, Ed.D., University of Utah, 1980; 2011. Physical Education Teacher Education.

Wallace, Juliane, Associate Professor, *Chair*, Ph.D., Iowa State University, 2004; 2004. Exercise Physiology.

West, Charlotte, Professor, *Emerita*, Ph.D., University of Wisconsin, 1969; 1957.

Wilson, Donna, Associate Professor, *Emerita*, M.F.A., University of Oklahoma, 1975; 1986. Dance.

Yoh, Taeho, Associate Professor, Ph.D., Florida State University, 2001; 2001. Sport Management.

Graduate courses in kinesiology are offered toward the Master of Science in Education degree with a major in kinesiology.

Two study tracks are available:

1. Sport Studies (with specializations in Sport Management, Social Psychology of Sport)
2. Exercise Science (with specializations in Biomechanics, Exercise Physiology, Motor Behavior)

Options for Sport Studies Program (37 Hours)

Requires a minimum of 31 semester hours of credit plus one of the following 6-hour options:

- Thesis — KIN 599, 6 hours
- Research Project— KIN 592, 3 hours
Additional Class, 3 hours
- Professional Development Project — KIN 594, 3 hours
Additional Class, 3 hours

- Internship — KIN 555, 6 hours

The following are required courses in Sport Studies: KIN 501, KIN 504, KIN 513, KIN 550, (or approved substitutes).

Options for Exercise Science Program (37 Hours)

Requires a minimum of 31 semester hours of credit plus one of the following 6-hour options:

- Thesis — KIN 599, 6 hours
- Research Project — KIN 592, 3 hours
- Additional Class, 3 hours

The following are required courses in Exercise Science: KIN 511, KIN 520, KIN 525, KIN 530 (or approved substitutes).

Criteria for Unconditional Admission

1. Admission to the Graduate School which requires a 2.70/4.00 for all work leading to a completed bachelor's degree and a completed application form, a resume, and a cover letter.
2. Three completed "Request for Recommendation" forms provided by the Graduate School.
3. A review of the application by the appropriate faculty and a willingness of a faculty member to serve as the program advisor for the applicant.
4. This program requires a nonrefundable application fee that must be submitted with the online application for Admission to Graduate Study in Kinesiology. Applicants must pay this fee by credit card.

A degree in Kinesiology is not required for admission into the graduate program. An individual program in Exercise Science or Sport Studies will be developed for the student. Completed applications are reviewed as they are received. Up to but not exceeding 12 hours of B grade or higher transfer credits will be considered by the department for application to the course work requirement and, for advisement purposes, should be considered during the first semester in the program.

Requirements

All students are required to take KIN 500, Techniques of Research, and a graduate class in statistical procedures. Additional requirements for the degree are specific to the respective areas of either Exercise Science or Sports Studies. All students not doing a thesis or other culminating projects must pass a comprehensive examination which may be taken after the major portion of the course work has been completed. If the research project option is selected, submission of the completed Research Project must comply with the rules of the Graduate School. If the thesis option is selected submission of the thesis will be electronic and must comply with the rules of the Graduate School.

Graduate Assistantships

A limited number of graduate assistantships are available on a competitive basis to students in a degree program. The Graduate Teaching Assistantships are for instruction in the undergraduate program and are available to applicants who have appropriate qualifications relevant to the teaching area. Applications may be obtained from the Chair of the Department of Kinesiology and they are reviewed by a committee

independently of the admissions process. In order to hold a graduate assistantship, a student must be registered as a full time student (8 hours, fall/spring; 3 hours, summer) during the semester of appointment.

Courses (KIN)

Courses in this department may require the purchase of supplemental materials.

400-3 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.

402-2 Exercise Programming for Cancer Survivors and Caregivers (Strong Survivors Staff Training) 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.

407-3 Rehabilitation of Athletic Injuries. This course provides the athletic training student with the theoretical background and practical application of principles and techniques of rehabilitation of athletic related injuries. This course also includes laboratory experiences in rehabilitation of athletic related injuries. Restricted to admission into Athletic Training Education Program or permission of instructor. Laboratory fee: \$50.

408-3 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.

416-2 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.

418-2 Administration of Aquatics. The study of comprehensive aquatic programs, their implementation and coordination.

420-3 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. Requires purchase of laboratory manual. Prerequisite: Physiology 201 and KIN 320.

421-3 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: Physiology 201 and KIN 320.

426-3 Research in Athletic Training. Specifically designed for the student who wishes to become an athletic trainer and gain knowledge in the application and current research in therapeutic modalities.

427-3 Organization and Administration in Athletic Training. This course is designed to study and discuss the concepts of organization and administration in the health care of athletes and physically active individuals. Restricted to admission into the Athletic Training Education Program or consent of instructor.

428-3 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.

493 A-I -2 to 4 Individual Research. The selection, investigation, and writing of a research topic under supervision of an instructor. (a) Dance. (b) Kinesiology. (c) Measurement. (d) Motor development. (e) Physiology of exercise. (f) History and philosophy. (g) Motor learning. (h) Psycho-social aspects and (i) Sport management. Written report required. Restriction: Consent of instructor.

494 A,B - 2 (1,1) 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. Restriction: Consent of instructor.

500-3 Techniques of Research. Study of research methods and critical analysis of research literature specifically applied to the areas of sport exercise and motor performance. Restriction: Consent of instructor.

501-3 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.

502-3 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.

503-2 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.

504-3 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).

505-3 to 12 (3 per topic) 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.

506-3 Medical Aspects of Fitness. 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.

507-3 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.

508-3 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.

510-3 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.

511-3 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.

512-3 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.

513-3 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.

514-3 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.

515-3 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.

517-3 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.

520-3 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.

525-3 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 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.

530-3 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.

540-3 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.

550-3 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.

555-1 to 6 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. Restriction: Consent of instructor.

560-3 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.

580-3 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.

590-1 to 4 Readings in Kinesiology. Supervised readings in selected subjects. Restriction: Consent of instructor.

592-2 to 8 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. Restriction: Consent of instructor.

594-3 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. Restriction: Consent of instructor.

599-1 to 6 Thesis. Graded *S/U*. Prerequisite: KIN 500 or equivalent.

601-1 per semester 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.