FAIRMONT STATE UNIVERSITY™

Office of the Provost
1201 Locust Avenue • Fairmont, West Virginia 26554
Phone: (304) 367-4101 • Fax: (304) 367-4902
www.fairmontstate.edu

MEMORANDUM

TO: Faculty Senate

FROM: Susan Ross

DATE: 02/17/2021

SUBJECT: Curriculum Proposal #20-21-16

The purpose of this proposal is to create two areas of concentration in the Exercise Science major to provide more diverse pathways based on the employment goals of the student upon graduation with the Exercise Science degree. The purpose of the differentiation between the two concentrations, Exercise Physiology and Kinesiology, is to better prepare students for the academic constructs of the given fields. The Exercise Physiology concentration requires a greater depth in the scientific fields for professional preparation and graduate work. The Kinesiology concentration utilizes an applied approach, preparing the students for applications in the fitness and wellness field.

The Exercise Physiology concentration is the equivalent of our current Exercise Science major with the addition of one course to the required course menu (PHED 1180-Medical Terminology – currently offered as an elective). This concentration focuses on the preparation for allied health degrees (Physical Therapy, Occupational Therapy, Medicine, Physician Assistant, Chiropractic, Athletic Training and more).

The Kinesiology concentration is designed to prepare students for the application of the Exercise Science degree in personal, community and corporate leisure, fitness and wellness industries, sports team applications, coaching, personal business, or outdoor recreation settings. It will require a minor which will allow students to tailor their degree to their professional goals.

cc: Richard Stephens
Lori Schoonmaker
Stephanie Gabor
Laura Ransom
Jan Kiger

CURRICULUM PROPOSAL (Submit one electronic copy to the Executive Director of Academic Programs by the second Tuesday of the month.)

Proposal Number:	#20-21-21
School/Department/Program:	School of Education, Health & Human Performance/Health & Human Performance/Exercise Science
Preparer/Contact Person:	Jan Kiger
Title of Degree Program	Exercise Science
Telephone Extension:	X4984
Date Originally Submitted:	January 14, 2021
Revision (Indicate date and label it Revision #1, #2, etc.):	Revision #1
Implementation Date Requested:	Fall 2021

I. **PROPOSAL ABSTRACT**. Write a brief abstract, not exceeding 100 words, which describes the proposed changes.

The purpose of this proposal is to create two areas of concentration in the Exercise Science major to provide more diverse pathways based on the employment goals of the student upon graduation with the Exercise Science degree. The purpose of the differentiation between the two concentrations, Exercise Physiology and Kinesiology, is to better prepare students for the academic constructs of the given fields. The Exercise Physiology concentration requires a greater depth in the scientific fields for professional preparation and graduate work. The Kinesiology concentration utilizes an applied approach, preparing the students for applications in the fitness and wellness field.

The Exercise Physiology concentration is the equivalent of our current Exercise Science major with the addition of one course to the required course menu (PHED 1180-Medical Terminology – currently offered as an elective). This concentration focuses on the preparation for allied health degrees (Physical Therapy, Occupational Therapy, Medicine, Physician Assistant, Chiropractic, Athletic Training and more).

The Kinesiology concentration is designed to prepare students for the application of the Exercise Science degree in personal, community and corporate leisure, fitness and wellness industries, sports team applications, coaching, personal business, or outdoor recreation settings. It will require a minor which will allow students to tailor their degree to their professional goals.

II. **DESCRIPTION OF THE PROPOSAL**. Provide a response for each letter, A-G, and for each Roman Numeral II–V. If any section does not apply to your proposal, reply N/A.

A. Deletion of course(s) or credit(s) from program(s) Total hours deleted: 0-9 credit hours

No courses were deleted from the Exercise Physiology Concentration (current Exercise Science degree).

In the proposed Kinesiology Concentration, 9-credit hours were removed from the current Exercise Science degree.

B. Addition of course(s) or credit(s) from program(s) Total hours added: 3-20 credit hours

3-credit hours were added to the current Exercise Science degree. New concentration name: Exercise Physiology.

20-credit hours added to the current Exercise Science degree to form the proposed Kinesiology concentration. This does not include the required minor in the concentration.

Both concentrations will use current courses that are being taught on a regular basis.

C. Provision for interchangeable use of course(s) with program(s)

N/A

D. **Course Description Revision**: Include, as an appendix, a revised course description, written in complete sentences, suitable for use in the university catalog.

The purpose of the differentiation between the two concentrations, Exercise Physiology and Kinesiology, is to better prepare students for the academic constructs of the given fields. The Exercise Physiology concentration requires a greater depth of knowledge in the scientific fields for professional preparation. The Kinesiology concentration utilizes an applied approach, preparing the students for applications in the fitness and wellness fields.

See Appendix D for new catalog descriptions for the B.S. in Exercise Science, Exercise Physiology Concentration and the B.S. in Exercise Science, Kinesiology Concentration.

E. **Course Changes:** Identify changes to existing courses such as changes to title, course number, learning outcomes, and elective or required status.

A new writing intensive course is proposed for the Kinesiology concentration (see Writing Intensive Course proposal submitted as a separate document).

Program-level assessment spaces in TaskStream will need to be created and/or edited. The current Exercise Science major can be renamed as Exercise Science - Exercise Physiology. All program outcomes will remain the same. The Kinesiology concentration space will need to be created as Exercise Science - Kinesiology with slightly different student learning outcomes and new course mapping.

See Appendix E for program-level student learning outcomes for both concentrations. Alignment of measurements are in process.

F. **Create a New Course**(s) information (if applicable): For each new course complete the following:

N/A

G. Attach an itemized summary of the present program(s) affected, if any, and of the proposed change(s).

Describe how this proposal affects the hours needed to complete this program. Specifically, what is the net gain or loss in hours? Use the format for Current and Proposed Programs in Appendix A.

See Appendix A for the current program.
See Appendix B and C for the proposed concentration changes.

The addition of the Kinesiology concentration reduces or eliminates (depending on the minor chosen) the large number of free electives that are available in the Exercise Physiology concentration (the current Exercise Science curriculum).

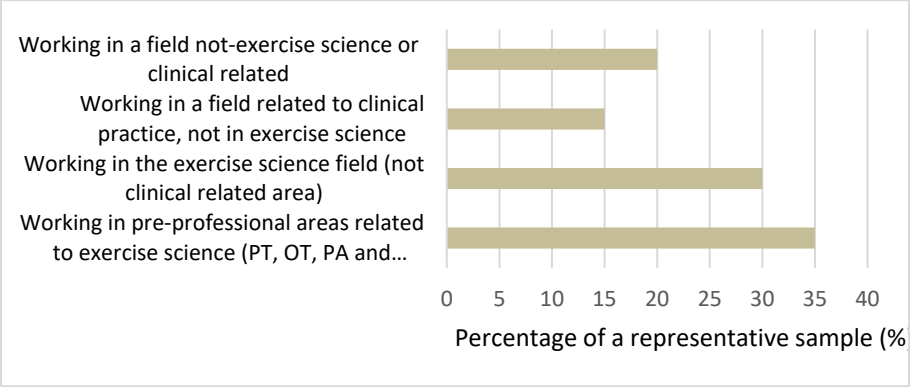
III. RATIONALE FOR THE PROPOSAL

A. **Quantitative Assessment**: Indicate the types of assessment data, i.e., surveys, interviews, capstone courses, projects, licensure exams, nationally-normed tests, locally developed measurements, accreditation reports, etc., that were collected and analyzed to determine that curricular changes were warranted. Quantitative data is preferred.

The recent 5-year review of the Exercise Science major shows 30% of graduates responding are working in an exercise science field that is not related to clinical professional preparation (see Figure 1 below). This would include, but is not be limited to, Exercise Physiology, Fitness Trainer Instructor, Athletic Trainers, Coaches, and Scouts.

The current Exercise Science curriculum is designed to accommodate the professional preparation of students for the fields of physical therapy, occupational therapy, physician's assistant, medicine, chiropractic, and others. It is the goal of this curriculum proposal to provide a more well-rounded professional preparation for those students who choose a career path that utilizes their Exercise Science degree in personal, community and corporate leisure, fitness and wellness industries, sports team applications and coaching, personal business, or outdoor recreation settings.

Figure 1



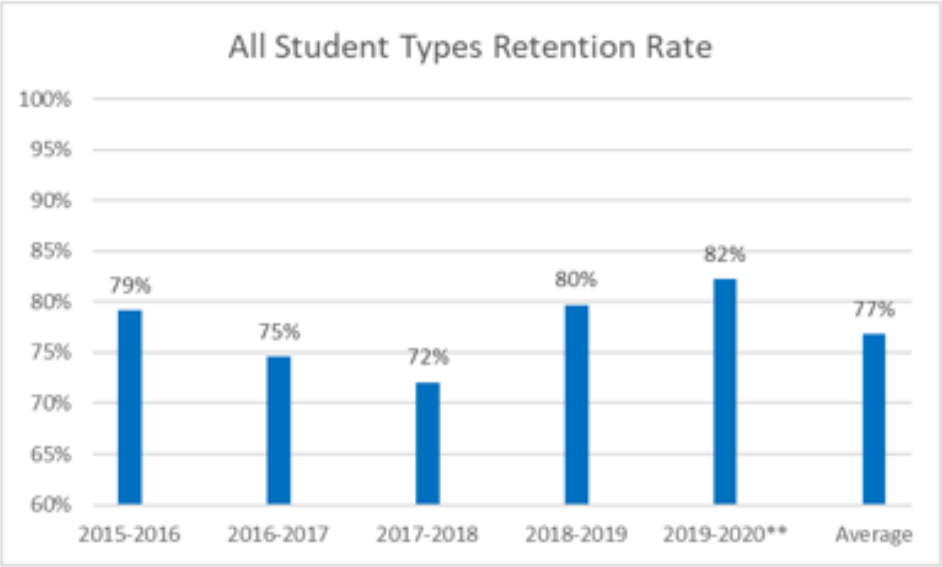
Percentage of Growth. The U.S. Bureau of Labor Statistics projects the areas of Exercise Physiology, Fitness Trainer Instructor, Athletic Trainers, Coaches and Scouts to grow. See Figure 2 below.

Figure 2

	% Growth Between 2019-2029	Mean Salary
Exercise Physiologist	11	$49,170
Fitness Trainer Instructors	15	$40,309
Athletic Trainers	16	$48,440
Coaches and Scouts	12	$34,840

Retention increase. The Exercise Science 5-year review completed at the conclusion of 2020 shows the Exercise Science major averages approximately 35 graduates and 155 majors each year. The retention rate for the Exercise Science major is 77% (on average) over the last 5 years (see Figure 3). This program has the potential to retain an additional 10-15 students per year with the addition of the Kinesiology concentration that allows students to tailor their degree for a more applied approach of the major.

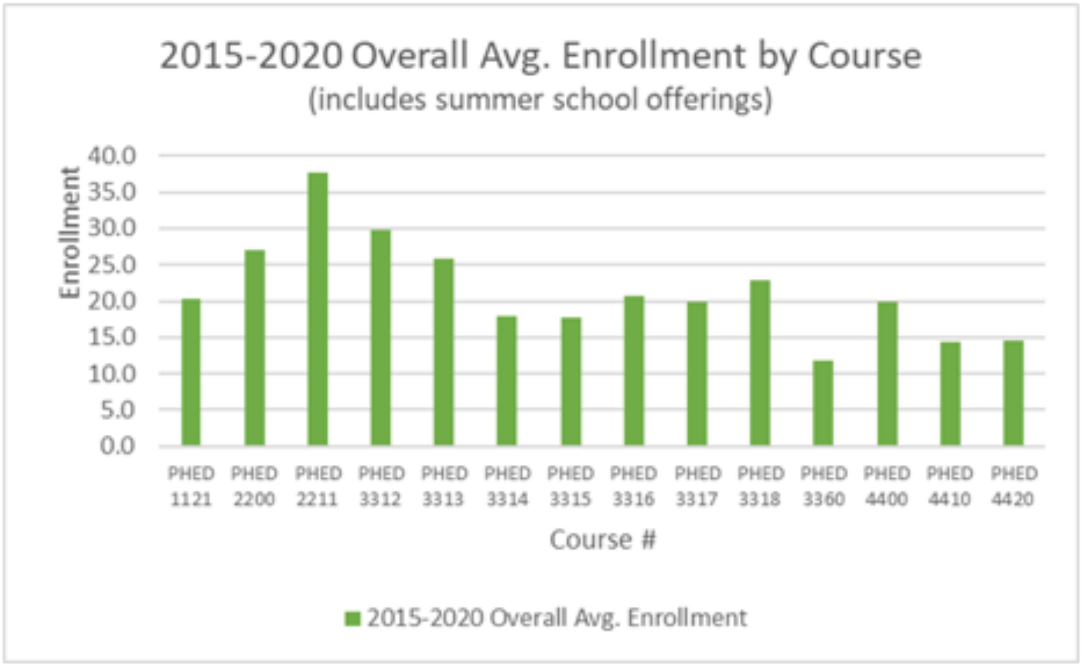
Figure 3



The 5-year review also shows that Exercise Science numbers decline as students enters higher-level courses in the curriculum (see Figure 4). Due to the ability for students to choose a different path and focus on preparation for different areas of the Exercise Science profession, it is out estimation this will assist with program retention. When students are not pursuing post-graduate work, the current curriculum does not always seem applicable to their professional goals.

Figure 4

Program Courses (Course Enrollments)



B. **Qualitative Assessment**: Based upon the assessment data above, indicate why a curricular change is justified. Indicate the expected results of the change. Be sure to include an estimate of the increased cost, or reduction in cost of implementation. FOR EXAMPLE: Will new faculty, facilities, equipment, or library materials be required?

The 5-year review responses from students describe a program that needs a concentration and prepares students for the variety of job opportunities not related to clinical professional preparation. External reviewer suggested the addition of motor development, motor learning, or motor behavior. We have added these components to the Kinesiology concentration.

Recruitment. The ability to show future students a choice in their Exercise Science pathway should increase the number of students pursuing the degree. The alignment of the new Kinesiology concentration with the many minors at Fairmont State will show the quality of opportunities available at our institution.

Retention. It is probable we will gain pre-Education majors that do not meet the requirements for admission into the Education program. This will be particularly true for the Physical Education concentration due to similar coursework and field of interest. The Kinesiology concentration is something they can transition into easily.

The addition of the Kinesiology concentration does not require the addition of any new faculty, facilities, equipment, or library materials.

IV. APPROVAL

Should this proposal affect any course or program in another school, a memo must be sent to the Dean of each school impacted and a copy of the memo(s) must be included with this proposal. In addition, the Deans of the affected schools must sign below to indicate their notification of this proposal.

By signing here, you are indicating your college's/school's notification of this proposal.

College/School	Dean	Signature
School of Education, Health & Human Performance	Dr. Amanda Metcalf	Amanda Metcalf

V. Should this proposal affect any course to be added or deleted from the general studies requirements, a memo from the chair of the General Studies Committee indicating approval of the change must be included with this proposal.

VI. ADDITIONAL COMMENTS.

APPENDIX A
B.S. Degree in Exercise Science
Current Program

Degree Requirements

Core Curriculum Courses (6-7 Credit Hours) For students in this major, list the courses satisfy both core curriculum and major requirements.		
Course Prefix & Number	**Course Name**	**Credit Hours**
PHED 1100	Fitness & Wellness	2
CHEM 1100 or CHEM 1105	General Chemistry or Chemical Principles	4-5

Required Major Courses (52 Credit Hours)		
Course Prefix & Number	**Course Name**	**Credit Hours**
NUTR 1110 or NUTR 1145	Nutrition or Sports Nutrition	3
HLTA 1150	Introduction to Health Education	3
CHEM 1100 or CHEM 1105	General Chemistry or Chemical Principles	4-5
PHED 1100	Fitness & Wellness	2
PHED 1121	Introductory Seminar in Human Movement	2
PHED 2200	Accident Analysis & Emergency Care	2
PHED 2211	Anatomy & Physiology	4
PHED 3312	Physiology of Exercise	3
PHED 3313	Biomechanics	3
PHED 3314	Group Fitness	2
PHED 3315 or PHED 3350	Advanced Personal Training or Physical Activity & Fitness Education	3
PHED 3316	Fitness Assessment & Exercise Prescription	3
PHED 3317	Clinical Applications of Exercise Physiology	3
PHED 3318	Sport Social Psychology	3
PHED 3360	Strength & Conditioning Theory & Practice	3
PHED 4400	Research Methods	3
PHED 4410	Research Design	3
PHED 4420	Internship	3

Total Core Curriculum Hours	**30-34 (Minimum 30)**
Total Pre-Major	**0**
Total Required Major Courses	**52**
Total Electives (If applicable)	**0**
Total Free Electives	**34-38**
TOTAL CREDIT HOURS	**120**

APPENDIX B
B.S. Degree in Exercise Science; Exercise Physiology Concentration
Proposed Program

Degree Requirements

Core Curriculum Courses (6-7 Credit Hours) For students in this major, list the courses satisfy both core curriculum and major requirements.		
Course Prefix & Number	**Course Name**	**Credit Hours**
PHED 1100	Fitness & Wellness	2
CHEM 1100 or CHEM 1105	General Chemistry or Chemical Principles	4-5

Required Major Courses (40-41 Credit Hours)		
Course Prefix & Number	**Course Name**	**Credit Hours**
NUTR 1110 or NUTR 1145	Nutrition or Sports Nutrition	3
HLTA 1150	Introduction to Health Education	3
CHEM 1100 or CHEM 1105	General Chemistry or Chemical Principles	4 or 5
PHED 1100	Fitness & Wellness	2
PHED 1121	Introductory Seminar in Human Movement	2
PHED 2200	Accident Analysis & Emergency Care	2
PHED 2211	Anatomy & Physiology	4
PHED 3312	Physiology of Exercise	3
PHED 3313	Biomechanics	3
PHED 3314	Group Fitness	2
PHED 3316	Fitness Assessment & Exercise Prescription	3
PHED 3318	Sport Social Psychology	3
PHED 3360	Strength & Conditioning Theory & Practice	3
PHED 4420	Internship	3
Must choose a concentration (Exercise Physiology or Kinesiology)		

Exercise Physiology Concentration Required Courses(15 Credit Hours)		
Course Prefix & Number	**Course Name**	**Credit Hours**
PHED 1180	Medical Terminology	3
PHED 3315	Advanced Personal Training	3
PHED 3317	Clinical Applications of Exercise Physiology	3
PHED 4400	Research Methods	3
PHED 4410	Research Design	3

Total Core Curriculum Hours	**30-34 (Minimum 30)**
Total Pre-Major	**0**
Total Required Major Courses	**55-56**
Total Electives (If applicable)	**0**
Total Free Electives-Clinical Concentration	**30-35**
TOTAL CREDIT HOURS	**120**

APPENDIX C
B.S. Degree in Exercise Science; Kinesiology Concentration
Proposed Program

Degree Requirements

Core Curriculum Courses (6-7 Credit Hours) For students in this major, list the courses satisfy both core curriculum and major requirements.		
Course Prefix & Number	**Course Name**	**Credit Hours**
PHED 1100	Fitness & Wellness	2
CHEM 1100 or CHEM 1105	General Chemistry or Chemical Principles	4-5

Required Major Courses (40-41 Credit Hours)		
Course Prefix & Number	**Course Name**	**Credit Hours**
NUTR 1110 or NUTR 1145	Nutrition or Sports Nutrition	3
HLTA 1150	Introduction to Health Education	3
CHEM 1100 or CHEM 1105	General Chemistry or Chemical Principles	4-5
PHED 1100	Fitness & Wellness	2
PHED 1121	Introductory Seminar in Human Movement	2
PHED 2200	Accident Analysis & Emergency Care	2
PHED 2211	Anatomy & Physiology	4
PHED 3312	Physiology of Exercise	3
PHED 3313	Biomechanics	3
PHED 3314	Group Fitness	2
PHED 3316	Fitness Assessment & Exercise Prescription	3
PHED 3318	Sport Social Psychology	3
PHED 3360	Strength & Conditioning Theory & Practice	3
PHED 4420	Internship	3
Kinesiology Concentration Required Courses (11 Credit Hours)		
PHED 2240	Outdoor Leisure Activities	2
PHED 3310	Motor Behavior	3
PHED 3350	Physical Activity & Fitness Education	3
RECR 2220	Program Planning	3
Kinesiology Concentration Electives (9 Credit Hours) Must complete three courses from the following list.		
Course Prefix & Number	**Course Name**	**Credit Hours**
PHED 2243	Teaching Team Passing Sports	3
PHED 2244	Teaching Wall-Net Sports	3
PHED 2246	Teaching Striking/Target Sports	3
BSBA 2204	Principles of Marketing	3
BSBA 2209	Principles of Management	3
Must choose a minor (15-24 Credit Hours)		

Total Core Curriculum Hours	**30-34 (Minimum 30)**
Total Pre-Major	**0**
Total Required Major Courses	**51-52**
Total Electives (If applicable)	**9**
Total Free Electives	**1-15**
Total Required Minor Courses	**15-24**
TOTAL CREDIT HOURS	**120**

APPENDIX D
Catalog Entries
B.S. Degree in Exercise Science; Kinesiology Concentration
B.S. Degree in Exercise Science; Exercise Physiology Concentration
Proposed Program

B.S. Degree in Exercise Science; Exercise Physiology Concentration

The Exercise Physiology Concentration in the Exercise Science major integrates the theories and practicalities of exercise physiology in preparing graduates for a career in this field. This is achieved through an understanding of the science of human movement and physiology, coupled with essential hands-on experiences that culminate in an internship. Graduates of this major are prepared to pursue careers in athletics programs, exercise/fitness centers, hospital wellness programs, corporate fitness programs, rehabilitation centers, and allied health areas. Additionally, the program prepares students for advanced study in related fields such as exercise physiology, physical therapy, occupational therapy, etc. Students also have the opportunity to actively participate in faculty research projects, thus expanding their professional knowledge and abilities.

B.S. Degree in Exercise Science; Kinesiology Concentration

The Kinesiology Concentration in the Exercise Science major will prepare students for the application of the Exercise Science degree in personal, community and corporate leisure, fitness and wellness industries, sports team applications and coaching, personal business, or outdoor recreation settings. A minor will be required which will allow students to tailor their degree to their professional goals. This major integrates the theories and practicalities of exercise science in preparing graduates for a career in this field. This is achieved through an understanding of the science of human movement and physiology, coupled with essential hands-on experiences that culminate in an internship in a health/fitness facility.

APPENDIX E
Program-Level Student Learning Outcomes
B.S. Degree in Exercise Science; Kinesiology Concentration
B.S. Degree in Exercise Science; Exercise Physiology Concentration
Proposed Program

Program-Level Outcomes: Exercise Science - Exercise Physiology	Program-Level Outcomes: Exercise Science - Kinesiology
1. Content Knowledge. Demonstrates knowledge of human anatomy, exercise physiology, and biomechanics.	1. Content Knowledge. Demonstrates knowledge of human anatomy, exercise physiology, and biomechanics.
2. Student Scholarship and Research. Develop and implement an individualized research project in the area of exercise physiology, biomechanics, and/or health promotion.	2. Instructional Skill Development. Develop the instructional and pedagogical knowledge required for the practical application of skill development and performance.
3. Oral and written communication. Students will be able to demonstrate effective verbal and written communication skills.	3. Planning and assessment. Students will develop skills required to plan and assess programmatic constructs for practical application.