

UNIVERSITY FACULTY SENATE FORMS

Academic Program Approval

This form is a routing document for the approval of new and revised academic programs. Proposing department should complete this form. For more information, call the Faculty Senate Office at 831-2921.

Submitted by: Charles Swanik phone number 2306

Action: Add a concentration to the Master of Science degree in Exercise Science
(Example: add major/minor/concentration, delete major/minor/concentration, revise major/minor/concentration, academic unit name change, request for permanent status, policy change, etc.)

Effective term 08F
(use format 04F, 05W)

Current degree MS
(Example: BA, BACH, BACJ, HBA, EDD, MA, MBA, etc.)

Proposed change leads to the degree of: Not Applicable
(Example: BA, BACH, BACJ, HBA, EDD, MA, MBA, etc.)

Proposed name: Sports Medicine
Proposed new name for revised or new major / minor / concentration / academic unit (if applicable)

Revising or Deleting:

Undergraduate major / Concentration: _____
(Example: Applied Music – Instrumental degree BMAS)

Undergraduate minor: _____
(Example: African Studies, Business Administration, English, Leadership, etc.)

Graduate Program Policy statement change: Additional concentration noted
(Attach your Graduate Program Policy Statement)

Graduate Program of Study: MS in Exercise Science
(Example: Animal Science: MS Animal Science: PHD Economics: MA Economics: PHD)

Graduate minor / concentration: Sports Medicine

List program changes for curriculum revisions:

List new courses required for the new or revised curriculum: None

(Be aware that approval of the curriculum is dependent upon these courses successfully passing through the Course Challenge list. If there are no new courses enter "None")

Other affected units: Undergraduate Athletic training Program (ATEP)

(List other departments affected by this new or revised curriculum. Attach permission from the affected units. If no other unit is affected, enter "None")

The addition of this Master's level graduate concentration will not negatively impact other units. It is perceived to have a positive impact on the professional preparation of doctoral students studying in the area of sports medicine while strengthening the mentorship and research experience of undergraduate ATEP students. The Athletic Training rooms, supported by intercollegiate athletics, the Athletic Training research laboratory and faculty are shared resources. Undergraduate ATEP students gain clinical experience during practicum classes in the Athletic Training rooms and through their interactions with their instructors, who must be certified Athletic Trainers (ATC's). Several funded graduate assistantships require certified athletic trainers who, under accreditation guidelines, can function as clinical instructors for ATEP students. Some of the graduate students in the sports medicine concentration will be ATC's with assistantships that include oversight of ATEP students. Both the graduate and undergraduate students are exposed to sports medicine research through the laboratory facility and testing equipment. Undergraduate students will benefit from their communications with graduate students and the professional preparation of graduate students will be enhanced through their mentorship role with undergraduate ATEP students. It is expected that having interactions among students at all 3 academic tiers will promote an ideal learning environment for critical thinking, research and evidence based sports medicine practice.

Rationale:

(Explain your reasons for creating, revising, or deleting the curriculum or program.)

The Department of Health Nutrition and Exercise Science is well positioned to meet the strong clinical, educational and research interests of a diverse group of both allied health and biomedical professionals wishing to pursue advanced degrees in the field of sports medicine. Although the HNES department has a long history of scholarly and service related activities in this field, specifically with the undergraduate Athletic Training Education program, a cohesive graduate track dedicated to research and education in sports medicine has not been pursued. Currently there exists over 350 undergraduate athletic training programs nationwide, each graduating approximately 10 students each year. Over 50% will immediately pursue graduate education and historically 75% will complete a graduate degree in order to be competitive for even entry level positions. The tri-state area contains the highest concentration of athletic trainers in the country yet only 1 similar program exists within 150 miles. Similarly, the field of sports medicine is relatively young and has undergone exponential growth during the past decade. First generation professionals working in this field are just now reaching retirement and two of the most frequently cited journals were only recently accepted into the National Library of Medicine's Index Medicus, the gold standard for scientific publications in medicine. Hence, there exists a strong need for professionals with the requisite clinical and research knowledge in sports medicine to conduct evidenced-based studies and publish scholarly papers. The department has added 2 experienced faculty members (Dr. Thomas Kaminski and Dr. Charles Swanik) with primary instruction and research agendas in Sports Medicine to meet this demand. The faculty has already initiated and successfully offered three new graduate courses to serve as core classes in this track, with existing elective courses in Motor Control, Biomechanics, and Exercise Physiology serving as cognates. Past enrollment in the Sports Medicine related classes has been between 6-10 students with varied academic preparations including athletic training, physical therapy, mechanical engineering, biomechanics and exercise physiology. The faculty members share advising responsibilities of 9 Master's level students and it is expected that 3-5 students will graduate and be replaced annually. The program can function at this level without additional faculty lines. Dr. Swanik has previous experience directing an accredited graduate sports medicine program that enrolled 8-10 students annually with 3 faculty members. Creating this concentration will provide a unique, interdisciplinary track of course offerings and research experiences related to the injuries and illnesses associated with participation in athletic endeavors and physical activity. We are confident that this new educational opportunity will provide students with a highly rewarding and competitive alternative to the nation's other leading graduate programs in Sports Medicine.

Program Requirements:

(Show the new or revised curriculum as it should appear in the Course Catalog. If this is a revision, be sure to indicate the changes being made to the present curriculum.)

Credit Requirements

Credits within Exercise Science	15
Credits in Cognate Areas	9
Thesis	<u>6</u>
<i>Total number of required credits</i>	<i>30</i>
A. Courses Required Within Exercise Science	
HESC 601 Research Methods	3
HESC 602 Statistics	3
HESC 603 Seminar in Exercise Science (4 semesters required)	0
HESC 604 Sensorimotor Characteristics of Injury	3
HESC 605 Pathoetiology of Musculoskeletal Injury	3
HESC 606 Evidence-Based Sports Medicine	<u>3</u>
<i>Total Credits from Area A</i>	<i>15</i>
B. A minimum of 3 courses from the following list: (at least 2 courses from the same cognate area and 1 elective that must be approved by the academic advisor)	
<i>Motor Control</i>	
HESC 607 Motor Learning and Control	3
HESC 650 Life Span Motor Development	3
HESC 651 Neurophysiological Basis of Human Movement	3
HESC 808 Seminar in Motor Control	3
<i>Biomechanics</i>	
HESC 688 Electromyographic Kinesiology	3
HESC 689 Laboratory Instrumentation	3
HESC 690 Biomechanical Methods	3
HESC 687 Seminar in Biomechanics	3
<i>Exercise Physiology</i>	
HESC 675 Exercise Testing and Prescription	3
HESC 800 Advanced Physiology of Exercise	3
HESC 804 Clinical Measures in Ex Phys	3
HESC 665 Cardiovascular Assessment I	3
HESC 802 Human Cardiovascular Control	3
<i>Research Design and Statistics</i>	
BISC 667 Seminar (Research design and Statistics)	3
STAT 615 Design and Analysis of Experiments	3
STAT 617 Multivariate Methods	3
EDUC 861 Introduction to Statistical Inference	3
EDUC 862 Principles of Experimental Design	3
HESC 666 Special Problem	3
HESC 840 Advanced Human Anatomy	<u>3</u>
<i>Total Credits from Area B</i>	<i>9</i>
C. HESC 869 Thesis in Sports Medicine	
<i>Total Credits from Area C</i>	<i><u>6</u></i>

ROUTING AND AUTHORIZATION: (Please do not remove supporting documentation.)

Department Chairperson _____ Date _____

Dean of College _____ Date _____

Chairperson, College Curriculum Committee _____ Date _____

Chairperson, Senate Com. on UG or GR Studies _____ Date _____

Chairperson, Senate Coordinating Com. _____ Date _____

Secretary, Faculty Senate _____ Date _____

Date of Senate Resolution _____ Date to be Effective _____

Registrar _____ Program Code _____ Date _____

Vice Provost for Academic Programs & Planning _____ Date _____

Provost _____ Date _____

Board of Trustee Notification _____ Date _____

Revised 11/03/04 /CBS