



GREAT IDEAS

GRADUATE PROGRAM IN EXERCISE SCIENCE AND SPORT STUDIES

GREAT LEADERS



Making a difference in human-helping professions since 1885



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FOR MORE THAN A CENTURY, SPRINGFIELD COLLEGE HAS BEEN
A LEADER IN PROVIDING A BROAD AND BALANCED EDUCATIONAL
EXPERIENCE. HUMANICS, THE PHILOSOPHY THAT HAS INSPIRED
SPRINGFIELD COLLEGE FROM ITS BEGINNING, CALLS FOR
EDUCATING THE WHOLE PERSON—SPIRIT, MIND, AND BODY—
FOR LEADERSHIP IN SERVICE TO OTHERS.



GRADUATE PROGRAM IN *EXERCISE SCIENCE AND SPORT STUDIES*

HOW DOES THE HUMAN BODY respond to its environment, and how does it respond to the demands placed upon it? More importantly, how do we get the human body to respond the way we want it to?

Exercise science is the study of physiological and functional adaptations to movement. It involves understanding the physiological and psychological responses of the human body to physical activity, paying particular attention to the mechanical qualities of movement, the processes that control movement, and the factors that affect the acquisition of motor skills. Exercise science also investigates the cultural, social, and historical importance of physical activity, documents the mind-body connection, and studies the psychological effects of physical activity on human behavior.

We've been adding to the body of knowledge of exercise science since we opened our doors in 1885, and enjoy a long and distinguished heritage stemming from pioneers in the field such as Peter Karpovich, Erastus Pennock, Josephine Rathbone, and Luther Gulick. Our graduates have championed the cause of health and fitness around the world: in schools, neighborhoods, colleges, universities, and government and interna-

tional agencies. Today, we remain a preeminent institution of exercise science with one of the most distinguished and singularly dedicated faculties in the field.

The College's long involvement in the study of exercise science, fitness, sport, and athletics affords its graduate students a level of specialization available at few other educational institutions. We have a reputation for producing outstanding educators and researchers, as well as athletic trainers and coaches at all levels: amateur, professional, intercollegiate, and inter-scholastic. Graduate alumni have participated in the Olympic Games as athletes, coaches, athletic trainers, sport psychologists, and other Games personnel. They have served in significant ways, as well, in the Special Olympics, the Paralympics, and the Gay Games.

The College's graduate programs in Exercise Science and Sport Studies (ESSS) appeal to physical educators, health, exercise, and wellness professionals, coaches, athletic trainers, and other students who are interested in movement, exercise, or sport sciences. Master's and doctoral graduates in exercise science are often highly sought candidates for leadership positions in higher education, fitness management,

professional and collegiate sport organizations and facilities, sport medicine, therapy, nutrition, teaching, and coaching. Others go on to become exercise professionals working to improve worker performance and prevent workplace and athletic injuries, cardiopulmonary rehabilitation specialists helping people recover from heart and lung diseases, strength and conditioning coaches for professional sports franchises, sport and exercise psychology consultants at all levels, including working with professional and elite athletes, and employee wellness directors for large corporations.

Advanced study in human movement and exercise science provides students with a comprehensive understanding of the physiological and psychosocial foundations of movement in exercise and sport. A master's degree from one of the ESSS programs equips students for a science-based

sport, exercise, or athletic health care-oriented career. All programs require the completion of a minimum of 36 semester hours, including research and fieldwork. Full-time students can typically finish the programs in two years. The master's degree may also form a substantial foundation toward further doctoral study.

A multidisciplinary academic approach combined with in-depth research and exceptional fieldwork experiences lay the foundation for our graduates' future success. The coursework in ESSS draws from many different disciplines and includes advanced-level classes in departments across the College, including education, physical therapy, psychology, sports management and recreation, rehabilitation counseling and services, and physical education and health education. Graduate research projects, which are required in all master's-level programs, provide students

“Graduate programs in the Department of Exercise Science and Sport Studies offer unique opportunities for our students to grow professionally and personally. Our students graduate with the practical, clinical, and problem-solving skills to succeed in their chosen profession. Perhaps even more importantly, however, our students are better prepared for the work of life. They embrace and embody Springfield College’s Humanics philosophy of spirit, mind, and body, and go on to become leaders in their fields. In fact, eight National Football League, two National Hockey League, and four Major League Baseball strength and conditioning coaches attended our program. In addition, three head athletic trainers in Major League Baseball also attended Springfield College. Equally impressive, our students have gone on to become leaders in academia, at private corporations, in clinical settings, and as private consultants.

“The programs are rigorous and challenging, and the bar of expectations is set very high. Year after year, however, our students rise to the occasion and exceed our expectations. I know that this is the direct result of the dedication of our faculty. Because Springfield College is a small school, the students have the rare opportunity of really getting to know our faculty. The faculty members in our programs are more than just teachers; they serve as mentors both inside and outside the classroom. Our doors are always open to students, and I know that when I was a graduate student here, that made all the difference.”

Tracey Matthews D.P.E. '97
Chair

the opportunity to explore various methods of research and data analysis, and encourage the development of critical thinking and truth-finding skills that will serve graduates in their professional development throughout their careers.

INTERNSHIPS / FIELDWORK

All programs also include intensive practical experiences involving lab work and/or on-campus fieldwork with athletes, inter-collegiate teams, and others. Supervised off-site internships are also a critical component of most programs. Our portfolio of internship sites and relationships are what truly sets Springfield College apart. We have longstanding collaborative connections (both nationally and internationally) with hundreds of high-profile sites and organizations that eagerly choose our interns every year because of the excellence of their preparation and the quality of their character. Internships often lead to full-time employment.

AREAS OF CONCENTRATION

The Exercise Science & Sport Studies department offers graduate programs in Athletic Training, Strength and Conditioning, Exercise Physiology, Sport and Exercise Psychology, and Health Promotion and Disease Prevention.

ATHLETIC TRAINING

The graduate Athletic Training program is designed for Board of Certification (BOC) certified (ATC) or certification-eligible athletic trainers who are looking for career advancement, specialization, and leadership positions in the athletic health care professions. The program allows students to focus on one of three concentrations: Athletic Training Administration, Athletic Training Professional Preparation, and Athletic Training Rehabilitation.

Athletic Training Administration involves coursework in physical education, sports and recreation management, and psychology. Students learn the various aspects of running an athletic health care facility including facility design and operations, budgeting, marketing, public relations, managerial supervision, and work group dynamics.

Athletic Training Professional Preparation is advanced study for athletic trainers looking to become involved in athletic training professional preparation. Students explore theories of education, legal issues, curriculum construction, the dynamics of human behavior, and supervisory management.

Athletic Training Rehabilitation allows athletic trainers to specialize in creating rehabilitation plans to help athletes and others recover from injuries and disabilities and regain optimum function. Students examine the physiology of different systems of the body and how they are affected by exercise. It includes courses in human anatomy (including a human cadaver lab), skeletal biomechanics, and kinesiology for use in the evaluation of persons with special needs.

STRENGTH AND CONDITIONING

By far the fastest-growing of all our master's degree programs, the Strength and Conditioning program prepares students to work with secondary school, collegiate, professional, and other elite athletes in developing and implementing exercise programs to support and enhance performance. Springfield College graduates currently have positions as strength and conditioning coaches in the National Football League, National Basketball Association, National Hockey League, and Major League Baseball, as well as most every major Division I NCAA football conference in the country. Coursework combines theoretical and extensive clinical/practical experience to prepare students for national certification offered by the American College of Sports Medicine, National Strength and Conditioning Association, and the YMCA. Outstanding internship opportunities include placement in numerous NCAA Division I colleges and universities; all four major professional sports: football, baseball, basketball, hockey; the United States Olympic Training Center; and many others.

EXERCISE PHYSIOLOGY

The Exercise Physiology program focuses on the changes in physiological function which occur as the human organism moves from an inactive state to an active state. In exercise physiology, acute responses to a single exercise session as well as chronic adaptations to a series of exercise sessions are studied. The physiological adaptation to stress is investigated with the intention of gaining an understanding of exercise-induced improvements in physiological function.

The Exercise Physiology program has a longstanding tradition and prestigious reputation both nationally and internationally. Many of the leaders of the American College of Sports Medicine have had an affiliation with Springfield College. Cutting-edge research can have practical applications in areas such as environmental, cardiovascular, and neuromuscular physiology with applications to exercise and sport.

Facilities available for research in exercise physiology include: a large multipurpose performance assessment laboratory,

a biochemistry laboratory which houses state-of-the-art research equipment, a computerized hydrostatic weighing laboratory, and a computerized dynamometry laboratory as well as metabolic testing equipment. The presentation of student research at regional and/or national scientific meetings along with the publication of research findings is one of the goals of the graduate experience in exercise physiology. The master's level program offers a master of science degree only.

Graduates continue their studies to the doctoral level contributing to the body of knowledge through research and teaching in colleges and universities across the country and around the world.

SPORT AND EXERCISE PSYCHOLOGY

The master's degree Sport and Exercise Psychology program is designed for students with a scholarly interest in the field and for those who wish to pursue a doctorate. The program focuses on a theoretical understanding of sport and exercise from philosophical, sociological, psychological, and physiological viewpoints. The synergy created in this unique program provides graduates with the tools and knowledge needed to help individuals maximize performance.

The graduate student pursuing the master of science degree in Sport and Exercise Psychology is required to complete courses in advanced exercise physiology, motor learning and control, sport sociology, sport psychometrics, sport and exercise psychology, and applied sport and exercise psychology. Students study the philosophy of sport, and explore theories of human behavior in sport settings with an emphasis on cognitive processes. Through classroom learning and supervised field experiences, students practice psychological skills training with athletes using a variety of performance-enhancement techniques including goal setting, imagery, self-talk, attributions, visualization, and mental practice.

Graduates of the program go on to pursue careers in academia in colleges and universities, conducting research and teaching the principles of sport and exercise psychology to coaches, health and fitness professionals, physical education teachers, and others in the field. Others may work as private consultants to professional or other elite athletes seeking to improve their performance.

HEALTH PROMOTION AND DISEASE PREVENTION

Exercise is an essential part of any wellness program, and the benefits of exercise to human health and healing are becoming widely known. The graduate program in Health Promotion and Disease Prevention focuses on preparing graduates for careers in health and wellness (including health promotion and exercise/physical fitness) and clinical exercise physiology. All students complete courses in health behaviors and public health and complete a supervised field experience. In addition, the program provides students two track options to support their career choice: Health Promotion and Clinical Exercise Physiology.

The Health Promotion track is designed for students interested in a career in designing, implementing, and evaluating comprehensive health promotion and wellness programs for individuals, agencies, and private and public organizations; or a career in designing and implementing exercise and fitness programs in corporate, commercial, clinical, community, or school settings. Coursework is designed to prepare graduates for national certifications in Health Promotion/Wellness and Exercise and Fitness. Students develop their abilities in the assessment of individual and community needs, setting goals and objectives, selecting programs to achieve program goals, coordinating and administering health services, and developing plans for the measurement and evaluation of program effectiveness.

The Clinical Exercise Physiology track is designed for students interested in working in clinical settings such as hospitals and outpatient medical settings with an emphasis on disease prevention. Students are exposed to a variety of clinical experiences as they interact with patients having or recovering from cardiac, pulmonary, metabolic, musculoskeletal, neuromuscular, or immunological/hematological conditions. With the increased incidence of chronic medical conditions, such as obesity and renal and cardiovascular disease, the role of the clinical exercise physiologist is becoming important in health care management.

DEGREES OFFERED

MASTER'S DEGREES

Master of Education (M.Ed.)

The M.Ed. requires the successful completion of all graduate work within the student's specific program plus the completion of an independent research project that is planned by the student and conducted under faculty supervision. It may involve a research project with data collection, development of curricula materials, a review of literature, or other appropriate activity. A written proposal is required, as well as a poster presentation at the completion of study.

Master of Science (M.S.)

The M.S. requires successful completion of all graduate work within the student's specific program, as well as a master's research thesis, which requires a written proposal. The thesis culminates in an oral defense before a thesis committee. The M.S. thesis option is required of the Exercise Physiology and Sport and Exercise Psychology programs.

DOCTORAL DEGREES

For students in Exercise Science and Sport Studies interested in achieving the highest level of credentials in the field and contributing to the body of knowledge in the exercise sciences, the Exercise Science and Sport Studies Department offers the Ph.D. degree in Physical Education, with a choice of two specializations: Sport and Exercise Psychology and Exercise Physiology.

Ph.D. Degree with a Specialization in Sport and Exercise Psychology

A doctorate in physical education with a specialization in sport and exercise psychology serves to further illuminate the Humanics philosophy of Springfield College. Integral to the philosophy is the incorporation of the whole person— spirit, mind, and body— for leadership in service to humanity. Sport and exercise psychology provides the student an opportunity to examine integrated mind/body responses in an exercise and sport context.

Students in the program gain an understanding of the scientific, sociological, psychological, and research bases of sport, as is necessary in working with athletes in a performance enhancement context. Upon successful completion of the program, students may seek licensure through the certification organization for sport psychology, the Association for the Advancement of Applied Sport Psychology (AAASP), in conjunction with the United States Olympic Committee (USOC).

Graduates of the sport and exercise psychology doctoral program will be prepared primarily to teach sport and exercise psychology at all educational levels, as well as in the areas of sociology and philosophy of sport. Graduates will be prepared to contribute to the current knowledge base of the field by continuing research in sport and exercise psychology, and will be qualified to work as a sport psychology consultant at all levels for athletes, athletic departments, coaches, exercise and fitness programs, and national governing bodies of the International Olympic Committee, as well as the USOC.

Ph.D. Degree with a Specialization in Exercise Physiology

From the earliest days following its founding in 1885, Springfield College has been known worldwide as a pioneer in physical education teaching and scholarship. The specialization in exercise physiology at the doctoral level is greatly influenced by such legendary faculty members as Dr. Peter Karpovich, an eminent scholar in exercise physiology and co-founder of the American College of Sports Medicine. Dr. Karpovich taught at the college from 1927 to 1961 and was internationally recognized for his innovative physiological research.

The doctoral program with a specialization in exercise physiology provides students with knowledge in theory and laboratory techniques and teaches students how to further develop and promote research skills. The program offers a personalized approach to graduate education, with opportunity for self-directed research eligible

for presentation to the American College of Sports Medicine and publication in peer-reviewed journals.

FACULTY

At Springfield College, members of the faculty really get to know the students. The mission of the Exercise Science and Sport Studies Department is to provide challenging educational experiences founded in academic excellence, while fostering independent inquiry and research within a supportive learning environment consistent with the College's Humanics philosophy.

Faculty members are not only teachers, scholars, and mentors, but also leaders in their professions. ESSS faculty members lead in professional organizations such as the American College of Sport Medicine; American Alliance of Health, Physical Education, Recreation, and Dance; National Strength and Conditioning Association; National Athletic Trainers Association; and others.

FACILITIES

Springfield College's graduate-level programs in Exercise Science and Sport Studies are enhanced by the state-of-the-art facilities found on campus. The Athletic Training and Exercise Science Complex provides students and faculty with interactive and experiential learning environments, as well as dedicated research space for the study of all aspects of wellness and human performance.

“Our programs are truly innovative, and our students have so many opportunities for internships, research, and networking. Our brand new, state-of-the-art facilities will enhance the students’ learning experience here. The Springfield College student body is diverse and collegial, with students coming from all over the world to attend our programs. The bonds of friendship they create during their graduate school years will last a lifetime. I truly believe that we offer an outstanding educational experience—one that will fully prepare them to go on to serve as leaders in their fields.”

Vincent Palone Ed.D.
Graduate Program Coordinator

Athletic Training / Exercise Science Complex:

Interactive and experiential learning environments including:

- Four SMART classrooms
- State-of-the-art athletic training room
- Athletic training rehabilitation room
- Active laboratories for student learning
- Human performance laboratory
- Strength and conditioning laboratory
- Biochemistry laboratory

We have dedicated research space for the study of all aspects of wellness and human performance. The equipment available to our students in the human performance and strength and conditioning laboratories during wellness and human performance research includes: Velotron bike, a treadmill, two metabolic systems, an Accupower force platform, a Keiser Power Rack machine, and a Keiser Performance Trainer

Our biochemistry laboratory has an impressive list of the latest equipment for processing, storing, and analyzing biological samples collected by our students and faculty during wellness and exercise research. The equipment available to our students and faculty includes: refrigerated centrifuge, microcentrifuge, -20 and -80 degree (C) freezers, electronic pipettes, wet and dry incubators, spectrophotometer, plate reader, automated plate washer, and the LDL Lipoprint System for the quantification of LDL particles within seven subclasses.

Athletic Health Care Facility includes:

- The treatment area consists of seventeen treatment tables, two high/low tables, and a motorized traction table. Modalities include six Game Ready cold therapy units, Low Level Laser Therapy unit, multiple electrical therapy and ultrasound units, a paraffin bath, three large hydrocollator units, two ice machines, and an administrative check-in counter. Twelve taping stations complete the main treatment area.
- A hydrotherapy area contains two full-body whirlpools, one extremity whirlpool, and a Polar Plunge cold hydrotherapy tub.
- The functional exercise area includes two Paramount functional trainer units, three Schwinn Airdynes, a PreCor treadmill and elliptical machines, SciFi upper body Ergometer, and numerous, functional exercise equipment with ample space for activity.
- A physician examination room.

The Physical Education Complex includes:

- James Naismith Court

(basketball, volleyball, wrestling, gymnastics)

- Art Linkletter Natatorium with a six-lane, fifty-meter pool
- Three teaching gymnasia and eight handball/racquetball courts
- Stagg Field (football, field hockey, lacrosse)
- Eight tennis courts
- Baseball and softball diamonds
- Eight-lane outdoor track
- Indoor jogging track
- Two multi-purpose Field Turf® athletic fields (soccer)
- Arena and athletic-training facility, with three levels of multipurpose venues

The Allied Health Sciences Center comprises:

- A human anatomy laboratory
- A hydrostatic weighing facility

The Wellness Center provides:

- Fitness testing and assessment
- A computerized check-in and tracking system
- Exercise prescription and personal training
- Over sixty pieces of cardiovascular equipment
- Two lines of over thirty pieces of resistance-training selectorized equipment
- Personal viewing screen TVs and cardiotheatre
- Spinning cycles and dedicated classes
- Free weights
- An indoor rock-climbing wall
- Three multi-purpose rooms for over thirty group exercise classes per semester
- Wellness programs and seminars each week

The Strength and Conditioning Center offers:

- Free weights and functional exercise equipment
- Conditioning programs specifically tailored to each of the College's athletic teams
- An active laboratory and clinical setting for exercise science and sport studies students

Strength and Conditioning Center equipment:

- Nine PowerLift half-rack double platforms with technique trays, pull-up bars, dip bars, band pegs, and lock-in benches
- Eighteen Olympic training bars
- Eighteen power bars
- Eighteen sets of Olympic lifting bumper plates
- Eighteen sets of iron plates
- Nine safety squat bars
- Six Extreme core trainers
- Six PowerLift glute/ham machines
- Two sets of dumbbells from 5-150 pounds
- Ten dumbbell benches
- Four SPS Plyo-Safe Plyometric Box sets
- Nine Schwinn Airdyne exercise bikes
- Nine Cybex Legacy 750T treadmills
- Two PowerLift leg presses
- Cybex Eagle machines—rowing, lat pull-down, chest press, shoulder press
- Two full sets of kettlebells
- More than forty assorted weight medicine balls
- Mini and soft hurdles
- Several agility ladders
- Assorted hoops, bands, agility, and speed equipment

Babson Library offers:

- A rich collection of print and digital materials that support our graduate programs
- Information and research support available seven days a week via e-mail, chat, toll-free phone, or in person
- Access to over thirty-five databases and over 10,000 full-text e-journals
- Subject-specialist librarians who consult with students and work closely with faculty to provide research support for class assignments, research projects, and thesis/dissertation research
- A variety of reading and study areas and computer labs
- Wireless access throughout the building

ADMISSION REQUIREMENTS

Application for admission for graduate study in the Exercise Science and Sport Studies program is highly competitive. All master's candidates are expected to have a strong undergraduate background in specialized science courses associated with the study of human movement before they arrive. Even though Springfield College has a rolling admission policy for graduate programs, completion of the application process as early as possible is encouraged. All applications must include the following:

- Undergraduate transcripts
- GRE scores
- Three references
- A personal statement relative to professional goals
- Any other materials required by the Office of Graduate Admissions must be included

ACADEMIC STANDING AND FINANCIAL AID

Graduate students must maintain a minimum 3.0 cumulative average in graduate-level coursework. Full-time students are expected to complete 18 credit hours per academic year. Academic reviews are conducted each semester. Students accepted to a graduate program on a probationary basis may apply for a federal Stafford Loan during this initial probationary semester of study. Students placed on or continued on probation as a result of their graduate academic record at the College are not eligible for College or federal financial assistance, including student loans. For more information, please write or call:

Springfield College
Office of Financial Aid
263 Alden Street
Springfield, MA 01109-3797
413 748 3108

Learn more about our graduate programs at
www.springfieldcollege.edu



FOUNDED IN 1885, Springfield College is known worldwide as the Birthplace of Basketball® and for the guiding principles of its Humanics philosophy—educating students in spirit, mind, and body for leadership in service to others. Springfield College, with its foundation of academic excellence and rich athletic heritage, prepares students with real-world leadership skills for tomorrow’s careers that transform lives and communities. A range of undergraduate and graduate degree programs are offered in fields of health sciences, human and social services, sport management and movement studies, education, business, and the arts and sciences. Doctoral programs are in physical education and physical therapy. The College is ranked in the 2010 edition of “America’s Best Colleges” in the top tier of “Best Universities—Master’s—North Region” by *U.S. News & World Report*, and is designated a premier Leadership Development Center by the YMCA of the USA. More than 5,000 traditional, nontraditional, and international students study at its main campus in Springfield, Massachusetts, and at its School of Human Services regional campuses located in ten other U.S. locations.



Springfield College Office of Graduate Admissions

263 Alden Street, Springfield, MA 01109-3797

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Learn more about our graduate programs at:

www.springfieldcollege.edu