

# 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:** Susan J. Hall phone number 2265

**Action:** Add 4+1 option to M.S. in Exercise Science, Exercise Physiology Concentration  
(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** 06F  
(use format 04F, 05W)

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

**Proposed change leads to the degree of:** BS, MS  
(Example: BA, BACH, BACJ, HBA, EDD, MA, MBA, etc.)

**Proposed name:** 4+1 Degree in Exercise Science, Exercise Physiology Concentration  
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:** \_\_\_\_\_  
(Attach your Graduate Program Policy Statement)

**Graduate Program of Study:** \_\_\_\_\_  
(Example: Animal Science: MS Animal Science: PHD Economics: MA Economics: PHD)

**Graduate concentrations:** \_\_\_\_\_

### List program changes for curriculum revisions:

The 4+1 degree program in Exercise Science combines the 4-year B.S. degree and the 2-year M.S. degree into an accelerated 5 year program. The 1-year savings is achieved by utilizing a portion of the undergraduate electives for graduate coursework, and by replacing three required undergraduate courses with three corresponding graduate courses. Specifically, STAT200, Basic Statistical Practice, will be replaced by HESC602, Elementary Statistics, HESC400, Research Methods, will be replaced by HESC601, Research Methods, and HESC430, Physiology of Activity, will be replaced by HESC800, Advanced Physiology of Exercise (being renumbered to HESC655).

**List new courses required for the new or revised curriculum:**

(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")

HESC 800, Advanced Physiology of Exercise, is being renumbered to HESC 655 to enable access by appropriate undergraduate students.

**Other affected units:**

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

none

**Rationale:**

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

The proposed creation of the 4+1 curriculum is based on the fact that the vast majority of undergraduate Exercise Science students pursue graduate education. The 4+1 curriculum would allow these students to accelerate the timetable for the B.S. and M.S. requirements and position them to obtain doctoral degrees or to start a career in a shorter period of time. More importantly, by exploiting common areas of coursework between the current B.S. and M.S. curricula, the compressed timetable would be achieved without sacrificing requirements for either degree.

**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.)

**FIVE-YEAR COMBINED B.S./M.S. IN EXERCISE SCIENCE**

Qualified undergraduate students in the Exercise Science major may apply for admission to the 4+1 option, which combines selected requirements of the undergraduate and master's degree programs in Exercise Science. Whereas the traditional programs for the B.S. and M.S. degrees in Exercise Science involve 4 years of undergraduate work and 2 years of graduate work, the 4+1 option enables students to earn both degrees in a 5 year period. Students who complete the 4+1 program will graduate with both a Bachelor of Science degree and a Master of Science degree in Exercise Science with a concentration in Biomechanics, Exercise Physiology, or Motor Control.

**APPLICATION PROCEDURE**

Students may apply for admission to the 4+1 program at the end of the sophomore year. The application process requires submission of a completed graduate application form for review by the Exercise Science Graduate Program Committee. Initial admission will be based upon the student's ability to meet the following recommended entrance criteria:

- Combined math and verbal SAT scores of at least 1100.
- An undergraduate GPA of at least 3.25
- Completion of all courses specified for the freshman and sophomore years in the concentration program of study
- At least 50 documented hours of volunteer time in exercise science related laboratory settings
- Submission of an in-person writing sample, to be obtained during a formal interview with a faculty advisory committee
- Acceptance by a prospective primary advisor for the master's thesis

## **MAINTAINING STATUS WITHIN THE PROGRAM**

Upon admission into the program and prior to the start of the junior year of study, the student will meet with their graduate advisor and submit a planned program of study, including all elective courses, to the Exercise Science Graduate Program Committee. Planned programs of study are due by the end of fall semester of the student's junior year.

Continuation in the 4+1 program is contingent upon maintaining a cumulative GPA of at least 3.0 in all undergraduate and graduate coursework and demonstrating satisfactory progress in the program. Satisfactory progress includes following the prescribed program of study and, beginning in the fourth year, making satisfactory progress toward the master's thesis. (A thesis proposal will be completed in HESC601 during the fall semester of the senior year.)

Each student's progress and GPA will be evaluated at the end of each academic year by the student's advisor and the Exercise Science Graduate Program Committee. Students who fail to meet the minimum GPA requirements or fail to show progress toward the degree will be placed into the B.S. degree program corresponding with their area of concentration.

### **DEGREE: 4+1 BACHELOR OF SCIENCE, MASTER OF SCIENCE MAJOR: EXERCISE SCIENCE CONCENTRATION: EXERCISE PHYSIOLOGY**

#### ***CURRICULUM CREDITS***

##### **UNIVERSITY REQUIREMENTS (6 Credits)**

ENGL 110 Critical Reading and Writing (minimum grade C-) .....	3
Multicultural course: Three credits in an approved course or courses stressing multi-cultural, ethnic, and/or gender-related course content .....	3

##### **BREADTH REQUIREMENTS (37 Credits)**

*Humanities and Communication Skills* .....9

##### *Social Sciences*

PSYC 100 General Psychology .....	3
PSYC 325 Child Psychology	
Or	
PSYC 334 Abnormal Psychology .....	3

##### *Natural/Biological Sciences and Mathematics*

BISC 207 Introductory Biology I .....	4
BISC 208 Introductory Biology II .....	4
CHEM 103 General Chemistry .....	4
CHEM 104 General Chemistry .....	4
MATH 221 Calculus I .....	3
NTDT 200 Nutrition Concepts .....	3

##### **MAJOR REQUIREMENTS (16-17 Credits, min grade C- in each except HESC 205)**

BISC 276 Human Physiology .....	4
Or	
BISC 306 General Physiology .....	3
HESC 205 Freshman Seminar in Exercise Science (PF) .....	1
HESC 310 Pre-Clinical Anatomy and Physiology .....	4
HESC 375 Neuromechanical Basis of Human Movements .....	3
HESC 426 Biomechanics I .....	4

HESC 431 Physiology of Activity Lab.....1

**CONCENTRATION REQUIREMENTS (42 credits, min grade C- in each)**

PHYS 201 Introduction to Physics I..... 4

PHYS 202 Introduction to Physics II .....4

HESC 305 Fundamentals of Athletic Training.....3

HESC 353 Seminar in Exercise Physiology.....1

HESC 432 Exercise Testing and Prescription

*Or*

HESC 434 Exercise Test Technology.....3

HESC 601 Research Methods.....3

HESC 602 Elementary Statistics .....3

HESC 603 Seminar in Exercise Science (4 semesters) .....0

HESC 665 Cardiovascular Assessment I.....3

HESC 804 Clinical Measures in Exercise Physiology.....3

HESC 800 Advanced Physiology of Exercise (being renumbered to HESC 655).....3

HESC 869 Thesis in Exercise Physiology .....6

*Plus a minimum of 3 of the following courses referred to as Graduate Area B:*

HESC 802 Human Cardiovascular Control .....3

HESC 675 Cardiovascular Assessment II.....3

HESC 685 Advanced Exercise Prescription.....3

HESC 680 Exercise, Nutrition, and Bone Health (currently proposed).....3

HESC 615 Nutrition and Activity.....3

STAT 615 Design and Analysis of Experiments.....3

STAT 617 Multivariate Methods.....3

**ELECTIVES**

After required courses are completed, sufficient elective credits must be taken to meet the minimum credits required for the degree.

**CREDITS TO TOTAL A MINIMUM OF .....125**

**4+1 DEGREE PROGRAM REQUIREMENTS  
BS AND MS IN EXERCISE SCIENCE (Exercise Physiology Concentration)**

**Freshman Year**

<b>Fall Semester</b>		<b>Spring Semester</b>	
HESC205	1	Breadth (ENGL110)	3
Breadth (BISC207)	4	Breadth (MATH221)	3
Breadth (CHEM103)	4	Breadth (CHEM104)	4
Breadth (PYSC100)	<u>3</u>	Breadth (BISC208)	<u>4</u>
<b>Total</b>	<b>12</b>	<b>Total</b>	<b>14</b>

**Sophomore Year**

HESC310	4	PHYS202	4
Breadth (NTDT200)	3	Breadth (Humanities and Communication)	3
PHYS201	4	Breadth (PSYC325 or 334)	3
BISC276 Or BISC306	<u>4/3</u>	Breadth (multicultural)	<u>3</u>
<b>Total</b>	<b>15/14</b>	<b>Total</b>	<b>13</b>

**Junior Year**

Breadth(Humanities and Communication)	3	Breadth (Humanities and Communication)	3
HESC375	3	HESC 431	1
HESC353	1	HESC 602	3
HESC305	<u>3</u>	HESC800 (being renumbered 655)	<u>3</u>
<b>Total</b>	<b>10</b>	<b>Total</b>	<b>10</b>

**Senior Year**

Seminar 603	0	Seminar 603	0
HESC 601	3	Graduate Area B	6
HESC432 or 434	3	HESC665	<u>3</u>
HESC426	<u>4</u>	<b>Total</b>	<b>9</b>
<b>Total</b>	<b>10</b>		

**5<sup>th</sup> Year**

HESC 869 (Thesis)	3	HESC 869 (Thesis)	3
HESC 804	3	Graduate Area B	3
HESC603 Seminar	<u>0</u>	HESC603 Seminar	<u>0</u>
	<b>6</b>		<b>6</b>

NOTE: Electives not shown. Sufficient elective courses must be taken for students to be enrolled in at least 12 credits each semester for the first four years and for the total number of credits for the degree to be at least 125.

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

Department Chairperson *Susan J. Hall* Date 11/18/05

Dean of College \_\_\_\_\_ Date \_\_\_\_\_

Chairperson, College Curriculum Committee *Wald* Date 12/5/05

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 /khs