

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 x2265

Department: Health, Nutrition, and Exercise Sciences email address sjhall@udel.edu

Action: 1) delete admission requirements for Exercise Science major, 2) revise Exercise Science major requirements, 3) revise Exercise Physiology concentration requirements within the Exercise Science major.

(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 09F
(use format 04F, 05W)

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

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

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

Revising or Deleting:

Undergraduate major / Concentration: Exercise Science/Exercise Physiology
(Example: Applied Music – Instrumental degree BMAS)

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

Graduate Program Policy statement change: _____
(Must attach your Graduate Program Policy Statement)

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

Graduate minor / concentration: _____

Note: all graduate studies proposals must include an electronic copy of the Graduate Program Policy Document, highlighting the changes made to the original policy document.

List new courses required for the new or revised curriculum. How do they support the overall program objectives of the major/minor/concentrations)?

HESC180, Introduction to Exercise Science (Provides survey overview of the sub-disciplines of exercise science so that freshmen entering the major can understand and appreciate the breadth of the field.)

HESC309, Pre-Clinical Anatomy and Physiology I (Provides foundational background in human anatomy and physiology that serves as prerequisite knowledge for upper division courses in the major.)

Explain, when appropriate, how this new/revised curriculum supports the 10 goals of undergraduate education:
<http://www.ugs.udel.edu/gened/>

The required courses involve quantitative reasoning and critical thinking, thereby supporting goals 1 and 2.

Identify other units affected by the proposed changes:

(Attach permission from the affected units. If no other unit is affected, enter "None") The option of either BISC276 or BISC306 is being deleted as a required course in the EXSC major. "No objection" from the Department of Biology attached.

Describe the rationale for the proposed program change(s):

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

1) **Delete admission requirements for the Exercise Science major.**

Rationale: We have advised the Registrar's Office that beginning in Fall 09 we wish to have incoming freshmen admitted directly into the major. This will replace the current practice of having students spend the freshman year in an "Exercise Science Interest group," with a competitive application process for entry to the major at the end of the freshman year. This will give more students the opportunity to demonstrate that they are capable of being successful in the major.

2) **Revise Exercise Science major requirements:**

- a) replace HESC310, Pre-Clinical Anatomy and Physiology with HESC309, Pre-Clinical Anatomy and Physiology I and HESC310, Pre-Clinical Anatomy and Physiology II, and
- b) delete BISC276, Human Physiology or BISC306, General Physiology.
- c) Add HESC180, Introduction to Exercise Science

Rationale:

- a) HESC310, Pre-Clinical Anatomy and Physiology is being expanded into two, 4-credit courses, which will be HESC309, Pre-Clinical Anatomy and Physiology I and HESC310, Pre-Clinical Anatomy and Physiology II. A majority of Exercise Science majors are interested in going on to a graduate program in physical therapy. A number of physical therapy programs are beginning to require four credits of anatomy and four credits of physiology, both with labs. These expanded course offerings will satisfy that requirement.
- b) BISC276 and 306 do not include labs and therefore do not satisfy prerequisite requirements for physical therapy programs. Requiring 8 credits of human anatomy and physiology through HESC309 & 310 will obviate the need for students to take BISC276 or 306.
- c) HESC180, Introduction to Exercise Science is being proposed as a new, required course for the major. This course will serve as an introduction to all of the sub-disciplinary fields of exercise science. Exercise Science majors are not required to take courses focused on several of the sub-disciplines until the junior or senior year. An early introduction to these sub-disciplines will give them earlier understanding of and appreciation for the major.

3) Revise Exercise Physiology concentration requirements within the Exercise Science major:

- a) The exercise physiology concentration requirements currently include the following option:
HESC432 Exercise Testing and Prescription (4)
Or
HESC434 Exercise Test Technology (3)
Or
HESC451 Clinical Exercise Physiology (3)
The proposed program change is to delete HESC432, Exercise Testing and Prescription, as one of these course options.
- b) The exercise physiology breadth requirements currently include the following option:
MATH221 Calculus I (3)
Or
MATH241 Analytic Geometry and Calculus A (4)
The proposed program change is insert MATH115 and MATH221 as the first option.

Rationale:

- a) All students in the exercise science major are preparing for entry into graduate programs in a medical field, the allied health professions, or exercise science. HESC434, Exercise Test Technology, and HESC451, Clinical Exercise Physiology, provide content very much in line with these students' interests and career aspirations. Alternatively, HESC432, Exercise Testing and Prescription, is designed for students interested in careers in the health and fitness industry, such as personal training or corporate fitness. Exercise Science student comments on HESC432 course evaluations tend to indicate that they have not found the course to be valuable.
- b) We have been advised by faculty in the departments of mathematics and physics that MATH221 does not provide sufficient background for PHYS201 & 202, which are required in the exercise physiology concentration. MATH115 does serve as a prerequisite for these Physics courses.

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 current curriculum and **include a side-by-side comparison** of the credit distribution before and after the proposed change.)

(Courses listed in **bold print** are proposed additions to the requirements. Courses listed in ~~strike-through~~ are proposed deletions from the requirements.)

BREADTH REQUIREMENTS

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
CHEM 103 General Chemistry 4
CHEM 104 General Chemistry 4
MATH 115 Pre-Calculus and MATH 221 Calculus I
or

MATH241 Analytic Geometry and Calculus A.....	4-6
NTDT 200 Nutrition Concepts	3
BISC 207 Introductory Biology I.	4
BISC 208 Introductory Biology II.	4

MAJOR REQUIREMENTS (minimum grade C- in each)

BISC 276 Human Physiology	4
or	
BISC 306 General Physiology	3
STAT 200 Basic Statistical Practice.	3
HESC180 Introduction to Exercise Science	3
HESC 205 Freshman Seminar in Exercise Science.	1
HESC 309 Pre-Clinical Anatomy and Physiology I	4
HESC 310 Pre-Clinical Anatomy and Physiology II	4
HESC 353 Pre-Professional Seminar.....	1
HESC 375 Neuromechanical Basis of Human Movements	3
HESC 400 Research Methods.	3
HESC 426 BiomechanicsI.	4
HESC 430 Physiology of Activity.....	3
HESC 431 Physiology of Activity Lab.	1

CONCENTRATION REQUIREMENTS (minimum grade C- in each)

HESC 305 Fundamentals of Athletic Training	3
HESC 432 Exercise Testing and Prescription	4
or	
HESC 434 ECG Interpretation	
or	
HESC 451 Clinical Exercise Physiology.....	3
PHYS 201 Introductory Physics I.	4
PHYS 202 Introductory Physics II.	4

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.....120

(Change in credits: 3-6 additional credits required, with HESC180 and possibly MATH115. A total of 82-84 credits are required for the major.)

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 Affairs & International Programs _____	Date _____	
Provost _____	Date _____	
Board of Trustee Notification _____	Date _____	