



MISSISSIPPI STATE
UNIVERSITY™

*UNIVERSITY COMMITTEE ON
COURSES AND CURRICULA*

A MEMORANDUM

DATE: June 13, 2018
TO: UCCC Members
FROM: Dr. Dana Pomykal Franz, Chair
SUBJECT: June 18, 2018 Meeting

Enclosed are the agenda and proposals for the UCCC meeting on **Monday, June 18, 2018 beginning at 1:00 p.m.** The meeting will be held in **Room 271 of Garner Hall.**

Thank you.

Enclosures: Course/Curriculum Proposals

AGENDA
UNIVERSITY COMMITTEE ON COURSES AND CURRICULA
June 18, 2018

- 1. Welcome**
- 2. Approval of minutes**
- 3. Course proposals by college/school:**
- 4. Degree proposals by college/school**

ARTS AND SCIENCES

Modification	BS	Biological Sciences
Modification	Minor	Biological Sciences

EDUCATION

Modification	BS	Kinesiology: Clinical Exercise Physiology, Neuromechanics, Performance Fitness, Physical Education and Coaching, Sport Administration
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APPROVAL FORM FOR
DEGREE PROGRAMS
MISSISSIPPI STATE UNIVERSITY

NOTE: This form is a cover sheet that must accompany the degree program change proposal. The actual proposal should be prepared in accordance with format requirements provided in the *Guide and Format for Curriculum Proposals* published by the UCCC. Both cover sheet and proposal should be submitted to UCCC Mail Stop 9702 (281 Garner Hall), Phone: 325-9410.

College: Arts and Sciences

Department: Biological Sciences

Contact Person: M.C. Reese **Mail Stop:** 9536 **E-mail:** mcr4@biology.mstate.edu

Nature of Change: Curriculum change **Date Initiated:** 2/14/18 **Effective Date:** 8/1/18

Current Degree Program Name: Biological Sciences

Major: Biological Sciences

Concentration:

New Degree Program Name:

Major: N/A

Concentration:

Summary of Proposed Changes:

This proposal aims to modify the degree requirements for the Bachelors of Science in Biological Sciences in the following ways: 1) change math requirements from College Algebra and Trigonometry to Calculus I and Statistical Inferences, 2) require Organic Chemistry labs, 3) expand required core BIO courses, and 4) delete BIO 3013, Writing for Biologists, and replace with BIO 3104. The proposal also includes updating the Biological Science's catalog description.

Approved:

Date:



Department Head





Chair, College or School Curriculum Committee





Dean of College or School



Chair, University Committee on Courses and Curricula

Chair, Graduate Council (If applicable)

Chair, Deans Council

PROPOSAL FOR DEGREE MODIFICATION: B.S. in Biological Sciences

Christopher Brooks, Department of Biological Sciences

1. CATALOG DESCRIPTION

Current catalog description:

The biological sciences encompass the three basic sub-disciplines of biology: botany, microbiology and zoology. The curricula of the major areas of concentration are designed to provide the student with a broad academic base while offering valuable practical experiences in laboratory and field situations.

The biology curriculum contains a nucleus of basic courses that present unifying principles, and advanced courses in either botany or zoology. Botany may be defined as a scientific study of plants. It is the basic science of all applied fields of work having to do with plants, such as agronomy, forestry, horticulture, plant breeding and plant pathology. Zoology is a basic science of all work having to do with animals such as taxonomy, ecology, physiology.

Microbiology is the study of living microscopic and submicroscopic organisms which are of importance to humankind. Majors in microbiology are prepared to work in food processing plants, plant or animal disease control agencies, pharmaceutical companies, quality control positions, the industrial fermentation industry, and basic research in cell and molecular biology. Majors offered in the department are the B.S. in Biological Sciences, B.S. in Medical Technology, B.S. in Microbiology, M.S. in Biological Sciences, and the Ph.D. in Biological Sciences.

A senior research thesis in the Biology is available to outstanding students. A description of the program and application materials may be obtained from the department office. A combined B.S./M.S. degree is available to outstanding students. Application to this program may be made as early as the end of the sophomore year (after completion of 60 or more hours of undergraduate courses). Students should consult with a graduate advisor if interested.

Proposed catalog description:

The Department of Biological Sciences provides an outstanding educational experience across the entire field of biology. Our expert faculty have diverse research and teaching interests that span molecular and cellular biology, microbiology, computational biology, evolutionary biology, genetics, and ecology. Our faculty are actively engaged in highly interdisciplinary, cutting-edge research and are committed to providing students with a broad knowledge of biological processes and systems and a deep understanding of biology at environmental, organismal, cellular, and molecular levels through engaging lectures and hands-on laboratory experiences. Graduates leave the department with the knowledge base and critical thinking skills to be successful in graduate programs leading to M.S. or Ph.D., medical, dental and veterinary schools, health professional schools, research, and teaching.

Majors offered in the department are the B.S. in Biological Sciences, B.S. in Medical Technology, B.S. in Microbiology, M.S. in Biological Sciences, Ph.D. in Biological Sciences, and an M.S. in General Biology, a distance program for science teachers.

An accelerated Master's program is available to outstanding students engaged in undergraduate research.

2. CURRICULUM OUTLINE

CURRENT Degree Description	PROPOSED Degree Description
Degree: Bachelor of Science Major: Biological Sciences	Degree: Bachelor of Science Major: Biological Sciences
<p><i>The biological sciences encompass the three basic sub-disciplines of biology: botany, microbiology and zoology. The curricula of the major areas of concentration are designed to provide the student with a broad academic base while offering valuable practical experiences in laboratory and field situations.</i></p> <p><i>The biology curriculum contains a nucleus of basic courses that present unifying principles, and advanced courses in either botany or zoology. Botany may be defined as a scientific study of plants. It is the basic science of all applied fields of work having to do with plants, such as agronomy, forestry, horticulture, plant breeding and plant pathology. Zoology is a basic science of all work having to do with animals such as taxonomy, ecology, physiology. Microbiology is the study of living microscopic and submicroscopic organisms which are of importance to humankind. Majors in microbiology are prepared to work in food processing plants, plant or animal disease control agencies, pharmaceutical companies, quality control positions, the industrial fermentation industry, and basic research in cell and molecular biology.</i></p> <p><i>Majors offered in the department are the B.S. in Biological Sciences, B.S. in Medical Technology, B.S. in Microbiology, M.S. in Biological Sciences, and the Ph.D. in Biological Sciences.</i></p> <p><i>A senior research thesis in the Biology is available to outstanding students. A description of the program and application materials may be obtained from the department office. A combined B.S./M.S. degree is available to outstanding students. Application to this program may be made as early as the end of the sophomore year (after completion of 60 or more hours of undergraduate courses). Students should consult with a graduate advisor if interested.</i></p>	<p>The Department of Biological Sciences provides an outstanding educational experience across the entire field of biology. Our expert faculty have diverse research and teaching interests that span molecular and cellular biology, microbiology, computational biology, evolutionary biology, genetics, and ecology. Our faculty are actively engaged in highly interdisciplinary, cutting-edge research and are committed to providing students with a broad knowledge of biological processes and systems and a deep understanding of biology at environmental, organismal, cellular, and molecular levels through engaging lectures and hands-on laboratory experiences. Graduates leave the department with the knowledge base and critical thinking skills to be successful in graduate programs leading to M.S. or Ph.D., medical, dental and veterinary schools, health professional schools, research, and teaching.</p> <p>Majors offered in the department are the B.S. in Biological Sciences, B.S. in Medical Technology, B.S. in Microbiology, M.S. in Biological Sciences, Ph.D. in Biological Sciences, and an M.S. in General Biology, a distance program for science teachers.</p> <p>An accelerated Master's program is available to outstanding students engaged in undergraduate research.</p>

CURRENT CURRICULUM OUTLINE	Req'd Hours	PROPOSED CURRICULUM OUTLINE	Req'd Hours
English (Ex: EN 1103 English Comp I):		English (Ex: EN 1103 English Comp I):	
EN 1103 or EN 1163	3	EN 1103 or EN 1163	3
EN 1113 or EN 1173	3	EN 1113 or EN 1173	3
Fine Arts (General Education): See A&S requirements	3	Fine Arts (General Education): See A&S requirements	3
Foreign Language: 2 semesters – one Foreign Language	6	Foreign Language: 2 semesters – one Foreign Language	6
Extra Science (if appropriate)	N/A	Extra Science (if appropriate)	N/A
Math (General Education):		Math (General Education):	
MA 1313 College Algebra	3	MA 1713 Calculus I	3
MA 1323 Trigonometry	3	ST 3123 Intro. to Statistical Inference	3
Humanities (General Education): Literature – see A&S requirements History – see A&S requirements	6	Humanities (General Education): Literature – see A&S requirements History – see A&S requirements	6
Social/Behavioral Sciences (Gen Ed): Must be from 2 different areas and from A&S Core. Consult advisor for acceptable areas.	6	Social/Behavioral Sciences (Gen Ed): Must be from 2 different areas and from A&S Core. Consult advisor for acceptable areas.	6
Oral Communication Requirement: CO 1003 or CO 1013	3	Oral Communication Requirement: CO 1003 or CO 1013	3
Writing Requirement: BIO 3013 Prof'l Writing for Biologists	3	Writing Requirement: Met in Core (Satisfied by successful completion of BIO 3104)	0
Computer Literacy Requirement: BIO 3013 Prof'l Writing for Biologists	3	Computer Literacy Requirement: Met in Core (Satisfied by successful completion of BIO 3104)	0

Major Core Courses:		Major Core Courses:	
BIO 1134 Biology I	4	BIO 1134 Biology I	4
BIO 1144 Biology II	4	BIO 1144 Biology II	4
BIO 3304 General Microbiology	4	BIO 3304 General Microbiology	4
BIO 4133 Human Genetics	3	BIO 4133 Human Genetics	3
BIO 2013 Cell Biology	3	BIO 2013 Cell Biology	3
		BIO 2113 Plant Biology	3
		BIO 2513 Animal Diversity	3
		BIO 3104 Ecology	4
		BIO 4113 Evolution	3
Additional department requirements:		Additional department requirements:	
CH 1213 Chemistry I	3	CH 1213 Chemistry I	3
CH 1223 Chemistry II	3	CH 1223 Chemistry II	3
CH 1211 Investigations in Chemistry I	1	CH 1211 Investigations in Chemistry I	1
CH 1221 Investigations in Chemistry II	1	CH 1221 Investigations in Chemistry II	1
CH 4513 Organic Chemistry I	3	CH 4513 Organic Chemistry I	3

CH 4523 Organic Chemistry II	3	CH 4523 Organic Chemistry II	3
		CH 4511 Organic Chemistry Lab I	1
		CH 4521 Organic Chemistry Lab II	1
PH 1113 General Physics I	3	PH 1113 General Physics I	3
PH 1123 General Physics II or PH 1133 General Physics III	3	PH 1123 General Physics II or PH 1133 General Physics III	3

Area 1: Molecules and Cells BIO 4114 Cellular Physiology BIO 4413 Immunology BIO 4433 Principles of Virology BIO 4504 Comparative Vertebrate Embryology BIO 4503 Vertebrate Histology BCH 4603 General Biochemistry BCH 4613 General Biochemistry	6		
Area 2: Anatomy and Physiology BIO 4204 Plant Anatomy BIO 4214 General Plant Physiology BIO 3504 Comparative Anatomy BIO 4514 Animal Physiology	6		
Area 3: Organisms BIO 2113 Plant Biology BIO 2213 Survey Plant Kingdom	6		
Area 4: Ecology & Evolution BIO 3104 Ecology BIO 4113 Evolution BIO 4213 Plant Ecology	6		
Life Science Elective	10		
General Electives	13	General Electives	15-20
Total Hours	124	Total Hours	124

Additional Science Electives
Choose 5 courses from the following:

BCH 4013 Principles of Biochemistry
BCH 4603 General Biochemistry I
BCH 4613 General Biochemistry II
BIO 2213 Survey of Plants and Fungi
Any 3000- or 4000-level BIO course*

*excluding BIO 3004, BIO 3014, and **BIO 4000**

3. JUSTIFICATION AND LEARNING OUTCOMES

Rationale: The current program has had only minor modifications for at least 18 years. The intent of this change to the Biology curriculum is to 1) bring the level of rigor more in line with peer institutions offering similar degrees, 2) increase competitiveness of students graduating with a B.S. from MSU, and 3) streamline the requirements for the Biology major to make it easier for students to take the courses they need in sequence and to customize their program to meet their personal and career interests.

Students from many of the concentrations within Biological Sciences intend to move on to advanced professional training following graduation, which often requires skills not provided under our current curriculum. In the sections that follow, we illustrate how many of the proposed changes will improve preparedness of our students for advanced studies.

Proposed changes:

Data listed in the justifications below are for the following 18 comprehensive institutions:

Auburn University	Louisiana State University	Texas A&M University
University of Alabama	University of Arkansas	University of Florida
University of Kentucky	University of Mississippi	University of Missouri
University of South Carolina	University of Tennessee	Vanderbilt University
University of Georgia	Virginia Polytechnic University	Clemson University
Florida State University	University of North Carolina	NC State University

- A. *Require Calculus I and Introduction to Statistical Inference for the major (no change in credits).*

Justification: The current curriculum leaves our graduates well outside the norm with respect to relevant mathematical skills. In a comparison of comparable curricula for the B.S. in Biology at 18 comprehensive institutions, 16 require Calculus I for the Biology major and 16 also require Calculus II or Statistics for the major. The reason for a strong emphasis on higher-level math skills for Biology majors is that biological systems operate under physical and natural laws that are explained in mathematical equations. Exposure to and understanding of basic mathematical properties covered in Calculus I is important to understanding biological patterns and processes. Many professional and graduate programs also require students to have completed Calculus I. The testing of biological hypotheses is based on the use of appropriate statistical methods to evaluate whether results deviate from random patterns and are therefore supportive of a hypothesis. Students receiving a B.S. in Biology should be able to conduct basic statistical tests and to interpret the results from such tests, as this is the practice of Biology. Currently, our students have no required preparation in statistics and are often unprepared for upper-level courses where many instructors require the interpretation and/or analysis of original biological data sets. In addition, half of biology majors have a pre-medical concentration. In 2015, the Medical Colleges Admissions Test (MCAT) incorporated questions directly related to measuring the design and execution of research. Requiring students to complete a statistics course is expected to better prepare them for these upper-level courses and for post-graduate programs as well as the MCAT exam.

- B. *Require Organic Chemistry I and II labs for the major (adds 2 credits that will be taken out of the Bio credits.)*

Justification: Knowledge of basic organic chemistry is critical to the understanding of biological systems. This is reflected in comparable curricula for the B.S. in Biology at 18 comprehensive institutions, 15 require 2 credits of organic chemistry lab, 2 programs require 1 credit of lab, and 1 program requires only the lecture course in organic chemistry. We currently require that students complete Organic Chemistry I and II lectures for the Biology major. Inclusion of the labs associated with these courses as a requirement of the major is expected to provide students with hands-on experience in the understanding and manipulation of organic molecules, which contribute to the diversity of life. Organic chemistry labs are also a requirement for medical, dental, and veterinary schools. Since greater than 60% of our majors indicate that they plan to apply to one of these professional schools, requiring the organic chemistry labs would streamline coursework for these students. These labs require students to complete written lab reports, which also contributes to their mastery of scientific writing.

- C. *Establish a new set of core courses required of all majors:*
(adds 10 credits that will be taken out of Life Sciences Electives)

Course No.	Course Title
BIO 1134 ^{1,2}	Biology I
BIO 1144 ^{1,2}	Biology II
BIO 2113 ^{1,3}	Plant Biology
BIO 2513 ^{1,3}	Animal Diversity
BIO 3304 ^{1,2}	General Microbiology
BIO 2013 ²	Cell Biology
BIO 3104 ^{1,3,4}	Ecology
BIO 4133 ²	Human Genetics
BIO 4113	Evolution

Justification: The current core curriculum needs to be updated in order to provide students with a broadly comprehensive background in the biological sciences. In comparison to the curricula at 18 other comprehensive universities, Introductory Biology (usually 2 semesters), Cell Biology, and Genetics are required courses for 17 programs (only Cell Biology is excluded at one institution). Courses in Ecology and Evolution are required by 14 programs, highlighting the widely-acknowledged importance of these subjects.

The proposed courses in the core curriculum are arranged into three sets that

1. introduce students to basic knowledge and concepts,
 (BIO 1134, and BIO 1144)

¹ Course includes lab sections.

² Course is also among the current core requirements.

³ Course includes writing assignments.

⁴ Fulfills the junior/senior-level writing requirement.

2. provide a broad survey of the major taxonomic groups of living organisms, and (BIO 2113, BIO 2513, and BIO 3304)
3. provide an introduction to fundamental disciplines of biology. (BIO 2013, BIO 3104, BIO 4133, and BIO 4113)

Adding Plant Biology and Animal Diversity to the existing requirement for General Microbiology will provide students with a more comprehensive knowledge of the diversity of life forms on earth. Plant Biology is currently listed as a course in the "organisms" area, but many of our other upper-level, plant-focused courses require Plant Biology as a pre-requisite. Thus, the proposed requirement will simply assure that all majors will take this comprehensive course. Animal Biology is a recently-developed course for majors that emphasizes animal diversity. We have three upper-level courses focusing on vertebrate diversity (Comparative Anatomy, Biology of Vertebrates, and Avian Diversity) but little exposure to other animal groups (e.g., invertebrates). This course provides a broad survey of animal diversity, evolutionary relationships, life history differences, and morphological variation (not just for vertebrates). Students' preparedness for upper level courses focusing on the study of animals will be enhanced by taking Animal Diversity. Both Plant Biology and Animal Diversity are also expected to increase student preparedness for courses in Ecology and Evolution.

Adding courses in Ecology and Evolution to the core requirements will fill a critical gap in our current curriculum. Evolution is the fundamental concept in the biological sciences and is a critical course for providing our students with a comprehensive background in biology. Ecology, the study of interactions among organisms and their environment, provides the context for evolutionary processes like natural selection, making this course similarly important. Ecology has incorporated a number of writing activities and instruction in the use of computer spreadsheets for a number of years and will fulfill both the upper-level writing and computer literacy requirements for the biology major in the new curriculum. We currently offer Ecology and Evolution in the department as area courses, but they are not required and many students graduate without taking one or both of them. All students in Biology-related fields should have an in-depth understanding of evolutionary principles because these provide a framework in which to evaluate all other biological phenomena.

This change in the structure of required courses will also alleviate scheduling issues students frequently face. Establishment of this new core set would require that some existing courses be taught more frequently to accommodate all biology majors. Because the new core is more comprehensive, we can eliminate the need for area requirements so that students have much greater freedom in choosing classes to fulfill the remaining 24 required credits.

D. Writing/Computer Literacy requirement:

According to MSU's Catalog for General Education Requirements:

College and school announcements specify additional requirements, including professional communication skills (oral, written, and computer), for the bachelor's degree in the various departments and programs.

The Department of Biological Sciences has previously used BIO 3013, Professional Writing for Biologists to meet this requirement. However, this specific course has not been offered by the department since 2011. This is due, in part, to faculty turnover and workload. To continue to meet this degree requirement, the Department of Biological Sciences has been making substitutions. These substitutions are courses taught by other departments that fulfill an upper level writing requirement. There are two main problems with utilizing other department' offerings: 1) These courses are not always science-based and therefore do not necessarily aid in the objectives of our major (as outlined), and 2) with continued enrollment constraints, these courses are becoming more and more difficult to get into.

To that end, the ability for our majors to communicate science effectively is very important. Using our own courses to teach this competence to students is the better option, rather than using courses taught outside our department. BIO 3104 Ecology, which has scientific writing components and provides instruction in using computer spreadsheets, will be used for this requirement. This course has three formal lab reports that are designed to teach students the overall structure of scientific papers, and to improve writing skills. Several of these labs also require the use of spreadsheets (one lab teaches the basic skills necessary, and at least two others require students to use those skills). Final presentations also teach students to use presentation software (e.g., Microsoft Power Point) to create poster presentations related to group projects.

E. Exclusion of BIO 3004, 3014, and 4000:

Exclusion of BIO 3004 and 3014 are not changes in the curriculum, but are described here for clarity. These were always intended as specialty courses developed for pre-nursing students, and do not represent the breadth of coverage required for a bachelor's degree in biological sciences. Appropriate courses in these areas are BIO 3504 and BIO 4514. BIO 4000 is excluded because directed individual study is a unique research experience that is not intended to replace coursework. However, BIO 3004, 3014, and 4000 may be used as general electives towards the degree.

F. Questions to Address:

1. Will this program change meet local, state, regional, and national educational and cultural needs?

The proposed changes to the curriculum will enhance the ability of our graduates to meet (or exceed) these needs.

2. Will this program change result in duplication in the System?

No

3. Will this program change/advance student diversity within the discipline?
The modifications we have proposed are not expected to affect diversity of students in the program.
4. Will this program change result in an increase in the potential placement of graduates in MS, the Southeast, and the U.S.?
The modification in all likelihood will not change the placement of graduates.
5. Will this program change result in an increase in the potential salaries of graduates in MS, the Southeast, and the U.S.?
No

4. SUPPORT

Please see attached letters of support from 1) the Biological Sciences Undergraduate Curriculum Committee, 2) The Department of Chemistry, and 3) The Department of Mathematics and Statistics.

5. PROPOSED 4-LETTER ABBREVIATION

There is no change to the 4-letter abbreviation.

6. EFFECTIVE DATE

Fall 2018



MISSISSIPPI STATE
UNIVERSITY

COLLEGE OF ARTS & SCIENCES
DEPARTMENT OF BIOLOGICAL SCIENCES

P.O. Box GY
295 E Lee Blvd
Mississippi State, MS 39762

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F. 662.325.7939

www.biology.msstate.edu

April 3, 2018

To Whom It May Concern:

On behalf of the Department of Biological Sciences Faculty, which includes all members of the Department's Undergraduate Curriculum Committee, I am writing this letter in full support of all of the proposed changes across our majors and minors. These changes make significant and overdue improvements to all of these curricula to bring them up to date, and reflect the growth and direction of the discipline as a whole. They also represent work performed by the Department's committee and other faculty members over several years. These changes were recommended in this final form by the Department's Curriculum Committee, and unanimously approved at a meeting of all tenure track and instructional Biological Sciences faculty on September 29, 2017.

Thank you for your consideration of these important and necessary changes to the Biological Sciences degree programs and minors.

Sincerely,

Dr. Angus Dawe, Department Head
Department of Biological Sciences



MISSISSIPPI STATE
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Department of Chemistry

P.O. Box 9573
310 President's Circle
1115 Hand Lab
Mississippi State, MS 39762

P. 662.325.3584

F. 662.325.1618

www.chemistry.msstate.edu

January 11, 2018

To: Members of the University Curriculum Committee
Mississippi State University

Re: Modifications to Biology Curriculum

To Whom it May Concern:

The Chemistry department at MSU hereby express our support for the proposed new curriculum in Biology, and acknowledge the increased load that it will mean for our department in CH 4511 (Organic Chemistry Lab I) and CH 4521 (Organic Chemistry Lab II). Biology students utilize the Organic laboratory courses to learn important concepts that greatly benefit their understanding of both chemistry and science in general.

This change will continue our enhanced collaborative support of our MSU undergraduate student experience toward successful careers and training in post-graduate programs.

Sincerely,

Dennis W. Smith, Jr., Ph.D.
Professor and Head
dsmith@chemistry.msstate.edu



MISSISSIPPI STATE
UNIVERSITY

Department of Mathematics & Statistics

P.O. Box MA
Mississippi State, MS 39762

P. 662.325.3414

F. 662.325.0005

<http://www.math.msstate.edu>

Date: January 10, 2018

To whom it may concern:

We hereby express our support for the proposed new curriculum in Biology, and acknowledge the increased load that it will mean for our department in both MA 1713 (Calculus I) and ST 3123 (Introduction to Statistical Inference). These new requirements will introduce students to important concepts that will greatly benefit their understanding of both science and mathematics.

Sincerely,

Dr. Mohsen Razzaghi

Professor of Mathematics

Head of the Department of Mathematics and Statistics

APPROVAL FORM FOR
DEGREE PROGRAMS
MISSISSIPPI STATE UNIVERSITY

NOTE: This form is a cover sheet that must accompany the degree program change proposal. The actual proposal should be prepared in accordance with format requirements provided in the *Guide and Format for Curriculum Proposals* published by the UCCC. Both cover sheet and proposal should be submitted to UCCC Mail Stop 9702 (281 Garner Hall), Phone: 325-9410.

College: Arts and Sciences

Department: Biological Sciences

Contact Person: M.C. Reese **Mail Stop:** 9536 **E-mail:**
mcr4@biology.mstate.edu

Nature of Change: Curriculum change **Date Initiated:** 2/14/18 **Effective Date:**
8/1/18

Current Degree Program Name: Minor in Biological Sciences

Major:

Concentration: N/a

New Degree Program Name:

Major: N/A

Concentration:

Summary of Proposed Changes:

The proposal aims to change the minor in Biological Sciences requirements to reflect the modified Biological Sciences curriculum.

Approved:

Date:



Department Head

4-3-18



Chair, College or School Curriculum Committee

4/5/18



Dean of College or School

4/5/18

Chair, University Committee on Courses and Curricula

Chair, Graduate Council (if applicable)

Chair, Deans Council

PROPOSAL FOR DEGREE MODIFICATION: Minor in Biological Sciences

Christopher Brooks, Department of Biological Sciences

1. CATALOG DESCRIPTION

Current catalog description:

No description currently.

Proposed catalog description:

A minor in Biological Sciences is an exceptional accompaniment to many academic majors, as well as students pursuing pre-professional programs. Courses required for the minor provide students with specialized knowledge in the life sciences and enhance understanding of current developments in science.

2. CURRICULUM OUTLINE

CURRENT DEGREE DESCRIPTION	PROPOSED DEGREE DESCRIPTION
Minor in Biological Sciences	Minor in Biological Sciences
<i>No description currently</i>	A minor in Biological Sciences is an exceptional accompaniment to many academic majors, as well as students pursuing pre-professional programs. Courses required for the minor provide students with specialized knowledge in the life sciences and enhance understanding of current developments in science.

CURRENT CURRICULUM OUTLINE	Req'd Hours	PROPOSED CURRICULUM OUTLINE	Req'd Hours
BIO 1134 Biology I	4	BIO 1134 Biology I	4
BIO 1144 Biology II	4	BIO 1144 Biology II	4
BIO 2103 Cell Biology	3	BIO 2103 Cell Biology	3
<i>BIO 3304 General Microbiology</i>	4	BIO 4113 Evolution	3
BIO 4133 Human Genetics	3	BIO 4133 Human Genetics	3

Choose one of the following:	3-4	Choose one of the following:	3-4
<i>BIO 2113 Plant Biology</i>			
<i>BIO 2213 Survey of the Plant Kingdom</i>			
<i>BIO 3303 Parasitology</i>			
<i>BIO 4203 Taxonomy of Spermatophytes</i>			
<i>BIO 3524 Biology of Vertebrates</i>			
<i>WFA 4433 Mammalogy</i>			
<i>WFA 4443 Ornithology</i>			
<i>WFA4453 Ichthyology</i>			
<i>BIO 3104 Ecology</i>			
<i>BIO 4113 Evolution</i>			
<i>BIO 4213 Plant Ecology</i>			
BIO 2213 Survey of Plants and Fungi			
Any 3000- or 4000-level BIO course*			
		*excluding BIO 3004, BIO 3014, and BIO 4000	
Total Hours	21	Total Hours	20-21

3. JUSTIFICATION AND LEARNING OUTCOMES

The following are the justifications for the changes in the minor requirement:

- Addition of BIO 4113, Evolution and deletion of BIO 3304, General Microbiology from the required courses: The primary justification for this change is that evolution is the central concept in biology, and should be included in the minor. General Microbiology is available to students who want to choose it as their elective course in the minor.
- Changes in the elective choice: The previous minor specified that courses in Areas 3 and 4 of the major were the courses available as the elective. Since we are eliminating area courses in the curriculum, we are altering the elective choices to match those in the new major curriculum, with one exception, we do not include the biochemistry courses as elective options for the minor.

Questions to Address:

1. Will this program change meet local, state, regional, and national educational and cultural needs?
These changes will allow a student to take Microbiology specific courses which will make the current minor more relevant.
2. Will this program change result in duplication in the System?
No
3. Will this program change/advance student diversity within the discipline?
The modifications we have proposed are not expected to affect diversity of students in the program.
4. Will this program change result in an increase in the potential placement of graduates in MS, the Southeast, and the U.S.?
The modification should make it easier for students to obtain a Microbiology minor and the hope is that this will in turn make for more competitive graduates.
5. Will this program change result in an increase in the potential salaries of graduates in MS, the Southeast, and the U.S.?
No

4. SUPPORT

Please see attached letter of support from Biological Sciences Curriculum Committee.

5. PROPOSED 4-LETTER ABBREVIATION

There is no change to the 4-letter abbreviation.

6. EFFECTIVE DATE

Fall 2018



MISSISSIPPI STATE
UNIVERSITY™

COLLEGE OF ARTS & SCIENCES
DEPARTMENT OF BIOLOGICAL SCIENCES

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www.biology.msstate.edu


April 3, 2018

To Whom It May Concern:

On behalf of the Department of Biological Sciences Undergraduate Curriculum Committee, I am writing this letter in full support for the proposed change for our Biological Sciences minor requirements. These changes will reflect our improved Biological Sciences curriculum changes.

Thank you for your consideration in this important change to the Biological Sciences curriculum.

Sincerely,



Dr. Angus Dawe, Department Head
Department of Biological Sciences

APPROVAL FORM FOR
DEGREE PROGRAMS
MISSISSIPPI STATE UNIVERSITY

NOTE: This form is a cover sheet that must accompany the degree program change proposal. The actual proposal should be prepared in accordance with format requirements provided in the *Guide and Format for Curriculum Proposals* published by the UCCC. Both cover sheet and proposal should be submitted to UCCC Mail Stop 9702 (281 Garner Hall), Phone: 325-9410.

College: Education

Department: Kinesiology

Contact Person: Stanley P. Brown Mail Stop: 9575 E-mail: spb107@msstate.edu
Nature of Change: Modification Date Initiated: 3/1/18 Effective Date: Upon Approval
Current Degree Program Name: Bachelor of Science

Major: Kinesiology Concentration(s): Clinical Exercise Physiology, Health Fitness Studies,
Physical Education and Coaching, Sport Studies

New Degree Program Name: Bachelor of Science
Major: Kinesiology Concentration(s): Clinical Exercise Physiology, Neuromechanics,
Performance Fitness, Physical Education and Coaching, Sport
Administration

Summary of Proposed Changes:

1. Clinical Exercise Physiology (modification), 2. Neuromechanics (addition),
3. Performance Fitness (addition), 4. Physical Education and Coaching (modification),
5. Sport Administration (name change from sport studies with program modification), 6. Health Fitness Studies (deletion)

Approved:

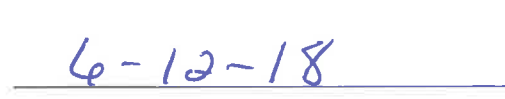
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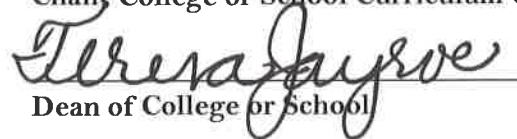


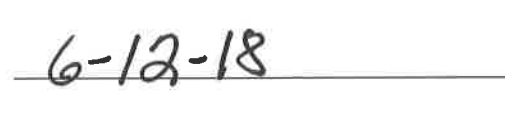
Department Head





Chair, College or School Curriculum Committee





Dean of College or School

Chair, University Committee on Courses and Curricula

Chair, Graduate Council(if applicable)

Chair, Deans Council

DEGREE MODIFICATION OUTLINE FORM

Use the chart below to make modifications to an existing undergraduate degree outline. If any General Education (Core) course is acceptable in the category, please indicate by saying "any Gen Ed course". There is no need to type in the whole list. All deleted courses and information should be shown in *italics* and all new courses and information in **bold**. Include the course prefix, number, and title in both columns. Expand this table as needed.

CURRENT Degree Description	PROPOSED Degree Description
Degree: Bachelor of Science Major: Kinesiology Concentration: Clinical Exercise Physiology	Degree: Bachelor of Science Major: Kinesiology Concentration: Clinical Exercise Physiology
<p>The Department of Kinesiology offers four undergraduate concentrations: Physical Education and Coaching (<i>PECO</i>), <i>Health Fitness Studies (HFS)</i>, Clinical Exercise Physiology (CLEP), and <i>Sport Studies (SS)</i>.</p> <p>Community college transfer hours not to exceed 62 semester hours may be applied to the Kinesiology degree program.</p> <p>All concentrations require the specified course requirements cited within the General Education and major core listings below. Specified area content courses vary among the four concentrations and are listed following the core section. Pre-Occupational Therapy, Pre-Physical Therapy, Pre-Medical, and Pre-Physician Assistant curricula have different core and program requirements. Those students desiring to enter a graduate health care field should major in CLEP in their undergraduate curriculum.</p>	<p>The Department of Kinesiology offers five undergraduate concentrations: Physical Education and Coaching (PEC), Neuromechanics (NM), Performance Fitness (PF), Clinical Exercise Physiology (CLEP), and Sport Administration (SA).</p> <p>Community college transfer hours not to exceed 62 semester hours may be applied to the Kinesiology degree program. All concentrations require the specified course requirements cited within the General Education and major core listings below. Specified area content courses vary among the five concentrations and are listed following the core section. Pre-Occupational Therapy and Pre-Physical Therapy curricula have different core and program requirements. Students electing to pursue Pre-OT or Pre-PT should consult their advisor.</p>
<p>The clinical exercise physiology concentration is designed as a professional preparation program of study that enables students to work in clinical settings as exercise physiologists in cardiac and pulmonary rehabilitation, or other clinical rehabilitation settings, such as those for individuals with diabetes, orthopedic limitations, arthritis, cancer, osteoporosis, renal failure, obesity, and in programs dealing with issues of aging. The clinical exercise physiology concentration also provides students with the necessary background to pursue</p>	<p>The clinical exercise physiology concentration is designed as a professional preparation program of study that enables students to work in clinical settings as exercise physiologists in cardiac and pulmonary rehabilitation, or other clinical rehabilitation settings, such as those for individuals with diabetes, orthopedic limitations, arthritis, cancer, osteoporosis, renal failure, obesity, and in programs dealing with issues of aging. The clinical exercise physiology concentration also provides students with the necessary background to pursue</p>

graduate health professions, such as physical or occupational therapy, physician assistant studies, medicine, or other graduate level educational programs.		graduate health professions, such as physical or occupational therapy, physician assistant studies, medicine, or other graduate level educational programs.	
CURRENT CURRICULUM OUTLINE	Required Hours	PROPOSED CURRICULUM OUTLINE	Required Hours
<u>English</u> EN 1103 English Comp I OR EN 1163 Accelerated Comp I and EN 1113 English Comp II OR EN 1173 Accelerated Comp II	6	<u>English</u> EN 1103 English Comp I OR EN 1163 Accelerated Comp I EN 1113 English Comp II OR EN 1173 Accelerated Comp II	6
Fine Arts (General Education): From Approved List	3	Fine Arts (General Education): Any Gen Ed Course	3
<u>Natural Sciences</u> Biology Course with Lab From Approved List Chemistry Course with Lab From Approved List	8	<u>Natural Sciences</u> BIO 1134 Biology I, OR other four credit hour approved Gen Ed BIO Lab Science Course above or equivalent CH 1213/CH 1211 Chemistry I & Inves in Chemistry I, OR other four credit hour approved Gen Ed CH Lab Science Course above or equivalent	8
Natural Science From Approved List	3	Natural Science (if appropriate) Any Gen Ed Course	3
Math (General Education): MA 1313 College Algebra ST 2113 Introduction to Statistics	6	<u>Math</u> MA 1313 College Algebra OR Above ST 2113 Introduction to Statistics	6
<u>Humanities</u> Approved List	6	<u>Humanities</u> Any Gen Ed Course(s)	6
<u>Social/Behavioral Sciences</u> From Approved List	6	<u>Social/Behavioral Sciences</u> PSY 1013 Psychology OR other approved Gen Ed Course SO 1003 Introduction to Sociology OR other approved Gen Ed Course	6

<u>Major Core Courses</u> KI 2023, Foundations of Health Education OR FNH 3163, Basic Principles of Health Promotion KI 2603, Medical Terminology EP 2013, Fundamentals of Kinesiology EP 3183, Exercise Psychology EP 3233, Anatomical Kinesiology EP 3304, Exercise Physiology EP 3613, Exercise Electrocardiography EP 3643, Applied Anatomy and Pathophysiology EP 4113, Fitness Programs and Testing Procedures EP 4133, Exercise Programs for Clinical Populations EP 4183, Exercise and Weight Control EP 4603, Physical Activity Epidemiology BIO 3004, Human Anatomy BIO 3014, Human Physiology	45	<u>Exercise Science Core</u> KI 2023, Foundations of Health Education EP 3304, Exercise Physiology EP 3643, Applied Anatomy and Pathophysiology EP 4113, Fitness Programs and Testing Procedures EP 4183, Exercise and Weight Control EP 4504, Mechanical Analysis of Movement EP 4603, Physical Activity Epidemiology EP 4814, Exercise Science Internship	27
<u>EP Elective (Choose two of the following)</u> EP 4123, Aging and Physical Activity EP 4143, Aging and Disability <i>EP 4503, Mechanical Analysis of Movement</i> EP 4703, Neural Control of Human Movement Concentration Courses	6	<u>Kinesiology Core Courses</u> PE 1003, Play, Fitness and Physical Activity or any 3 PE Activity Courses SS 4003, Philosophy of Sport & Physical Activity, OR SS 4303, Globalization & Sport, OR PE 3163, Sport Psychology, OR EP 3183, Exercise Psychology EP 2013, Fundamentals of Kinesiology EP 3233, Anatomical Kinesiology Concentration Courses	12
<u>Major Electives</u> See advisor for approved list of courses	20	<u>Electives (consent of advisor – must meet student's career goals)</u>	15
<u>Oral Communication Requirement</u> CO 1003, Fundamentals of Public	3	<u>See Adjunct Courses</u>	-0-

Speaking OR CO 1013, Introduction to Communication, OR CO 2253, Fundamentals of Interpersonal Communication			
<u>Computer Literacy Requirement</u> <i>Satisfied by successful completion of EP 4803</i>		Clinical Exercise Physiology Concentration EP 3803, Advanced Exercise Physiology EP 3613, Exercise Electrocardiography EP 4123, Aging and Physical Activity EP 4133, Exercise Programs for Clinical Populations EP 4143, Aging and Disability	15
Writing Requirement EDF 3413, Writing for Thinking, OR MGT 3213, Organized Communications OR BIO 3013, Professional Writing for Biologists	3	<u>Adjunct Courses</u> EDF 3413, Writing for Thinking OR MGT 3213, Organizational Comm, OR BIO 3013, Writing for Biologists CO 1003, Fund. Of Public Speaking, OR CO 1013, Intro to Comm, OR CO 2253, Interpersonal Comm BIO 3004, Human Anatomy OR equivalent Gen Ed Bio/Lab Science course BIO 3014, Human Physiology OR equivalent Gen Ed Bio/Lab Science course KI 2603, Medical Terminology	17
<u>Final Semester: Clinical Exercise Physiology Internship</u> <i>EP 4803 Professional Seminar in Exercise Science</i> <i>EP 4810 Clinical Exercise Physiology Internship</i>	9		
Total Hours	124	Total Hours	124

CLEP

3. JUSTIFICATION AND STUDENT LEARNING OUTCOMES

The changes to the curriculum outline constitute less than a 15% modification.

The majority of the students enrolled in the department's clinical exercise physiology (CLEP) program do so with the express interest of using it as a springboard to a graduate level health professions degree, usually physical therapy, with smaller percentages of students targeting other graduate health professions programs, such as occupational therapy, physician assistant, and medicine. Recognizing students' aims when enrolling in the CLEP concentration, our goal has been to provide a curriculum that meets the needs of students' diverse interest and goals, transitioning them to their graduate health program while maintaining a rigorous program of clinical exercise physiology. Recently, the faculty of the department recognized the need for a Kinesiology Core that would be common to all of the undergraduate degree concentrations. Since all students receive a bachelor's degree in Kinesiology, faculty felt there should be some commonality (see the 12 hour core block in each curriculum outline). With the new core we have reorganized the CLEP curriculum slightly while maintaining its original emphasis and learning outcomes.

4. SUPPORT

See Attached Letter

There will be no additional support needed, such as, personnel or material requirements.

5. PROPOSED 4-LETTER ABBREVIATION

CLEP (stays the same)

6. EFFECTIVE DATE

Upon Final Approval

DEGREE MODIFICATION OUTLINE FORM

Use the chart below to make modifications to an existing undergraduate degree outline. If any General Education (Core) course is acceptable in the category, please indicate by saying "any Gen Ed course". There is no need to type in the whole list. All deleted courses and information should be shown in *italics* and all new courses and information in **bold**. Include the course prefix, number, and title in both columns. Expand this table as needed.

CURRENT Degree Description	PROPOSED Degree Description
Degree: Major: Concentration:	Degree: Bachelor of Science Major: Kinesiology Concentration: Neuromechanics
"[Click here and type old degree description]"	<p>The Department of Kinesiology offers five undergraduate concentrations: Physical Education and Coaching (PEC), Neuromechanics (NM), Performance Fitness (PF), Clinical Exercise Physiology (CLEP), and Sport Administration (SA).</p> <p>Community college transfer hours not to exceed 62 semester hours may be applied to the Kinesiology degree program. All concentrations require the specified course requirements cited within the General Education and major core listings below. Specified area content courses vary among the five concentrations and are listed following the core section. Pre-Occupational Therapy and Pre-Physical Therapy curricula have different core and program requirements. Students electing to pursue Pre-OT or Pre-PT should consult their advisor.</p>
"[Click here and type old concentration description]"	<p>The Neuromechanics concentration requires 124 semester hours of prescribed courses to complete a Bachelor of Science in Kinesiology. The Neuromechanics concentration combines the disciplines of "neuroscience" and "biomechanics" and deals with the study of human movement accomplished by the interaction of the nervous, muscular and skeletal systems of the human body. Students learn concepts of the neuromechanical basis of kinesiology in the development, learning, control and production of human movement. This enhances their knowledge and understanding of neural, biomechanical, cognitive and behavioral mechanisms underlying human movements to help improve performance and prevent injuries in a variety of populations ranging from recreational, athletic, occupational, geriatric and special populations such as Downs' syndrome, autism and</p>

		Parkinson's disease. The curriculum provides students a foundation in the mechanisms underlying human movement to prepare them for careers in physical therapy, occupational therapy, medicine/physician assistance, neuromechanics, human factors ergonomics, sport science, disability and rehabilitation science.	
CURRENT CURRICULUM OUTLINE	Required Hours	PROPOSED CURRICULUM OUTLINE	Required Hours
English (Ex: EN 1103 English Comp I):	6	<u>English</u> EN 1103 English Comp I OR EN 1163 Accelerated Comp I EN 1113 English Comp II OR EN 1173 Accelerated Comp II	6
Fine Arts (General Education):	3	Fine Arts (General Education): Any Gen Ed Course	3
Natural Sciences (2 labs required from Gen Ed):	6-8	<u>Natural Sciences</u> BIO 1134 Biology I, OR other four credit hour approved BIO above, OR other four hour approved Gen Ed Lab Science CH 1213/CH 1211 Chemistry I & Inves in Chemistry I, OR other four credit hour approved CH and lab above, or four credit hour approved Gen Ed Lab Science	8
Extra Science (if appropriate)		Natural Science (if appropriate) Any Gen Ed Course	3
Math (General Education): MA 1313	6-9	<u>Math</u> MA 1313 College Algebra OR Above ST 2113 Introduction to Statistics	6
Humanities (General Education):	6	<u>Humanities</u> Any Gen Ed Course(s)	6
Social/Behavioral Sciences (Gen Ed):	6	<u>Social/Behavioral Sciences</u> PSY 1013 Psychology OR other approved Gen Ed Course SO 1003 Introduction to Sociology OR other approved Gen Ed Course	6

Major Core Courses		<u>Exercise Science Core</u> KI 2023, Foundations of Health Education EP 3304, Exercise Physiology EP 3643, Applied Anatomy and Pathophysiology EP 4113, Fitness Programs and Testing Procedures EP 4183, Exercise and Weight Control EP 4504, Mechanical Analysis of Movement EP 4603, Physical Activity Epidemiology EP 4814, Exercise Science Internship	27
Concentration Courses		<u>Kinesiology Core Courses</u> PE 1000, Play, Fitness and Physical Activity or any 3 PE Activity Courses SS 4003, Philosophy of Sport & Physical Activity, OR SS 4303, Globalization & Sport, OR PE 3163, Sport Psychology, OR EP 3183, Exercise Psychology EP 2013, Fundamentals of Kinesiology EP 3233, Anatomical Kinesiology Concentration Courses	12
		<u>Electives (consent of advisor – must meet student’s career goals)</u>	15
		Neuromechanics Concentration EP 4143, Aging and Disability EP 4703, Neural Control of Movement PE 3223, Motor Development PE 4283, Sport Biomechanics PE 4853, Motor Learning	15

		<u>Adjunct Courses</u> EDF 3413, Writing for Thinking OR MGT 3213, Organizational Comm, OR BIO 3013, Writing for Biologists CO 1003, Fund. Of Public Speaking, OR CO 1013, Intro to Comm, OR CO 2253, Interpersonal Comm BIO 3004, Human Anatomy OR equivalent Gen Ed Bio/Lab Science course BIO 3014, Human Physiology OR equivalent Gen Ed Bio/Lab Science course KI 2603, Medical Terminology	17
		Total Hours:	124

NEUROMECHANICS

3. JUSTIFICATION AND STUDENT LEARNING OUTCOMES

The Neuromechanics concentration is a completely new concentration and will be one of the eventual three undergraduate exercise science concentrations in the department. This concentration will prepare students for some of the same career goals as does CLEP. However, neuromechanics students will also be able to achieve the following career goals: human factors ergonomics, sport science, disability, and rehabilitation science. As this will be a new concentration within the department, it will also have the proposed new Kinesiology Core. Since all students receive a bachelor's degree in Kinesiology, faculty felt there should be some commonality (see the 12 hour core block in each curriculum outline).

4. SUPPORT

See Attached Letter

There will be no additional support needed, such as personnel or material requirements.

5. PROPOSED 4-LETTER ABBREVIATION

NRMC

6. EFFECTIVE DATE

Upon Final Approval

DEGREE MODIFICATION OUTLINE FORM

Use the chart below to make modifications to an existing undergraduate degree outline. If any General Education (Core) course is acceptable in the category, please indicate by saying "any Gen Ed course". There is no need to type in the whole list. All deleted courses and information should be shown in *italics* and all new courses and information in **bold**. Include the course prefix, number, and title in both columns. Expand this table as needed.

CURRENT Degree Description	PROPOSED Degree Description
Degree: Major: Concentration:	Degree: Bachelor of Science Major: Kinesiology Concentration: Performance Fitness
"[Click here and type old degree description]"	<p>The Department of Kinesiology offers five undergraduate concentrations: Physical Education and Coaching (PEC), Neuromechanics (NM), Performance Fitness (PF), Clinical Exercise Physiology (CLEP), and Sport Administration (SA).</p> <p>Community college transfer hours not to exceed 62 semester hours may be applied to the Kinesiology degree program. All concentrations require the specified course requirements cited within the General Education and major core listings below. Specified area content courses vary among the five concentrations and are listed following the core section. Pre-Occupational Therapy and Pre-Physical Therapy curricula have different core and program requirements. Students electing to pursue Pre-OT or Pre-PT should consult their advisor.</p>
"[Click here and type old concentration description]"	<p>The Performance Fitness concentration provides students with the necessary knowledge to incorporate exercise physiology concepts into activities that enhance fitness and performance. This concentration covers everything from the development of plans to enhance fitness in apparently healthy populations to improving performance in elite athletes. Performance Fitness takes into consideration a combination of the physiological, biomechanical, and psychological aspects of training in the development of individual and team needs for customized programming. The concentration serves as the foundation for students to become sport scientists, strength and conditioning coaches, personal trainers, and specialists within corporate fitness/wellness programs.</p>

CURRENT CURRICULUM OUTLINE	Required Hours	PROPOSED CURRICULUM OUTLINE	Required Hours
English (Ex: EN 1103 English Comp I):	6	<u>English</u> EN 1103 English Comp I OR EN 1163 Accelerated Comp I EN 1113 English Comp II OR EN 1173 Accelerated Comp II	6
Fine Arts (General Education):	3	Fine Arts (General Education): Any Gen Ed Course	3
Natural Sciences (2 labs required from Gen Ed):	6-8	<u>Natural Sciences</u> BIO 1134 Biology I, OR other four credit hour approved BIO above, OR other four hour approved Gen Ed Lab Science CH 1213/CH 1211 Chemistry I & Inves in Chemistry I, OR other four credit hour approved CH and lab above, or four credit hour approved Gen Ed Lab Science	8
Extra Science (if appropriate)		Natural Science (if appropriate) Any Gen Ed Course	3
Math (General Education): MA 1313	6-9	<u>Math</u> MA 1313 College Algebra OR Above ST 2113 Introduction to Statistics	6
Humanities (General Education):	6	<u>Humanities</u> Any Gen Ed Course(s)	6
Social/Behavioral Sciences (Gen Ed):	6	<u>Social/Behavioral Sciences</u> PSY 1013 Psychology OR other approved Gen Ed Course SO 1003 Introduction to Sociology OR other approved Gen Ed Course	6
Major Core Courses		<u>Exercise Science Core</u> KI 2023, Foundations of Health Education EP 3304, Exercise Physiology EP 3643, Applied Anatomy and Pathophysiology EP 4113, Fitness Programs and	27

		Testing Procedures EP 4183, Exercise and Weight Control EP 4504, Mechanical Analysis of Movement EP 4603, Physical Activity Epidemiology EP 4814, Exercise Science Internship	
Concentration Courses		<u>Kinesiology Core Courses</u> PE 1000, Play, Fitness and Physical Activity or any 3 PE Activity Courses SS 4003, Philosophy of Sport & Physical Activity, OR SS 4303, Globalization & Sport, OR PE 3163, Sport Psychology, OR EP 3183, Exercise Psychology EP 2013, Fundamentals of Kinesiology EP 3233, Anatomical Kinesiology Concentration Courses	12
		<u>Electives (consent of advisor – must meet student’s career goals)</u>	15
		Performance Fitness Concentration FNH 4223, Sports Nutrition PE 3313, Sport Physiology EP 4153, Training Techniques for Exercise and Sport PE 4283, Sport Biomechanics PE 4533, Developing Coaching Expertise	15
		<u>Adjunct Courses</u> EDF 3413, Writing for Thinking OR MGT 3213, Organizational Comm, OR BIO 3013, Writing for Biologists CO 1003, Fund. Of Public Speaking, OR CO 1013, Intro to Comm, OR CO 2253, Interpersonal Comm BIO 3004, Human Anatomy OR equivalent Gen Ed Bio/Lab Science course BIO 3014, Human Physiology OR	17

		equivalent Gen Ed Bio/Lab Science course KI 2603, Medical Terminology	
		Total Hours:	124

PERFORMANCE FITNESS

3. JUSTIFICATION AND STUDENT LEARNING OUTCOMES

The Performance Fitness concentration replaces the Health Fitness Studies (HFS is being deleted – refer to the proposal) concentration as one of the eventual three undergraduate exercise science concentrations in the department. The Performance Fitness concentration prepares students for the same careers as did HFS, but it is more current to today's expectations for those desiring careers as strength and conditioning coaches, personal trainers, and specialists within the corporate fitness and wellness market sectors. Recently, the faculty of the department recognized the need for a Kinesiology Core that would be common to all of the undergraduate degree concentrations. Since all students receive a bachelor's degree in Kinesiology, faculty felt there should be some commonality (see the 12 hour core block in each curriculum outline). With the new core incorporated into this new concentration, we have maintained the original emphasis and learning outcomes of HFS while changing the title and making it more current to today's market.

4. SUPPORT

See Attached Letter

There will be no additional support needed, such as personnel or material requirements.

5. PROPOSED 4-LETTER ABBREVIATION

PRFT

6. EFFECTIVE DATE

Upon Final Approval

DEGREE MODIFICATION OUTLINE FORM

Use the chart below to make modifications to an existing undergraduate degree outline. If any General Education (Core) course is acceptable in the category, please indicate by saying "any Gen Ed course". There is no need to type in the whole list. All deleted courses and information should be shown in *italics* and all new courses and information in **bold**. Include the course prefix, number, and title in both columns. Expand this table as needed.

CURRENT Degree Description		PROPOSED Degree Description	
Degree: Bachelor of Science Major: Kinesiology Concentration: Physical Education and Coaching		Degree: Bachelor of Science Major: Kinesiology Concentration: Physical Education and Coaching	
<p>The Department of Kinesiology offers four undergraduate concentrations: Physical Education and Coaching (<i>PECO</i>), <i>Health Fitness Studies (HFS)</i>, Clinical Exercise Physiology (CLEP), and <i>Sport Studies (SS)</i>.</p> <p>Community college transfer hours not to exceed 62 semester hours may be applied to the Kinesiology degree program.</p> <p>All concentrations require the specified course requirements cited within the General Education and major core listings below. Specified area content courses vary among the four concentrations and are listed following the core section. Pre-Occupational Therapy, Pre-Physical Therapy, Pre-Medical, and Pre-Physician Assistant curricula have different core and program requirements. Those students desiring to enter a graduate health care field should major in CLEP in their undergraduate curriculum.</p>		<p>The Department of Kinesiology offers five undergraduate concentrations: Physical Education and Coaching (PEC), Neuromechanics (NM), Performance Fitness (PF), Clinical Exercise Physiology (CLEP), and Sport Administration (SA).</p> <p>Community college transfer hours not to exceed 62 semester hours may be applied to the Kinesiology degree program. All concentrations require the specified course requirements cited within the General Education and major core listings below. Specified area content courses vary among the five concentrations and are listed following the core section. Pre-Occupational Therapy and Pre-Physical Therapy curricula have different core and program requirements. Students electing to pursue Pre-OT or Pre-PT should consult their advisor.</p>	
<p>The Physical Education and Coaching concentration requires 124 semester hours of prescribed courses to complete the Bachelor of Science in Kinesiology. The curriculum is designed to meet the need of students interested in becoming physical education teachers in public and private schools. The teaching block of courses must be included in the on-campus requirement of 32 semester hours of junior and senior courses. Students who complete the program will be eligible for teacher licensure by the Mississippi Department of Education.</p>		<p>The Physical Education and Coaching concentration requires 124 semester hours of prescribed courses to complete the Bachelor of Science in Kinesiology. The curriculum is designed to meet the need of students interested in becoming physical education teachers in public and private schools. The teaching block of courses must be included in the on-campus requirement of 32 semester hours of junior and senior courses. Students who complete the program will be eligible for teacher licensure by the Mississippi Department of Education.</p>	
CURRENT CURRICULUM OUTLINE	Required Hours	PROPOSED CURRICULUM OUTLINE	Required Hours
<u>English</u> EN 1103 English Comp I OR EN 1163 Accelerated Comp I	6	<u>English</u> EN 1103 English Comp I or EN 1163 Accelerated Comp I	6

EN 1113 English Comp II OR EN 1173 Accelerated Comp II		EN 1113 English Comp II or EN 1173 Accelerated Comp II	
<u>Fine Arts</u> PE 1323 History & Apprec of Dance or other approved FA	3	<u>Fine Arts</u> PE 1323 History & Apprec of Dance or other approved FA	3
<u>Natural Sciences</u> BIO 1023 Plants & Humans or any core approved lab SCI BIO 1004 Anatomy and Physiology BIO 1123 Animal Biology or any core approved lab SCI	10	<u>Natural Sciences</u> BIO 1023 Plants & Humans or any core approved lab SCI BIO 1004 Anatomy and Physiology BIO 1123 Animal Biology or any core approved lab SCI	10
<u>Math</u> MA 1313 College Algebra ST 2113 Introduction to Statistics or math above 1313	6	<u>Math</u> MA 1313 College Algebra ST 2113 Introduction to Statistics or math above 1313	6
<u>Humanities</u> EN 22xx Intro to Lit OR American Lit I or II or other approved Humanities HI 1063 or 1073 (Early or Modern U.S.) or other approved Humanities	6	<u>Humanities</u> EN 22xx Intro to Lit OR American Lit I or II or other approved Humanities HI 1063 or 1073 (Early or Modern U.S.) or other approved Humanities	6
<u>Social/Behavioral Sciences</u> PSY 1013 General Psychology SO 1203 Marriage & Family or other approved Social Science	6	<u>Social/Behavioral Sciences</u> PSY 1013 General Psychology SO 1203 Marriage & Family or other approved Social Science	6
<u>Major Core Courses</u> PE 1243 Methods of Teaching Games and Sports PE 1253 Methods of Teaching Lifetime Activities PE 1263 Methods of Teaching Rhythms <i>KI 1803 Health Trends and Topics</i> EP 2013 Fundamentals of Kinesiology PE 3133 Adapted Physical Education PE 3153 Methods of Elementary PE PE 3163 Sport Psychology PE 3223 Motor Development EP 3233 Anatomical Kinesiology PE 3313 Sport Physiology PE 3533 Coaching Sports PE 4533 Developing Coaching Expertise PE 4283 Sport Biomechanics	42	<u>Major Core Courses</u> PE 1243 Methods of Teaching Games and Sports PE 1253 Methods of Teaching Lifetime Activities PE 1263 Methods of Teaching Rhythms PE 3133 Adapted Physical Education PE 3153 Methods of Elementary PE PE 3223 Motor Development PE 3304 Sport Physiology PE 3533 Coaching Sports PE 4533 Developing Coaching Expertise PE 4283 Sport Biomechanics <u>Kinesiology Core Courses</u> PE 1000 or 2 Activity Class Electives PE 3163 Sport Psychology EP 3233 Anatomical Kinesiology EP 2013 Fundamentals of Kinesiology	42
<u>Select one of the following</u> KI 3273 Athletic Training OR KI 2213 Emergency Health Care <u>Professional Education Courses</u> EDF 3333 Social Foundations in Education EDX 3213 Psychology & Education of Exceptional Children and Youth <u>Required for Admission into Teacher Ed</u> PE 4163 Principles and Methods of	45	<u>Select one of the following</u> KI 3273 Athletic Training OR KI 2213 Emergency Health Care <u>Professional Education Courses</u> EDF 3333 Social Foundations in Education EDX 3213 Psychology & Education of Exceptional Children and Youth <u>Required for Admission into Teacher Ed</u> PE 4163 Principles and Methods of Secondary PE	45

Secondary PE 4173 Tests Measures PE PE 4853 Motor Learning PE 4883 School Health Education EPY 3143 Human Development & Learning EPY 3253 Evaluating Learning EDF 4243 Planning for Diverse Learning <u>Final Semester: Teaching Internship</u> PE 4873 Professional Seminar PE 4886 Teaching Intern PE 4896 Teaching Intern	124	PE 4173 Tests Measures PE PE 4853 Motor Learning PE 4883 School Health Education EPY 3143 Human Development & Learning EPY 3253 Evaluating Learning EDF 4243 Planning for Diverse Learning <u>Final Semester: Teaching Internship</u> PE 4873 Professional Seminar PE 4886 Teaching Intern PE 4896 Teaching Intern	124
Total Hours	124	Total Hours	124

PHYSICAL EDUCATION AND COACHING

3. Justification and Student Learning Outcomes

These changes will allow more movement/activity for our students which is something vitally needed in our curriculum. The student learning outcomes will not be changed.

4. Support

See attached letter. No anticipated changes in support (i.e. personnel and materials requirements)

5. Proposed 4-Letter Abbreviation

PECO

6. Effective Date

Upon Approval

DEGREE MODIFICATION OUTLINE FORM

Use the chart below to make modifications to an existing undergraduate degree outline. If any General Education (Core) course is acceptable in the category, please indicate by saying "any Gen Ed course". There is no need to type in the whole list. All deleted courses and information should be shown in *italics* and all new courses and information in **bold**. Include the course prefix, number, and title in both columns. Expand this table as needed.

CURRENT Degree Description	PROPOSED Degree Description
Degree: Kinesiology Major: Concentration: <i>Sport Studies</i>	Degree: Kinesiology Major: Concentration: Sport Administration
<p>The Department of Kinesiology offers <i>four</i> undergraduate concentrations: <i>Physical Education and Coaching (PECO)</i>, <i>Health Fitness Studies (HFS)</i>, Clinical Exercise Physiology (CLEP), and <i>Sport Studies (SS)</i>.</p> <p>Community college transfer hours not to exceed 62 semester hours may be applied to the Kinesiology degree program.</p> <p>All concentrations require the specified course requirements cited within the General Education and major core listings below. Specified area content courses vary among the <i>four</i> concentrations and are listed following the core section. Pre-Occupational Therapy, Pre-Physical Therapy, <i>Pre-Medical</i>, and <i>Pre-Physician Assistant</i> curricula have different core and program requirements. <i>Those students desiring to enter a graduate health care field should major in CLEP in their undergraduate curriculum.</i></p>	<p>The Department of Kinesiology offers five undergraduate concentrations: Physical Education and Coaching (PEC), Neuromechanics (NM), Performance Fitness (PF), Clinical Exercise Physiology (CLEP), and Sport Administration (SA).</p> <p>Community college transfer hours not to exceed 62 semester hours may be applied to the Kinesiology degree program.</p> <p>All concentrations require the specified course requirements cited within the General Education and major core listings below. Specified area content courses vary among the five concentrations and are listed following the core section. Pre-Occupational Therapy and Pre-Physical Therapy curricula have different core and program requirements. Students electing to pursue Pre-OT or Pre-PT should consult their advisor.</p>
<p>The <i>Sport Studies</i> concentration provides students with knowledge and skills necessary for careers in the sport industry. A concentration in <i>Sport Studies</i> helps prepare students to work in such fields as sport marketing & promotions, sporting event and/or facility management & operations, sport communication & media relations, and other administrative areas at the professional, collegiate, and recreational levels of the <i>sport business</i> industry. The program seeks to combine classroom education with hands-on experience, as all students will complete an internship in the sport industry prior to graduation. Students choosing a concentration in <i>Sport Studies</i> choose either the Business or Communication cognate field.</p>	<p>The Sport Administration concentration provides students with knowledge and skills necessary for careers in the sport industry. A concentration in Sport Administration helps prepare students to work in such fields as sport marketing & promotions, sporting event and/or facility management & operations, sport communication & media relations, and other administrative areas at the professional, collegiate, and recreational levels of the industry. The program seeks to combine classroom education with hands-on experience, as all students will complete an internship in the sport industry prior to graduation. Students choosing a concentration in Sport Administration choose either the Business, Communication, or Foreign Language cognate field.</p>

CURRENT CURRICULUM OUTLINE	Required Hours	PROPOSED CURRICULUM OUTLINE	Required Hours
<u>English</u> EN 1103 English Comp I OR EN 1163 Accelerated Comp I and EN 1113 English Comp II OR EN 1173 Accelerated Comp II	6	<u>English</u> EN 1103 English Comp I OR EN 1163 Accelerated Comp I and EN 1113 English Comp II OR EN 1173 Accelerated Comp II	6
Fine Arts (General Education): PE 1323 History and Appreciation of Dance OR any approved fine arts Gen Ed course	3	Fine Arts (General Education): PE 1323 History and Appreciation of Dance OR any approved fine arts Gen Ed course	3
Natural Sciences (2 labs required from Gen Ed): BIO 1004 Anatomy and Physiology and <i>any two</i> 3-4 hour Gen Ed Lab Science courses	10-11	Natural Sciences (2 labs required from Gen Ed): BIO 1004 Anatomy and Physiology and any 3-4 hour Gen Ed Lab Science course	8
Extra Science (if appropriate)		Extra Science (if appropriate)	0
Math (General Education): MA 1313 College Algebra and MA 1613 Calculus for Business and Life Science	6	Math (General Education): MA 1313 College Algebra MA 1613 Calculus for Business and Life Science	6
Humanities (General Education): PHI 1123 Intro to Ethics OR any two Gen Ed Humanities courses.	6	Humanities (General Education): PHI 1123 Intro to Ethics OR any two Gen Ed Humanities courses.	6
Social/Behavioral Sciences (Gen Ed): SO 1003 Introduction to Sociology and EC 2113 Macroeconomics	6	Social/Behavioral Sciences (Gen Ed): SO 1003 Introduction to Sociology and EC 2113 Macroeconomics	6
Major Core Courses:	0	Kinesiology Core Courses: EP 2013, Fundamentals of Kinesiology PE 1000, Play, Fitness and Physical Activity or any 3 PE Activity Courses SS 4003, Philosophy of Sport & Physical Activity, OR SS 4303, Globalization & Sport, OR PE 3163, Sport Psychology, OR EP 3183, Exercise Psychology EP 3233, Anatomical Kinesiology Concentration Courses	12

Concentration Courses SS 2003 Foundations Sport Management SS 2103 Sport Careers and Practicum SS 3103 Sport Sponsorship SS 3203 Sport Law SS 4103 Ethics in Sports Management SS 4203 Funding of Sport <i>SS 4303 Globalization & Sport</i> SS 4396 Sports Studies Internship SS 4803 Seminar in Sports Studies <i>TKT 1273 Computer Applications (Satisfies Computer requirement)</i> <i>CO 1003 Fundamentals of Public Speaking. (Satisfies Communication requirement)</i>	36	<u>Concentration Courses:</u> SS 2003 Foundations Sport Mgmt SS 2103 Sport Careers and Practicum SS 3103 Sport Sponsorship SS 3203 Sport Law SS 3403 Facil & Event Mgmt Sport SS 4103 Ethics in Sports Mgmt SS 4203 Funding of Sport SS 4396 Sports Studies Internship SS 4803 Seminar in Sports Studies	30
Concentration Electives: Choose <i>six</i> of the following: SS 3303 Communicat Mgmt in Sport SS 3403 Facil & Event Mgmt Sport SS 3503 Sport and Rec Leadership SS 3603 Program Planning-Sport & Rec SS 3703 Contemp Issues in Int Ath SS 4403 Gender & Sport SS 4503 Sport Promotion & Sales Mgmt SS 4990 Special Topics Sport Studies PE 3163 Sport Psychology PE 3313 Sport Physiology PE 4223 Sport Biomechanics	18	Concentration Electives: SS 3303 Communication Management in Sport SS 3503 Sport and Rec Leadership SS 3603 Program Planning-Sport & Rec SS 3703 Contemporary Issues in Int Ath SS 3903 Anct./Medi. Sport Hist. SS 4000 Directed Indiv. Study SS 4003 Phil. Sport & Physical Act. SS 4403 Gender & Sport SS 4503 Sport Promotion & Sales Management PE 3163 Sport Psychology PE 3313 Sport Physiology PE 4283 Sport Biomechanics KI 2213 Emergency Health Care SO 4333 Sociology of Sports	15
Cognates Courses: Choose one of the following cognates to complete the concentration	25-27	Cognates Courses: Choose one of the following cognates to complete the concentration requirements:	24-26

requirements:

Business (25 hrs)
ACC 2013 Fin. Acct.
ACC 2023 Man. Acct.
MA 2113 Stats
EC 2123 Microeconomics
MKT 3013 Prin. Marketing
FIN 3113 Fin. Systems
FIN 3123 Fin. Management
MGT 3114 Prin. Man./Production
(plus 8 hours in free electives)

Communication (27 hours)
CO 1223 Intro Com.
CO1403 Intro to Mass Media
CO 2333 TV Prod.
CO 2413 Intro. News Writing
CO 3313 News writ. Elec. Media
CO 3423 Feature Writing
CO 3713 Digital Communication
CO 3803 Principles PR
CO 3823 PR Copy Layout
(Plus 6 hours in free electives)

Business (25 hrs)
ACC 2013 Fin. Acct.
ACC 2023 Man. Acct.
MA 2113 Stats
EC 2123 Microeconomics
MKT 3013 Prin. Marketing
FIN 3113 Fin. Systems
FIN 3123 Fin. Management
MGT 3113 Prin. Man./Production
(plus 7 hours in free electives)

Communication (24 hrs)
CO 1223 Intro Com.
CO1403 Intro to Mass Media
CO 2333 TV Prod.
CO 2413 Intro. News Writing
CO 3313 News writ. Elec. Media
CO 3423 Feature Writing
CO 3713 Digital Communication
CO 3803 Principles PR
(plus 8 hours in free electives)

Foreign Language (26 hrs)
Choose one of the following:
FLF 1113 French I
FLG 1113 German I
FLS 1113 Spanish I

Choose one of the following:
FLF 1123 French II
FLG 1123 German II
FLS 1123 Spanish II

Choose one of the following:
FLF 2133 French III
FLG 2133 German III
FLS 2133 Spanish III

Choose one of the following:
FLF 2143 French IV
FLG 2143 German IV
FLS 2143 Spanish IV

Choose one of the following:

		FLF 3114 Advanced French Composition FLG 3114 Advanced German Composition FLS 3113 & FLS 3111 Advanced Spanish Composition and Advanced Spanish Laboratory Choose one of the following: FLF 3124 Advanced French Conversation FLG 3124 Advanced German Conversation FLS 3233 & FLS 3121 Advanced Spanish Conversation and Advanced Spanish Conversation Practicum Choose one of the following: FLF 3143 French Civilization FLG 3143 German Civilization FLS 3143 Hispanic Civilization Choose one of the following: FLF 3313 Business French I FLG 3313 Business German I FLS 3313 Economics of the Spanish-Speaking World (plus 6 hours in free electives)	
Free Electives	6-8	Free Electives	6-8
Total Hours	124	Total Hours:	124

3. JUSTIFICATION AND STUDENT LEARNING OUTCOMES

The sport studies curriculum, as it is currently constituted, was developed in 2008 (with the exception of one course that was altered in the curriculum in 2012). In the ten years since the curriculum was developed, there has been substantial growth in the sport studies program and the Department of Kinesiology. In fall 2008, the enrollment in the sport studies concentration (known as sport communication at the time), was 74 students. By the fall of 2014, the enrollment in the sport studies concentration was 176 students. By the fall of 2017 enrollment in sport studies had grown to 219 students - growth of 196% in just nine years. Further, in 2008 there were only two faculty members in the Department of Kinesiology whose primary area of teaching was in the sport studies concentration. There are now four TT faculty members in the department whose primary area of teaching is sport studies, as well as one full-time instructor. The curricular modifications outlined in this proposal result from the need to serve a growing number of students in the sport studies program and the ability to serve those students due to an increase in faculty members.

Each of the proposed changes will enhance our program significantly and increase our student marketability after graduation. First, we are changing the concentration's name to Sport Administration. This will more accurately reflect the nature of the curriculum, to reduce confusion and to increase consistency. This is a common name used across the United States for the discipline and is also the name used for the Master's Degree program at MSU. It will also reduce confusion when our graduates go on the job market or apply to graduate school. Second, we are adding the kinesiology core to our concentration. This core will be required of all kinesiology undergraduate independent of concentration. This will expose students to the wider discipline, make them more well-rounded kinesiologists and better prepare them to work within the increasingly diverse work settings found in kinesiology at large. Additionally, a "kinesiology core" is considered best practice by the American Kinesiology Association (AKA). Third, to accommodate the addition of the kinesiology core, we have deleted two concentration courses from outside of the department that were required and have moved SS 4303 Globalization in Sport into the kinesiology core. Fourth, we have deleted CO 3823 PR Copy Layout from the Communications Cognate, since the course no longer exists. Fifth, we have added a Foreign Language Cognate option. As the world of sport continues to shrink, the option to study foreign language in depth will better prepare our students to compete in the increasingly global and multi-cultural sport industry. The addition of the cognate is supported by the Dept. of Classical & Modern Languages and Literatures (see enclosed email from Dr. Corrigan).

All other changes are insignificant (small fluctuations in free electives based on cognate choice, a reduction of required concentration electives to 15 from 18, and an update of the courses available as concentration electives).

Given that the curricular modifications are aimed at helping students gain additional skills and select coursework that best aligns with their academic and professional interests, there is also reason to expect that these program changes may increase the potential placement of graduates within the region/nation as well as increase potential salaries by helping students become better prepared for more desirable positions. Overall, the modifications outlined in this proposal will help the sport administration program better prepare students for careers in the sport industry and/or for postgraduate study in the field.

4. SUPPORT

A letter of support from the head of the Division of Sport Studies, Dr. Brad Vickers, signed by members of the Sport Studies faculty is included in this proposal. We also include a letter of support from Dr. Peter L. Corrigan Professor and Head, Dept. of Classical & Modern Languages and Literatures.

5. PROPOSED 4-LETTER ABBREVIATION

SPAD.

6. EFFECTIVE DATE

Upon approval.

DEGREE MODIFICATION OUTLINE FORM

Use the chart below to make modifications to an existing undergraduate degree outline. If any General Education (Core) course is acceptable in the category, please indicate by saying "any Gen Ed course". There is no need to type in the whole list. All deleted courses and information should be shown in *italics* and all new courses and information in **bold**. Include the course prefix, number, and title in both columns. Expand this table as needed.

CURRENT Degree Description	PROPOSED Degree Description
<i>Degree: Bachelor of Science Major: Kinesiology Concentration: Health Fitness Studies</i>	Degree: Major: Concentration:
<i>The Department of Kinesiology offers four undergraduate concentrations: Physical Education and Coaching (PECO), Health Fitness Studies (HFS), Clinical Exercise Physiology (CLEP), and Sport Studies (SS). Community college transfer hours not to exceed 62 semester hours may be applied to the Kinesiology degree program. All concentrations require the specified course requirements cited within the General Education and major core listings below. Specified area content courses vary among the four concentrations and are listed following the core section. Pre-Occupational Therapy, Pre-Physical Therapy, Pre-Medical, and Pre-Physician Assistant curricula have different core and program requirements. Those students desiring to enter a graduate health care field should major in CLEP in their undergraduate curriculum.</i>	"[Click here and type new degree description]"
<i>Health Fitness Studies Concentration (HFS) Major Advisors: Erin Grant-Butler, Matthew McAllister, and Elizabeth Palmer The health fitness studies concentration provides a basic understanding of the science behind physical fitness and the knowledge to implement effective health fitness programs. This concentration also provides students a basic preparation in one of three tracks</i>	"[Click here and type new concentration description]"

students may choose: Business, Health, or Aging. Students are prepared to work in a variety of settings and jobs: fitness instructors, strength and conditioning specialists, directors of wellness and fitness programs associated with hospitals or geriatric centers, or in employee assistance in the corporate setting.

CURRENT CURRICULUM OUTLINE		PROPOSED CURRICULUM OUTLINE	
	Required Hours		Required Hours
<u>English</u> EN 1103 English Comp I OR EN 1163 Accelerated Comp I EN 1113 English Comp II OR EN 1173 Accelerated Comp II	6	English (Ex: EN 1103 English Comp I):	6
<u>Fine Arts (General Education):</u> PE 1323 History & Appreciation of Dance OR Any Gen Ed Course	3	Fine Arts (General Education):	3
<u>Natural Sciences</u> (2 labs required from Gen Ed): BIO 1004 Anatomy and Physiology BIO 1123 Animal Biology CH 1043 Survey of Chemistry	10	Natural Sciences (2 labs required from Gen Ed):	6-8
<u>Extra Science (if appropriate)</u>		Extra Science (if appropriate)	
<u>Math</u> MA 1313 College Algebra OR Above ST 2113 Introduction to Statistics	6-9	Math (General Education):	6-9
<u>Humanities</u> Any Gen Ed Course(s)	6	Humanities (General Education):	6
<u>Social/Behavioral Sciences</u> PSY 1013 Psychology EC 2113 Principles of Macroeconomics	6	Social/Behavioral Sciences (Gen Ed):	6
<u>Major Core Courses</u> KI 1803 Health Trends and Topics KI 2213 Emergency Health Care PSY 3503 Health Psychology FNH 2293 Individual and Family Nutrition HDFS 4403 Introduction to Gerontology	55-58	Major Core Courses	

<p> <i>FDM 4583 Fashion Entrepreneurship</i> <i>PE 1041 Aerobics</i> <i>PE 1061 Walking and Jogging</i> <i>PE 1151 Strength Training</i> <i>EP 2013 Fundamentals of Kinesiology</i> <i>EP 3183 Exercise Psychology</i> <i>EP 3233 Anatomical Kinesiology</i> <i>KI 3273 Athletic Training</i> <i>EP 3304 Exercise Physiology</i> <i>EP 3663 Personal Fitness Training</i> <i>EP 4113 Fitness Programs and Testing</i> <i>EP 4153 Training Techniques for Exercise and Sport</i> <i>EP 4183 Exercise and Weight Control</i> <i>EP 4210 Health Fitness Studies Internship</i> <i>EP 4803 Professional Seminar in Exercise Science</i> </p>			
<p> <i>Choose 15 hours from one of the following cognates and one course from each of the other two cognates:</i> </p>	21	Concentration Courses	
<p> <i>Business Cognate Courses:</i> <i>EC 2123 Principle of Microeconomics</i> <i>ACC 2013 Principles of Financial Accounting</i> <i>MKT 3013 Principles of Marketing</i> <i>MGT 3513 Introduction to Human Resource Management</i> <i>MKT 4123 Advertising</i> <i>MGT 4153 Management Seminar</i> <i>MGT 4533 Advanced Human Resource Management</i> </p>		Concentration Courses	
<p> <i>Health Cognate Courses:</i> <i>KI 2023 Foundations of Health Education</i> <i>FNH 3163 Basic Principles of Health Promotion</i> <i>EP 4603 Physical Activity</i> </p>			

<i>Epidemiology PSY 3363 Behavioral Modification PSY 3353 Motivation COE 4023 Introduction to Counseling CO 3203 Communication and Group Leadership</i>			
<i>Aging Cognate Courses: PSY 4983 Psychology of Aging EP 4123 Aging and Physical Activity HS 4813 Adult Development: The Middle Years COE 4713 Issues in Aging SO 4413 Aging and Retirement in American Society HS 4863 Consumer Aspects of Aging</i>			
<i>Oral Communication Requirement CO 1003 Fundamentals of Public Speaking</i>	3		
<i>Computer Literacy Requirement TKT 1273 Computer Applications (or other approved course)</i>	3		
<i>Writing Requirement EDF 3413 Writing for Thinking (or other approved junior-level writing course)</i>	3		
<i>Total Hours</i>	<i>124</i>	<i>Total Hours</i>	

Summary of Proposed Changes:

We are deleting the concentration title Health Fitness Studies in lieu of the addition of a similar concentration titled Performance Fitness (see the specific information for Performance Fitness found elsewhere in this packet). This necessitates a delete and add because the changes between the two concentrations are extensive, yet Performance Fitness serves students desiring the same career path. Students remaining in Health Fitness Studies after deletion will be allowed to finish the program. However, they will also be given the opportunity to matriculate into the newly established Performance Fitness concentration if this appears to be more efficient to their plans for a timely graduation.



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February 09, 2018

Dr. Stanley P. Brown
Professor and Head

DEPARTMENT OF KINESIOLOGY

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Dear Dr. Brown,

The curriculum committee of the Division of Exercise Science has met and agreed on the following changes:

- 1) Add PE 1003 Play, Fitness and Physical Activity
- 2) Add SS 4003 Philosophy of Sport & Physical Activity
- 3) Add EP 3803 Advanced Exercise Physiology
- 4) Delete EP 4803 Professional Seminar in Exercise Science
- 5) Delete EP 4210 Health Fitness Studies Internship
- 6) Delete EP 3663 Personal Fitness Training
- 7) Delete KI 3633 Rehabilitation Techniques in Sport
- 8) Modify EP 4810 Clinical Exercise Physiology Internship
- 9) Modify EP 4183 Exercise and Weight Control
- 10) Modify EP 4503 Mechanical Analysis of Movement
- 11) Modify PE 3313 Sport Physiology
- 12) Add the degree concentration titled Neuromechanics
- 13) Add the degree concentration titled Performance Fitness
- 14) Modify the degree concentration titled Clinical Exercise Physiology
- 15) Delete the degree concentration titled Health Fitness Studies

These actions will allow our students the opportunity to specialize into more well-defined areas of interest. We feel that for the program being modified (CLEP) these changes represent less than a 15% change to the program. We propose these course and program deletions, modifications, and additions be presented to the Box Council of the College of Education and from there to the University Committee on Courses and Curricula.

Sincerely,

John Lamberth, Ph.D.

Exercise Science Undergraduate Curriculum Coordinator

Faculty Signatures For

Faculty Signatures Against



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Faculty Signatures For

[Handwritten signatures in black and blue ink on lined paper]

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February 28, 2018

Rebecca Robichaux-Davis
Box Council Chair

Dear Dr. Robichaux-Davis:

This letter is to accompany our approval letters for the curricular/course changes being put forward by the Department of Kinesiology. Herein I wish to clarify the makeup of our curriculum committees so that there will be no miss understanding among the members of the Box Council.

We have three departmental curricular committees:

1. **Graduate:** Composed of Drs. Knight, McAllister, Lee, Lamberth, Vickers, and Smith
2. **Undergraduate Exercise Science:** Composed of Drs. Holmes, Smith, Chander, Lamberth, McAllister, Chen, Knight, Agiovlasitis, Pan, Wiley, and also Mrs. Grant-Butler and Mrs. Joe
3. **Undergraduate Sport Studies:** Composed of Drs. Vickers, Chander, Lee, Twietmeyer, Zimmerman, Lim, Chen, Pan, Wiley, and also Mr. Young, Mrs. Funderburk, and Mr. Rye.

These committees reflect the divisions of the department: Exercise Science and Sport Studies. There is some overlap in committee membership because some faculty teach in one or more of the curricula in each division while others teach only in one division. Notice, therefore, that the signatures on the letters reflect this makeup.

Sincerely,

Stanley P. Brown, Ph.D.
Professor and Head

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Mississippi State, MS 3976

January 29th, 2018

Dr. Stanley P. Brown
Head, Department of Kinesiology

Dear Dr. Brown:

The curriculum committee of the Division of Sport Studies met to discuss changes to the PE and Coaching program. The changes are minor, affecting one course. We feel these changes represent less than a 15% modification to the program so that they do not initiate a program review. The program modification maintains the 124 hour requirement. Program alterations are shown in the following pages. Specific changes are as follows:

1. Add a Kinesiology Core which includes 3 courses already in the curriculum plus the 3 hours of activity course electives.
 - a. Activity PE 1000 2-Hours Activity Classes Electives
 - b. Humanities SS 4003 (Philosophy of Sport and Physical activity), PE 3163 (Sport Psychology), or SS 4303 (Globalization)
 - c. EP 2013 Fundamentals of Kinesiology
 - d. EP 3233 Anatomical Kinesiology (BIO 1004 pre-req)

We propose these changes be taken to the Box Council of the College of Education and from there to the UCCC.

Sincerely,



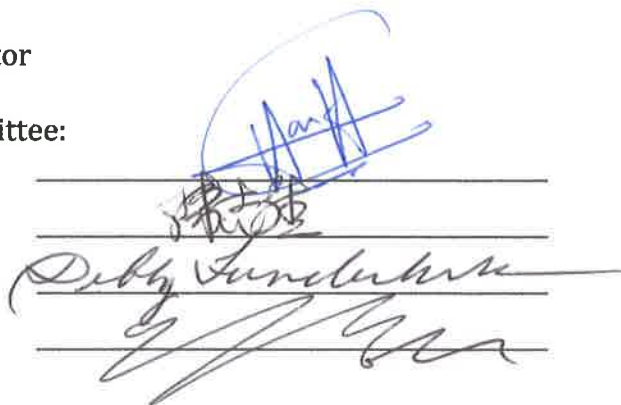
Dr. Brad Vickers
Sport Studies Division Coordinator

Sport Studies Curriculum Committee:
Dr. Harish Chander

Dr. JJ Chen

Mrs. Debbie Funderburk

Dr. Younghan Lee




Mrs. Elizabeth Palmer

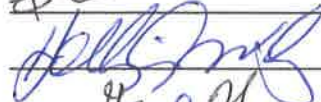


Dr. Zhujun Pan

Mr. Matthew Rye



Dr. Brad Vickers



Dr. Holly Wiley



Mr. Glen Young



Dr. Gregg Twietmeyer



Dr. Matthew Zimmerman



Dr. Lim





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January 26th, 2018

Dr. Stanley P. Brown
Head, Department of Kinesiology

Dear Dr. Brown:

The curriculum committee of the Division of Sport Studies met to discuss the following changes to the PE Curriculum.

1. PE 3304 to take the place of PE 3313 (Sport Physiology) as an updated course.
2. Delete KI 1803 (no longer utilized in the curriculum).
3. Add PE 1000 (2 hours) as an activity class used in the Kinesiology Core.

These changes represent a less than 15% modification and subsequently will not initiate a program review. This modification also maintains the 124-hour requirement. These changes will allow more movement/activity for our students which is something vitally needed in our curriculum. We ask that these changes be taken to the Box Council of the College of Education and from there to the UCCC.

Sincerely,

Dr. Brad Vickers
Sport Studies Division Coordinator
Department of Kinesiology
Mississippi State University

Sport Studies Curriculum Committee:
Dr. Harish Chander

Dr. JJ Chen

Mrs. Debbie Funderburk

Dr. Younghan Lee

Mrs. Elizabeth Palmer

Dr. Zhujun Pan

Mr. Matthew Rye

Dr. Brad Vickers

Dr. Holly Wiley



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Mr. Glen Young

Dr. Gregg Twietmeyer

Dr. Matthew Zimmerman

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Glen Young
Gregg Twietmeyer
Matthew Zimmerman



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2/20/18

To: Members of College of Education Box Council
Subject: Sport Studies Curricular Revisions

We wish to submit the following proposal for modifications to the bachelor's degree in kinesiology, concentration in sport studies. These modifications include:

1. We are changing the undergraduate concentration name to sport administration to more accurately reflect the nature of the curriculum, to reduce confusion and to increase consistency. This is a common name used across the United States for the discipline and is also the name used for the Master's Degree program at MSU.
2. We have added the new "kinesiology core" to our curriculum. This will benefit our students by making them well-rounded and better prepared to work within the increasingly diverse work settings found in kinesiology at large.
3. We have deleted two courses out of the concentration core and moved up SS 4303 Globalization in Sport to the kinesiology core.
4. We have deleted a "dead course" from the communications cognate.
5. We have added the option of a foreign language cognate to better prepare our students to compete in the increasingly global and multi-cultural sport industry.

Included in this proposal packet are the following items: (a) a degree program approval cover sheet, (b) the degree program modification proposal form outlined in the UCCC handbook, (c) a letter of support from the sport studies faculty in the Department of Kinesiology, and (d) a letter of support from Dr. Peter L. Corrigan Professor and Head, Dept. of Classical & Modern Languages and Literatures.

Thank you for your consideration of this proposal.

Sincerely,

Gregg Twietmeyer, Ph.D.
Assistant Professor
Mississippi State University
Department of Kinesiology
McCarthy Gymnasium - 233 B
Mississippi State, MS 39762
(662) 268-7533



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2/20/18

Dear Chair, University Committee on Courses and Curriculum,

Please accept this letter of support for the modification of sport studies concentration in the Department of Kinesiology. These changes have the unanimous support of the Sport Studies faculty. These changes will update the curriculum, allow for the integration of the kinesiology core and make our graduates more competitive in the job market. Please contact Brad Vickers, Chair of the Division of Sport Studies Undergraduate Curriculum Committee, if you have further questions.

Sincerely yours,
Division of Sport Studies
Department of Kinesiology
Undergraduate Curriculum Committee,

Dr. Brad Vickers (Chair)

Dr. Chih-Chia (J.J.) Chen

Dr. Younghun Lee

Dr. Soyoun Lim

Dr. Zhujun Pan

Dr. Gregg Twietmeyer

Prof. Matthew Rye

Dr. Holly Gentry Wiley

Prof. Glen Young

Dr. Matthew Zimmerman

Dr. Harish Chander



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2/20/18

Dear Chair, University Committee on Courses and Curriculum,

Please accept this letter of support for the creation of PE 1000 Play, Fitness & Physical Activity in the Department of Kinesiology. This course has the unanimous support of the Sport Studies faculty. This course will expand course options for Kinesiology students and allow them to more easily fulfill the department's new activity requirement. Please contact Brad Vickers, Chair of the Division of Sport Studies Undergraduate Curriculum Committee, if you have further questions.

Sincerely yours,
Division of Sport Studies
Department of Kinesiology
Undergraduate Curriculum Committee,

Dr. Brad Vickers (Chair)

Dr. Chih-Chia (J.J.) Chen

Dr. Younghan Lee

Dr. Soyoun Lim

Ms. Debby Funderburk

Dr. Zhujun Pan

Dr. Gregg Twietmeyer

Prof. Matthew Rye

Dr. Holly Gentry Wiley

Prof. Glen Young

Dr. Matthew Zimmerman

Dr. Harish Chander



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2/20/18

Dear Chair, University Committee on Courses and Curriculum,

Please accept this letter of support for the modification of sport studies concentration in the Department of Kinesiology. These changes have the unanimous support of the Sport Studies faculty. These changes will update the curriculum, allow for the integration of the kinesiology core and make our graduates more competitive in the job market. Please contact Brad Vickers, Chair of the Division of Sport Studies Undergraduate Curriculum Committee, if you have further questions.

Sincerely yours,
Division of Sport Studies
Department of Kinesiology
Undergraduate Curriculum Committee,

Dr. Brad Vickers (Chair)

Dr. Chih-Chia (J.J.) Chen

Dr. Younghun Lee

Dr. Soyoun Lim

Dr. Zhujun Pan

Dr. Gregg Twietmeyer

Prof. Matthew Rye

Dr. Holly Gentry Wiley

Prof. Glen Young

Dr. Matthew Zimmerman

Dr. Harish Chander

Twietmeyer, Gregg

From: Corrigan, Peter
Sent: Friday, February 09, 2018 3:10 PM
To: Twietmeyer, Gregg
Cc: Russell, Amie
Subject: Re: foreign language cognate?

Dear Gregg,

This looks like a really solid proposal. I'm happy to support it.

One great thing is: any student taking the 26 credits will already qualify for a minor. In fact, some of your students may opt for doing a double major, since the language major isn't that many credits above the 26.

I'm glad to put you in contact with our undergraduate coordinator, Amie Russell, whom I've copied here. She's an expert advisor in helping students get in all the required language courses while making progress toward the major.

Best regards,
Peter

Dr. Peter L. Corrigan
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MISSISSIPPI STATE UNIVERSITY™
DEPARTMENT OF CLASSICAL & MODERN
LANGUAGES AND LITERATURES

From: "Twietmeyer, Gregg" <gjt67@msstate.edu>
Date: Friday, February 9, 2018 at 10:35 AM
To: "Corrigan, Peter" <corrigan@cmll.msstate.edu>
Cc: "Lee, Younghan" <yl690@msstate.edu>, "Lim, Soyoun" <s.lim@msstate.edu>, "Zimmerman, Matthew" <mz319@msstate.edu>, "Rye, Matthew" <drye@colled.msstate.edu>
Subject: foreign language cognate?

Dr. Corrigan,

I am writing to solicit your support for the addition of a foreign language cognate to our sport studies (sport management) undergraduate program. Currently there are cognates in business and communication. We'd like to add