KENT STATE UNIVERSITY
CERTIFICATION OF CURRICULUM PROPOSAL

Preparation Date **25-Feb-20** Curriculum Bulletin _____

Effective Date **Fall 2020** Approved by EPC _____

Department	**Health Sciences**
College	**EH - Education, Health and Human Services**
Degree	**BS - Bachelor of Science** **MS - Master of Science**
Program Name	**Exercise Science/Exercise Physiology** Program Banner Code **EXSI/EXPH**
Concentration(s)	**Exercise Physiology/Exercise Specialist** Concentration(s) Banner Code(s) **EXPH/EXSP**
Proposal	**Revise program**

Description of proposal:

The purpose of this proposal is to establish a combined bachelor's/master's degree program in Exercise Science/Physiology. The total number of hours required for the B. S. Exercise Science major is 120 credits and the M.S. Exercise Physiology major requires 34 credit hours (154). With the combined degree program, 9 hours of graduate coursework will be shared between degree programs, resulting in 145 total unique credit hours.

Does proposed revision change program's total credit hours? ☒ Yes ☐ No

Current total credit hours: **154** Proposed total credit hours **145**

Describe impact on other programs, policies or procedures (e.g., duplication issues; enrollment and staffing considerations; need; audience; prerequisites; teacher education licensure):

There is no expected impact.

Units consulted (other departments, programs or campuses affected by this proposal):

None

REQUIRED ENDORSEMENTS

_____ 3/4/2020

Department Chair / School Director

_____ ___/___/___

Campus Dean (for Regional Campuses proposals)

S. Mitchell 3/16/20

College Dean (or designee)

_____ ___/___/___

Dean of Graduate Studies (for graduate proposals)

_____ ___/___/___

Provost (or designee)

Ohio | Department of Higher Education

Mike DeWine, Governor
Randy Gardner, Chancellor

Combined Bachelor's/Master's Degree Program Request Form

Date of submission: 02/06/20

Name of institution: Kent State University

Primary institutional contact for the request

Name: Therese E. Tillett
Title: Associate Vice President, Curriculum Planning and Administration
Office of the Provost
Phone: 330-672-8558
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Name of bachelor's degree program: Bachelor of Science in Exercise Science

Name of master's degree program: Master of Science in Exercise Physiology (Exercise Physiology and Exercise Specialist concentrations)

Proposed implementation date: Fall 2020

1. **Identify the total number of credit hours in the undergraduate and master's programs combined.**

   The total number of hours required for the Bachelor of Science degree in Exercise Science is 120 credits and the Master of Science degree in Exercise Physiology requires 34 credit hours (154). With the combined degree program, 9 credit hours will be shared between degree programs, resulting in 145 total unique credit hours.

2. **Describe how the university will ensure that students meet the expected baccalaureate program outcomes before the bachelor's degree is awarded.**

   Students will apply for graduation clearance via the university's web-based portal (FlashLine) and undergo a Graduate Planning System (GPS) degree audit to ensure satisfactory completion of required credits toward the B.S. in Exercise Science.

3. **Describe how students are informed of this combined degree program. Include in the answer how students are advised regarding opportunities and challenges associated with the option.**

Students will be informed on the College website and other media, including open houses and other events. Students will also be advised during undergraduate advising sessions by the graduate/undergraduate exercise science/physiology faculty.

4. **Describe the options available for students who wish to leave the program with a bachelor's degree before finishing the graduate-level work.**

   Students will have the ability to take the American College of Sports Medicine (ASCM) Certified Exercise Physiologist (C-EP) exam or the National Strength and Conditioning Association (NSCA) Strength and Conditioning Specialist (CSCS) Exam once they are in the last semester of their B.S. degree. Students who wish to leave the program without finishing the requisite graduate-level work will still earn their B.S. in Exercise Science.

5. **Describe how the institution ensures that students will pay undergraduate tuition throughout the completion of the undergraduate degree.**

   Per Kent State policy, students in a combined bachelor's/master's degree program are classified as undergraduate until the bachelor's degree is awarded. Kent State's tuition rate is assigned to the student's level, and not at the course level. Therefore, undergraduate students taking graduate courses will be charged the undergraduate tuition rate.

Attach to this document a listing of the graduate courses in the master's degree program that will apply toward the bachelor's degree program and explain the requirements they will satisfy in the bachelor's degree.

Students in the combined program will take EXPH 55065 *Exercise Testing,* EXPH 55070 *Electrocardiography for the Exercise Physiologist,* and EXPH 55080 *Physiology of Exercise.* This will allow two of our three concentrations the ability to enroll in the combined program and will address all the learning outcomes and requirements for our undergraduate Commission on Accreditation of Allied Health Programs (CAAHEP) accreditation, also addressed in slashed-equivalent undergraduate courses: EXSC 45080 *Physiology of Exercise,* EXSC 45065 *Exercise Testing,* and EXSC 45070 *Electrocardiography for the Exercise Physiologist.* These three courses will be applied to the master's degree as elective credit hours.

The list of courses are as follows:

- EXPH 55065 will be considered equivalent to EXSC 45065
- EXPH 55070 will be considered equivalent to EXSC 45070
- EXPH 55080 will be considered equivalent to EXSC 45080

Kent State University agrees to monitor the success of the program and will submit an annual report to Ohio Department of Higher Education on the scope of the program and student success.

Kent State University verifies that the information in this request is truthful and accurate.

Respectfully,

Signed after the request goes to EPC

Melody J. Tankersley, Ph.D.
Senior Vice President for Academic Affairs and Provost (Interim)
Kent State University

EXERCISE SCIENCE - B.S.

College of Education Health and Human Services
School of Health Sciences
100 Nixson Hall
Kent Campus
330-672-2197
www.kent.edu/ehhs/hs

Description

The Bachelor of Science degree in Exercise Science comprises three concentrations:

- The **Exercise Physiology** concentration prepares students for graduate school in exercise physiology or health care professions.
- The **Exercise Specialist** concentration enables students to prepare for work in the clinical setting, ranging from a career in wellness to cardiac rehabilitation.
- The **Pre-Physical/Occupational Therapy/Podiatric Medicine** concentration prepares students for subsequent graduate school in these areas. The pre-podiatric medicine track is designed to be a combined program with Kent State University's College of Podiatric Medicine. Successful completion of this program, however does not guarantee acceptance into the Doctor of Podiatric Medicine degree. Please see the Podiatric Medicine doctoral program in the catalog for more information about the application process and acceptance criteria.

Fully Offered At:

- Kent Campus

Accreditation

Commission on Accreditation of Allied Health Education Programs, Committee on Accreditation for the Exercise Sciences

Admission Requirements

The university affirmatively strives to provide educational opportunities and access to students with varied backgrounds, those with special talents and adult students who graduated from high school three or more years ago.

Freshman Students on the Kent Campus: The freshman admission policy on the Kent Campus is selective. Admission decisions are based upon the following: cumulative grade point average, ACT and/or SAT scores, strength of high school college preparatory curriculum and grade trends. The Admissions Office at the Kent Campus may defer the admission of students who do not meet admissions criteria but who demonstrate areas of promise for successful college study. Deferred applicants may begin their college coursework at one of seven regional campuses of Kent State University. For more information on admissions, including additional requirements for some academic programs, visit the admissions website for new freshmen.

Freshman Students on the Regional Campuses: Kent State campuses at Ashtabula, East Liverpool, Geauga, Salem, Stark, Trumbull and Tuscarawas, as well as the Regional Academic Center in Twinsburg, have open enrollment admission for students who hold a high school diploma, GED or equivalent.

English Language Proficiency Requirements for International Students: All international students must provide proof of English language proficiency (unless they meet specific exceptions) by earning a minimum 525 TOEFL score (71 on the Internet-based version), minimum 75 MELAB score, minimum 6.0 IELTS score or minimum 48 PTE score, or by completing the ESL level 112 Intensive Program. For more information on international admission, visit the Office of Global Education's admission website.

Transfer, Transitioning and Former Students: For more information about admission criteria for transfer, transitioning and former students, please visit the admissions website.

Current Kent State and Transfer Students: Active Kent State students who wish to change their major must have attempted a minimum 12 credit hours at Kent State and earned a minimum 2.000 overall Kent State GPA to be admitted. Students who have not attempted 12 credit hours at Kent State will be evaluated for admission based on their high school GPA for new students or transfer GPA for transfer students. Transfer students who have not attempted 12 credit hours of college-level coursework at Kent State and/or other institutions will be evaluated based on both their high school GPA and college GPA.

University Requirements

All students in a bachelor's degree program at Kent State University must complete the following university requirements for graduation.

NOTE: University requirements may be fulfilled in this program by specific course requirements. Please see Program Requirements for details.

Destination Kent State: First Year Experience	1
Course is not required for students with 25 transfer credits, excluding College Credit Plus, or age 21+ at time of admission.	
Diversity Domestic/Global (DIVD/DIVG)	2 courses
Students must successfully complete one domestic and one global course, of which one must be from the Kent Core.	
Experiential Learning Requirement (ELR)	varies
Students must successfully complete one course or approved experience.	
Kent Core (see table below)	36-37
Writing-Intensive Course (WIC)	1 course
Students must earn a minimum C grade in the course.	
Upper-Division Requirement	39 (or 42)
Students must successfully complete 39 upper-division (numbered 30000 to 49999) credit hours to graduate. Students in a B.A. and/or B.S. degree in the College of Arts and Sciences must complete 42 upper-division credit hours.	
Total Credit Hour Requirement	120
Some bachelor's degrees require students to complete more than 120 credit hours.	

Kent Core Requirements

Kent Core Composition (KCMP)	6
Kent Core Mathematics and Critical Reasoning (KMCR)	3
Kent Core Humanities and Fine Arts (KHUM/KFA) (min one course each)	9
Kent Core Social Sciences (KSS) (must be from two disciplines)	6

Kent Core Basic Sciences (KBS/KLAB) (must include one laboratory)	6-7
Kent Core Additional (KADL)	6
Total Credit Hours:	**36-37**

Program Requirements

Major Requirements

Code	Title	Credit Hours
Major Requirements (courses count in major GPA)		
ATTR/EXSC 25057	HUMAN ANATOMY AND PHYSIOLOGY I (KBS) (KLAB) [1]	4
ATTR/EXSC 25058	HUMAN ANATOMY AND PHYSIOLOGY II (KBS) (KLAB) [1]	4
ATTR 35040	STRENGTH AND CONDITIONING	2-3
or EXSC 45040	ADVANCED STRENGTH AND CONDITIONING	
ATTR/EXSC 35054	BIOMECHANICS	3
EXSC 15010	INTRODUCTION TO EXERCISE SCIENCE	2
EXSC 35022	EXERCISE LEADERSHIP	3
EXSC 35023	PROFESSIONAL CERTIFICATE PREPARATION	2
EXSC 35068	STATISTICS FOR EXERCISE SCIENTIST [2]	3
EXSC 45080	PHYSIOLOGY OF EXERCISE (WIC) [3]	3
EXSC 45481	SEMINAR IN EXERCISE PHYSIOLOGY	1
NURS 20950	HUMAN GROWTH AND DEVELOPMENT FOR HEALTH PROFESSIONALS	3
or PEP 25033	LIFESPAN MOTOR DEVELOPMENT	
Additional Requirements (courses do not count in major GPA)		
CHEM 10060	GENERAL CHEMISTRY I (KBS)	4
CHEM 10061	GENERAL CHEMISTRY II (KBS)	4
CHEM 10062	GENERAL CHEMISTRY I LABORATORY (KBS) (KLAB)	1
CHEM 10063	GENERAL CHEMISTRY II LABORATORY (KBS) (KLAB)	1
PSYC 11762	GENERAL PSYCHOLOGY (DIVD) (KSS)	3
GERO 14029	INTRODUCTION TO GERONTOLOGY (DIVD) (KSS)	3
NUTR 23511	SCIENCE OF HUMAN NUTRITION (KBS)	3
UC 10097	DESTINATION KENT STATE: FIRST YEAR EXPERIENCE	1
Kent Core Composition		6
Kent Core Humanities and Fine Arts (minimum one course from each)		9
General Electives (total credit hours depends on earning 120 credit hours, including 39 upper-division credit hours) [4]		12
Concentrations		
Choose from the following:		43
Exercise Physiology		
Exercise Specialist		
Pre-Physical/Occupational Therapy/Podiatric Medicine		
Minimum Total Credit Hours:		120

1 Students who have successfully completed BSCI 11010/BSCI 11020 or BSCI 21010/BSCI 21020 may use those courses in place of ATTR 25057/ATTR 25058 and EXSC 25057/EXSC 25058.

2 Students who have successfully completed MATH 12022 or PSYC 21621 may use those courses in place of EXSC 35068.

3 A minimum C grade must be earned to fulfill writing-intensive requirement.

4 Students are strongly encouraged to meet with faculty advisor when selecting electives. Maximum 12 credit hours from the Doctor of Podiatric Medicine degree can be used to fulfill general electives for students admitted to the combined bachelor's/doctoral degree program.

Exercise Physiology Concentration Requirements

Code	Title	Credit Hours
Concentration Requirements (courses count in major GPA)		
ATTR 25036	PRINCIPLES OF ATHLETIC TRAINING	3
CHEM 20481	BASIC ORGANIC CHEMISTRY I	4
or CHEM 30481	ORGANIC CHEMISTRY I	
EXSC 45096	INDIVIDUAL INVESTIGATION IN EXERCISE SCIENCE (ELR)	3
NUTR 33512	INTERMEDIATE NUTRITION SCIENCE	3
Additional Requirements (courses do not count in major GPA)		
MATH 11009	MODELING ALGEBRA (KMCR)	3-4
or MATH 11010	ALGEBRA FOR CALCULUS (KMCR)	
General Electives		27
Minimum Total Credit Hours:		43

Exercise Specialist Concentration Requirements

Code	Title	Credit Hours
Concentration Requirements (courses count in major GPA)		
ATTR 25036	PRINCIPLES OF ATHLETIC TRAINING	3
ATTR 45040	PATHOLOGY AND PHARMACOLOGY FOR ALLIED HEALTH CARE PROVIDERS	3
or EXSC 41000	EXERCISE IMPLEMENTATION: AN EXERCISE INTERVENTION PROGRAM	
EXSC 35075	EXERCISE PROGRAMMING	3
EXSC 40612	EXERCISE LEADERSHIP FOR THE OLDER ADULT	3
EXSC 45065	EXERCISE TESTING	3
EXSC 45070	ELECTROCARDIOGRAPHY FOR THE EXERCISE PHYSIOLOGIST	3
EXSC 45492	INTERNSHIP IN PHYSICAL FITNESS AND CARDIAC REHABILITATION (ELR) [1]	3
Additional Requirements (courses do not count in major GPA)		
MATH 11009	MODELING ALGEBRA (KMCR)	3-4
or MATH 11010	ALGEBRA FOR CALCULUS (KMCR)	
General Electives		19
Minimum Total Credit Hours:		43

1 State or Federal background checks may be required for practicum/internship experiences.

Pre-Physical/Occupational Therapy/Podiatric Medicine Concentration Requirements

Code	Title	Credit Hours
Concentration Requirements (courses count in major GPA)		
BSCI 10110	BIOLOGICAL DIVERSITY (KBS) (KLAB)	4
BSCI 10120	BIOLOGICAL FOUNDATIONS (KBS) (KLAB)	4
EXSC 45096	INDIVIDUAL INVESTIGATION IN EXERCISE SCIENCE (ELR)	3
EXSC 45492	INTERNSHIP IN PHYSICAL FITNESS AND CARDIAC REHABILITATION (ELR) [1]	3

HED 14020	MEDICAL TERMINOLOGY	3
NUTR 33512	INTERMEDIATE NUTRITION SCIENCE	3
PHY 13001	GENERAL COLLEGE PHYSICS I (KBS)	4
PHY 13002	GENERAL COLLEGE PHYSICS II (KBS)	4
PHY 13021	GENERAL COLLEGE PHYSICS LABORATORY I (KBS) (KLAB)	1
PHY 13022	GENERAL COLLEGE PHYSICS LABORATORY II (KBS) (KLAB)	1
PSYC 40111	ABNORMAL PSYCHOLOGY	3
Chemistry Elective, choose from the following (depending on career goals):		4-8
CHEM 20481	BASIC ORGANIC CHEMISTRY I	
CHEM 30481 & CHEM 30482 & CHEM 30475 & CHEM 30476	ORGANIC CHEMISTRY I and ORGANIC CHEMISTRY II and ORGANIC CHEMISTRY LABORATORY I (ELR) and ORGANIC CHEMISTRY LABORATORY II [2]	
Additional Requirements (courses do not count in major GPA)		
MATH 11010	ALGEBRA FOR CALCULUS (KMCR)	3
MATH 11022	TRIGONOMETRY (KMCR)	3
Minimum Total Credit Hours:		43

1 State or Federal background checks may be required for practicum/internship experiences.

2 Recommended for those students planning to apply to the Doctor of Podiatric Medicine degree.

Graduation Requirements

Minimum Major GPA	Minimum Overall GPA
2.250	2.000

- Upon completion of the degree, students are highly encouraged, especially those who do not have a 3.000 GPA, to take the American College of Sports Medicine (ACSM) Certified Exercise Physiologist exam and/or the Certified Personal Trainer exam to enhance employment opportunities. Admission into physical therapy or occupational therapy graduate programs is competitive by GPA.

Roadmaps

- Exercise Physiology Concentration
- Exercise Specialist Concentration
- Pre-Physical/Occupational Therapy/Podiatric Medicine Concentration

EXERCISE PHYSIOLOGY - M.S.

College of Education Health and Human Services
School of Health Sciences
100 Nixson Hall
Kent Campus
330-672-2197
www.kent.edu/ehhs/hs

Description

The Master of Science degree in Exercise Physiology prepares graduates for a wide variety of career options, including exercise prescription and research, as well as future doctoral study. Representative faculty research includes the areas of body composition, metabolism/nutritional requirements, environment, clinical exercise physiology and the psychophysiology of aging as it is influenced by physical activity and fitness. Athletic training faculty also support the degree path with their areas of expertise in clinical and educational research in the field of athletic training.

The Exercise Physiology major includes the following optional concentration:

- The **Athletic Training** concentration is designed to serve the needs of post-certification (or certification-pending) students who wish to further their knowledge and skills in the athletic training profession while pursuing a master's degree. Students have the opportunity to pursue advanced clinical and academic training while obtaining knowledge and skills relative to effective clinical instruction and supervision. Advanced research skills are also a critical component to this advanced track program. Opportunities to perform research independently and/or in conjunction with program faculty are widely available.

Fully Offered At:

- Kent Campus

Accreditation

Commission on Accreditation of Allied Health Education Programs

Admission Requirements

- Bachelor's degree in exercise science, or equivalent preparation, from an accredited college or university for unconditional admission
- Minimum 3.000 undergraduate GPA on a 4.000 point scale for unconditional admission
- Official transcript(s)
- GRE or MCAT score of the 50th percentile
- Goal statement
- Two letters of recommendation
- English language proficiency - all international students must provide proof of English language proficiency (unless they meet specific exceptions) by earning one of the following:
  - Minimum 550 TOEFL PBT score (paper-based version)
  - Minimum 79 TOEFL IBT score (Internet-based version)
  - Minimum 77 MELAB score
  - Minimum 6.5 IELTS score
  - Minimum 58 PTE score

Degree applicants are expected to have substantial preparation in the sciences, usually including coursework in biology, chemistry, physics, mathematics, anatomy, kinesiology and exercise physiology. For more information about graduate admissions, please visit the Graduate Studies admission website. For more information on international admission, visit the Office of Global Education's admission website.

Program Learning Outcomes

Graduates of this program will be able to:

1. Pass one of the American College of Sports Medicine's (ACSM) exams: Certified Exercise Physiologist or Certified Personal Trainer.
2. Demonstrate understanding of the physiology of human movement across the lifespan.
3. Demonstrate detailed knowledge of the anatomy and physiology of the human and health and disease.
4. Demonstrate knowledge of the pathophysiology of disease, risk factors and special exercise populations, according to the American College of Sports Medicine.

Graduates of the Athletic Training concentration will be able to:

1. Apply the principles of the research process in athletic training by engaging with faculty and clinical staff in graduate research initiatives.
2. Engage health care professionals and apply the knowledge gained, through their education in both the classroom and clinical settings.
3. Engage in program improvement as part of a continuous quality improvement initiative by evaluating the effectiveness of the program through multiple evaluation resources.

Program Requirements

Major Requirements

Code	Title	Credit Hours
Major Requirements		
ATTR 63018	ETHICS FOR HEALTH CARE PROFESSIONALS	3
EXPH 63050	RESEARCH PROCESS IN ATHLETIC TRAINING AND EXERCISE PHYSIOLOGY	3
EXPH 63095	RESEARCH SEMINAR	1
Additional Requirements or Concentration		
Choose from the following:		27
Additional Requirements for Students Not Declaring a Concentration		
Athletic Training Concentration		
Minimum Total Credit Hours:		34

Additional Requirements for Students Not Declaring a Concentration

Code	Title	Credit Hours
Major Requirements		
EXPH 63051	QUANTITATIVE AND RESEARCH METHODS IN ATHLETIC TRAINING AND EXERCISE PHYSIOLOGY	3
EXPH 65081	ENERGY METABOLISM AND BODY COMPOSITION	3

EXPH 65082	CARDIO-RESPIRATORY FUNCTION	3
Thesis or Non-Thesis Option, choose from the following:		6
EXPH 63199	THESIS I	
EXPH 63098 & EXPH 65192	RESEARCH and INTERNSHIP IN EXERCISE PHYSIOLOGY	
EXPH 65192	INTERNSHIP IN EXERCISE PHYSIOLOGY	
Suggested Electives, choose from the following:		12
BMS 68610	HUMAN GROSS ANATOMY I	
BMS 68611	HUMAN GROSS ANATOMY II	
BSCI 50020	BIOLOGY OF AGING	
BSCI 60431	NEUROENDOCRINOLOGY	
EXPH 50612	EXERCISE LEADERSHIP FOR THE OLDER ADULT	
EXPH 55065	EXERCISE TESTING	
EXPH 55070	ELECTROCARDIOGRAPHY FOR THE EXERCISE PHYSIOLOGIST	
EXPH 55080	PHYSIOLOGY OF EXERCISE	
EXPH 60610	PHYSIOLOGY OF AGING: IMPLICATIONS FOR HUMAN BEHAVIOR	
EXPH 63098	RESEARCH	
EXPH 65080	PHYSIOLOGICAL BASIS OF EXERCISE AND SPORT	
EXPH 65086	NEUROBIOLOGY OF MOVEMENT AND EXERCISE	
NUTR 53520	SPORTS NUTRITION	
Addtional Electives Chosen in Consultation with Advisor		
Minimum Total Credit Hours:		27

Athletic Training Concentration Requirements

Code	Title	Credit Hours
Concentration Requirements		
ATTR 62010	CONTEMPORARY ISSUES IN ATHLETIC TRAINING	3
ATTR 62012	EDUCATION AND SUPERVISION PROCESSES IN ATHLETIC TRAINING	3
ATTR 62014	ADVANCED CLINICAL PROCEDURES IN ATHLETIC TRAINING AND SPORTS MEDICINE	3
ATTR 62016	CLINICAL INQUIRY IN ATHLETIC TRAINING	3
Thesis or Non-Thesis Option, choose from the following: [1]		3-6
ATTR 63199	THESIS I	
ATTR 63098	RESEARCH	
Suggested Electives, choose from the following: [1]		9-12
BMS 60450	MEDICAL PHYSIOLOGY II	
BMS 68610	HUMAN GROSS ANATOMY I	
BMS 68611	HUMAN GROSS ANATOMY II	
BSCI 50020	BIOLOGY OF AGING	
BSCI 50142	BIOENERGETICS	
BSCI 50432	ENDOCRINOLOGY	
BSCI 50433	MAMMALIAN PHYSIOLOGY I	
BSCI 50434	MAMMALIAN PHYSIOLOGY II	
BSCI 60431	NEUROENDOCRINOLOGY	
CHEM 50261	PRINCIPLES OF BIOCHEMISTRY I	
EXPH 50612	EXERCISE LEADERSHIP FOR THE OLDER ADULT	
EXPH 55065	EXERCISE TESTING	
EXPH 55070	ELECTROCARDIOGRAPHY FOR THE EXERCISE PHYSIOLOGIST	
EXPH 55080	PHYSIOLOGY OF EXERCISE	
EXPH 60610	PHYSIOLOGY OF AGING: IMPLICATIONS FOR HUMAN BEHAVIOR	
EXPH 63051	QUANTITATIVE AND RESEARCH METHODS IN ATHLETIC TRAINING AND EXERCISE PHYSIOLOGY	
EXPH 63098	RESEARCH	
EXPH 65075	MUSCLE FUNCTION AND EXERCISE	
EXPH 65076	ENVIRONMENTAL STRESS AND EXERCISE	
EXPH 65080	PHYSIOLOGICAL BASIS OF EXERCISE AND SPORT	
EXPH 65081	ENERGY METABOLISM AND BODY COMPOSITION	
EXPH 65082	CARDIO-RESPIRATORY FUNCTION	
EXPH 65083	EXERCISE ENERGY METABOLISM	
EXPH 65084	CARDIOVASCULAR-RESPIRATORY DYNAMICS DURING EXERCISE	
EXPH 65086	NEUROBIOLOGY OF MOVEMENT AND EXERCISE	
NUTR 53513	MICRONUTRIENT NUTRITIONAL BIOCHEMISTRY	
NUTR 53520	SPORTS NUTRITION	
Addtional Electives Chosen in Consultation with Advisor		
Minimum Total Credit Hours:		27

[1] Students who select the non-thesis option must take additional coursework to meet the minimum credit hours required for the degree.

Graduation Requirements

Only in rare instances does a student fulfill the educational and research expectations within the minimum credit-hour requirement for this degree. Any deficiencies for a doctoral academic preparation must be corrected very early in the approved academic program.