MISSISSIPPI STATE UNIVERSITY

UNIVERSITY COMMITTEE ON COURSES AND CURRICULA

A MEMORANDUM

DATE: April 11, 2018

TO: UCCC Members

FROM: Dr. Dana Pomykal Franz, Chair

SUBJECT: April 26, 2018 Meeting

Enclosed are the minutes from the meeting on March 23, 2018 and the agenda and proposals for the meeting on **Thursday April 26, 2018 beginning at 9:00 a.m.** The meeting will be held in the **Trotter Room (Room 2200) of the Center for Advanced Vehicular Systems in the Research Park**. Please contact the UCCC office if you are unable to attend.

Thank you.

Enclosures: March 23, 2018 Meeting Minutes
Course/Curriculum Proposals

Post Office Box 5268 • Starkville, MS 39762 • Office: (662) 325-9410 • Fax: (662) 325-1846

AGENDA
UNIVERSITY COMMITTEE ON COURSES AND CURRICULA
April 26, 2018

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

ACADEMIC AFFAIRS

Modification	DSS 0810	Employment Practicum/On-campus
Modification	DSS 0910	Employment Practicum/Off-campus

AGRICULTURE AND LIFE SCIENCES

Addition +Distance	ADS 4633/6633	Immunology and Disease in Large Livestock Species
Addition	FNH 3103	Introduction to Health Professions
Modification	FNH 4363/6363	Research Methods in Food and Nutrition
Addition +Distance	FNH 8473	Advanced Sports Nutrition
Addition	PSS 4393/6393	Agriculture Remote Sensing II

ARCHITECTURE, ART AND DESIGN

Modification +Distance	ARC 3904	Architectural Structures I
Modification +Distance	ARC 3914	Structures II

ARTS AND SCIENCES

Addition	CH 4710/6710	Study Tour Abroad
+Distance	EN 4403/6403	Introduction to Linguistics
Addition	PHI 3183	African American Philosophy
+Distance	PS 1313	Introduction to International Relations
+Distance	PS 2703	Introduction to Public Policy
Addition	REL 1003	Introductory Hebrew
Addition	REL 3143	African American Religious Experience
Addition	REL 3593	Johannine Theology

BUSINESS

+Distance	FIN 4423	Investments

EDUCATION

Modification	EDE 8623	Content Area Literacy and Disciplinary Literacy Instruction
Addition	EDL 8313	Assessing Content Knowledge for Teacher Leadership
Addition	EDL 8323	Differentiation of Instruction for Teacher Leadership

Addition	EDL 8333	Teaching Practice and Learning Environment for Teacher Leadership
Addition	EDL 8343	Effective and Reflective Practitioner for Teacher Leadership
Addition	EP 3803	Advanced Exercise Physiology
Modification	EP 4183	Exercise and Weight Control
Modification	EP 4504	Mechanical Analysis of Movement
Addition	EP 8303	Heart/Lung Rehabilitation
+Distance	EPY 3543	Psychology of Adolescence
Modification +Distance	EPY 4073/6073	Personal and Motivational Factors in Education
+Distance	EPY 4513	Introduction to Research in Educational Psychology
Modification +Distance	EPY 6513	Introduction to Research in Educational Psychology
Modification +Distance	KI 3273	Athletic Training
Addition +Distance	MU 1143	The History of Jazz
Addition	MU 1153	Music of Africa
Addition	MU 2023	Music of Latin America
Addition	PE 1000	Play, Fitness & Physical Activity
Modification	PE 3313	Sport Physiology
+Distance	PE 3433	General Safety Methods
Modification +Distance	PE 4413	Basic Drive and Traffic Safety Education I
Modification	RDG 4133	Integrating Literacy Instruction in the Content Areas

FOREST RESOURCES

Addition +Distance	FO 8300	Thesis Research/Thesis in Forestry - International
Addition	FO 9300	Dissertation Research - International
Addition	NREC 4313	Spatial Technologies in Natural Resources Management (was tabled at February 16, 2018 meeting)
Addition	WFA 4513/6513	Current Topics in Human-Wildlife Interactions

VETERINARY SCIENCE

Addition	CVM 8201	Medical Physics I
Addition	CVM 8211	Medical Physics II
Addition	CVM 8824	Advanced Veterinary Anatomy I
Addition	CVM 8832	Advanced Veterinary Anatomy II

4. Degree proposals by college/school

AGRICULTURE AND LIFE SCIENCES

Modification	BS	Food Science, Nutrition, Health Promotions

ARTS AND SCIENCES

Modification	Minor	Biological Sciences
Modification	BS	Biological Sciences

Modification	BS	Microbiology
Modification	Minor	Microbiology
Modification	BS	Medical Technology

BUSINESS

Modification	Ph.D.	Business Administration

EDUCATION

Modification	BS	Kinesiology/Health Fitness Studies
Modification	BS	Kinesiology/Performance Fitness
Modification	BS	Kinesiology/Neuromechanics
Modification	BS	Kinesiology/Clinical Exercise Physiology
Modification	BS	Kinesiology/Sport Studies
Modification	BS	Kinesiology/Physical Education and Coaching
Modification	MS	Educational Leadership

ENGINEERING

Modification	M Eng	Engineering; Military Engineering

University Committee on Courses and Curricula
Mississippi State University
March 23, 2018

Members Present:	Tracey Baham, Randy Campbell, Russell Carr, Cody Coyne, Dana Franz, Seamus Freyne, Charles Freeman, Trey Howell, Kevin Hunt, Brenda Kirkland, Pat Matthes, Erin McDevitt, Hugh Medal, Rob Moore, Emily Owen, Prem Parajuli, Tommy Parker, Andy Perkins, Tommy Phillips, Charles Provine, Wendy Roussin, Kathy Sherman-Morris, Barry Stewart, Brad Trinkle, Jenny Turner, Erica Waldman, Jeff Winger, Robert Wolverton, Chien Yu, Matthew Zimmerman
Proxy:	Bob Wolverton for Pat Matthes
Absent:	Shrinidhi Ambinakudige, Ben Mackin, Erin McDevitt
Excused:	Amy Adkerson, Amy Crumpton, Holly Holladay, Tommy Parker
Guests:	J. W. Bruce, Padmanava Dash, Stephen France, Jean Mohammadi-Aragh, Danielle Molina, Lynda Moore, Sharon Oswald, Heidi Renninger, Jason Walker, Xinchang Wang

Franz called the meeting to order at 1:30 p.m. on Friday, March 23, 2018 in Room 324 of the Union. Franz introduced Hugh Medal who is serving on the committee for the College of Engineering for the March and April UCCC meetings. Franz also introduced Matthew Zimmerman from Kinesiology who was elected to replace Kelly Moser.

Hunt moved to approve the February 16, 2018 UCCC minutes. Coyne seconded the motion. The motion to approve the February 16, 2018 UCCC minutes was approved unanimously.

Hunt moved to approve the addition of NREC 4573 Ecology of Managed Forests. Kirkland seconded the motion. The motion to approve NREC 4573 was approved unanimously.

Hunt moved to approve the modification of the BS in Forestry: Environmental Conservation, Forest Management, Forest Products, Wildlife Management, Urban Forestry. Coyne seconded the motion. The motion to approve the modification of the BS in Forestry was approved unanimously.

Howell moved to approve the additions of CVM 5882 Small Animal Gastroenterology and CVM 6882 Small Animal Gastroenterology. Carr seconded the motion. The motion to approve CVM 5882 and CVM 6882 was approved unanimously.

Kirkland moved to approve the addition of distance education to BIS 3233 Management Information Systems. Trinkle seconded the motion. The motion to approve the addition of distance education to BIS 3233 was approved unanimously.

Kirkland moved to approve the addition of BQA 4423/6423 Business Decision Analysis and the addition of distance education to BQA 4423/6423. Trinkle seconded the motion. The subcommittee that reviewed the proposal observed that the policy in the syllabus concerning when make-up exams are

allowed may not be in compliance with AOP 12.09. Committee members observed that students who do well on a test may not be able to get the maximum extra credit points allowed. Stewart moved to pass the proposal contingent upon the above concern about the make-up exams and AOP 12.09 being addressed. Hunt seconded the motion. The motion to pass the addition of BQA 4423/6423 and the addition of distance education to BQA 4423/6423 was approved unanimously.

Stewart moved to approve the addition of distance education to BUS 4853 Business Policy. Kirkland seconded the motion. The motion to approve the addition of distance education was unanimously approved.

Kirkland moved to approve the addition of distance education to the Bachelor of Business Administration. Hunt seconded the motion. Committee members discussed the addition of distance education to undergraduate degrees. Committee members observed that distance education has not been added to BL 2413 The Legal Environment of Business, and it is a college core course. Committee members felt distance education should be added to that course as soon as possible. The motion to approve the addition of distance education to the Bachelor of Business Administration was unanimously approved.

Kirkland moved to approve the addition of a minor in Business Analytics. Stewart seconded the motion. The motion to approve the addition of a minor in Business Analytics was approved unanimously.

Perkins moved to approve the addition of CE 4933/6933 An Introduction to the Finite Element Method, the addition of distance education to CE 4933/6933, and the modification to EM 4123/6123 An Introduction to the Finite Element Method. Hunt seconded the motion. Committee members were concerned the syllabi do not contain attendance policies. Coyne moved to pass the addition of CE 4933/6933, the addition of distanced education to CE 4933/6933, and the modification to EM 4123/6123 contingent upon the above concern being addressed. The motion to pass contingent was approved unanimously.

Perkins moved to approve the addition of ENE 8003 and the inclusion of distance education with the course, the addition of ENE 8303 and the inclusion of distance education with the course, the addition of ENE 8703 Design in Engineering Education & Practice and the inclusion of distance education with the course, and the modification of the Ph.D. in Engineering Education. The subcommittee pointed out that it is not clear if there are prerequisites for ENE 8303 and ENE 8703, since the proposals do not have prerequisites listed, but the syllabi do contain prerequisites. Committee members pointed out under the Program of Studies Courses heading in the modification of the Ph.D. in Engineering Education, ENE 3003, ENE 8303, and ENE 8703 are listed, but ENE 8703 is not required in the program. Committee members felt this information would be confusing to students and should be clarified for the graduate catalog. Stewart moved to pass ENE 8003, ENE 8303, ENE 8703 and the modification of the Ph.D. in Engineering Education contingent upon the above concerns being addressed. Trinkle seconded the motion. The motion to pass contingent was approved unanimously.

Hunt moved to approve the modification of the BS in Computer Engineering and the modification of the BS in Electrical Engineering. Carr seconded the motion. The motion to approve the modification of the BS in Computer Engineering and the modification of the BS in Electrical Engineering was unanimously approved.

Hunt moved to approve the addition of distance education to GR 4643/6643 Physical Climatology and the addition of distance education to GR 4963/6963 Mesoscale Meteorology. Kirkland seconded the motion. The subcommittee that reviewed the proposal recommended approval. The motion to approve the addition of distance education to GR 4643/6643 and GR 4963/6963 was approved unanimously.

Carr moved to approve the modification of GR 8333 Field Techniques in Remote Sensing. Hunt seconded the motion. The subcommittee that reviewed the proposal recommended approval. The motion to approve the modification of GR 8333 was approved unanimously.

Carr moved to approve the modification of the BS in Geosciences. Hunt seconded the motion. The subcommittee that reviewed the proposal was concerned that the course listing table is not clear because of the way the credit hours for Math and Natural Sciences are entered; the Professional Geology concentration credit hours add up to 133; and all of the concentrations' credit hour totals should be double checked. Coyne moved to pass the modification of the BS in Geosciences contingent upon the above concerns being addressed. Parajuli seconded the motion. The motion to pass the modification of the BS in Geosciences contingent was approved unanimously.

Carr moved to approve the modification of the Broadcast and Operational Meteorology Certificate. Hunt seconded the motion. The subcommittee that reviewed the proposal recommended approval. The motion to approve the modification of the Broadcast and Operational Meteorology Certificate was unanimously approved.

Kirkland moved to approve the addition of PPA 8183 Local Government Finance. Hunt seconded the motion. The motion to approve the addition of PPA 8183 was approved unanimously.

Stewart moved to approve the addition of SW 4653 Social Work with Family Violence and the inclusion of distance education with the course. Parajuli seconded the motion. Committee members pointed out the student honor code needs to be added to the syllabus. The motion to approve the addition of SW 4653 and the addition of distance education to the course was approved unanimously.

Kirkland moved to approve the modifications and additions of distance education to EDA 8223 Seminar in Administration, EDA 8283 Educational Leadership, EDA 8353 Applications of Theory to Educational Administration, EDA 8383 Ethical Decision Making in Educational Administration, HED 8223 Seminar in Administration, HED 8283 Educational Leadership, HED 8353 Applications of Theory to Educational Administration, and HED 8383 Ethical Decision Making in Educational Administration. Hunt seconded the motion. The subcommittee that reviewed the proposals recommended approval. The motion to approve the modifications and additions of distance education to EDA 8223, EDA 8283, EDA 8353, EDA 8383, HED 8223, HED 8283, HED 8353, and HED 8383 was unanimously approved.

Kirkland moved to approve the modification and addition of distance education to HED 8523 Student Development Theory. Hunt seconded the motion. The subcommittee that reviewed the proposal pointed out that the evaluation points in the Campus 1 syllabus do not equal 100, but the points do equal 100 in the proposal. The subcommittee pointed out it appears the case study competition should be worth 25 points instead of 20 points. Coyne moved to pass the modification and addition of distance education to HED 8523 contingent upon the above concern being addressed. The motion to pass contingent was approved unanimously.

Kirkland moved to approve the modification of TKI 3223 Industrial Materials. Hunt seconded the motion. The motion to approve the modification of TKI 3223 was approved unanimously.

Hunt moved to approve the addition of distance education to PE 8113 Curriculum Construction in Physical Education. Parajuli seconded the motion. Committee members pointed out the syllabus did not contain an attendance policy. Coyne moved to pass the proposal to add distance education to PE 8113 contingent upon the above concern being addressed. Trinkle seconded the motion. The motion to pass PE 8113 contingent was approved unanimously.

Coyne moved to approve the modification of ABE/LA 4843/6843 Sustainable Communities and the modification of the Bachelor of Landscape Architecture. Stewart seconded the motion. Dr. Jason Walker appeared in support of the proposals. The motion to approve the modification of ABE/LA 4843/6843 and the Bachelor of Landscape Architecture was approved unanimously.

Hunt moved to approve the addition of HDFS 2123 Perspectives on Child Maltreatment and Child Advocacy and the inclusion of distance education for the course, the addition of distance education for HDFS 3813 Lifespan Theory, and the addition of distance education for HDFS 8813 Seminar in Human Development and Family Science. Parajuli seconded the motion. The motion was approved unanimously.

Freeman moved to approve the modification of FDM 1533 Apparel Construction, the addition of FDM 2333 Intro to Buying and Management, the addition of FDM 2153 Fashion Apparel Analysis, the modification of FDM 2593 Product Development II, the addition of FDM 3221 Internship Preparation, the modification of FDM 3553 Fashion Retail Pricing and Inventory Management, the addition of FDM 4424/6424 Teaching Methods in Agricultural and Human Sciences, the modification of FDM 4363/6363 Draping, the modification of FDM 4513/6513, the modification of FDM 4603/6603 Global Sourcing in the Textile and Apparel Industry, the addition of FDM 4693/6693, and the modification of the BS in Fashion Design and Merchandising. Stewart seconded the motion. The subcommittee that reviewed the proposals had the following concerns: for FDM 1533 under the proposed course outline no contact hours are listed for Part II (v) Lining Sample; for FDM 2153 and FDM 2593 at end of the attendance section of the syllabus "2 AOP 12.09" is included without an explanation; for FDM 3553 the math and Excel Assignments grade worth should be clarified and the course outline does not outline how the lecture/lab contact hours are distributed; for FDM 4424/6424 the proposal mentions graduate student assignments, but the syllabus does not; for FDM 4513/6513 the syllabus lists prerequisites while the proposal does not, how much each exam is worth needs to clarified, and under the course policies (syllabus p.4) Policy 2 is blank; for the modification of the BS in Fashion Design and Merchandising, subcommittee members questioned why MA 2113 was not were not included in the general education list of courses of BQA 2113 and ST 2113, and to make it easy to see the credit hours equal 124, at the bottom of the program table the 10 free elective hours need to be moved into the right hand column. Coyne moved to pass the proposals for FDM 1533, FDM 2333, FDM 2153, FDM 2593, FDM 3221, FDM 3553, FDM 4424/6424, FDM 4363/6363, FDM 4513/6513, FDM 4603/6603, FDM 4693/6693 and the modification of the BS in Fashion Design and Merchandising contingent upon the above concerns being addressed. Hunt seconded the motion. The motion to pass contingent was unanimously approved.

Stewart moved to approve the modification of the BS in Human Development and Family Science. Hunt seconded the motion. The motion to approve the modification of the BS in Human Development and Family Science was approved unanimously.

Coyne moved to adjourn. Hunt seconded the motion. The motion to adjourn the meeting was approved unanimously. The meeting was adjourned at 3:50 p.m.

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: CALS Department: FSNHP

Contact Person: Christine Cord Mail Stop: 9805 E-mail: cml260@msstate.edu

Nature of Change: Concentration changes; Concentration deletion; Concentration addition
Date Initiated: January 24, 2018 Effective Date: Fall 2018

Current Degree Program Name:
Major: Food Science, Nutrition, and Health Promotion
Concentrations:
Food Science and Technology, Food Safety, Food Business/Processing, Food and Nutrition, Culinology®

New Degree Program Name:
Major: Food Science, Nutrition, and Health Promotion
Concentrations:
Food Science and Technology, Food Safety, Food Business/Processing, Food and Nutrition, Pre-Health Professions

Summary of Proposed Changes:

Adjustment of required courses within Food Science and Technology, Food Safety, Food Business/Processing, and Food and Nutrition concentrations

Deletion of Culinology concentration

Addition of Pre-Health Professions concentration

Approved: Date:

Donna Bland for Marion W. Evans, Jr. 3/15/18
Department Head

4.2.18
Chair, College or School Curriculum Committee

4/4/18
Dean of College or School

Chair, University Committee on Courses and Curricula

Chair, Graduate Council (if applicable)

Chair, Deans Council

DEGREE MODIFICATION OUTLINE FORM – Food Processing Business Concentration

CURRENT Degree Description		PROPOSED Degree Description	
Degree: Bachelor of Science Major: Food Science, Nutrition, and Health Promotion Concentration: Food Processing and Business		Degree: Bachelor of Science Major: Food Science, Nutrition, and Health Promotion Concentration: Food Processing and Business	
The Food Science, Nutrition and Health Promotion major offers the opportunity to gain a broad education in food science, nutrition, and health, as well as the specific academic background to pursue careers as food scientists and dietitians/nutritionists. It involves the integration of new knowledge and advances in technology and the physical and biological sciences with psychological, sociological, and behavioral sciences in the provision of a safe, nutritious food supply. Research, teaching, and outreach extend the continuum from the processing of food to its marketing, consumption, and impact on public health and community.		The Food Science, Nutrition and Health Promotion major offers the opportunity to gain a broad education in food science, nutrition, and health, as well as the specific academic background to pursue careers as food scientists and dietitians/nutritionists. It involves the integration of new knowledge and advances in technology and the physical and biological sciences with psychological, sociological, and behavioral sciences in the provision of a safe, nutritious food supply. Research, teaching, and outreach extend the continuum from the processing of food to its marketing, consumption, and impact on public health and community.	
FSTP combines food science and business courses to prepare students for careers in the food industry, government, or private business.		FSTP combines food science and business courses to prepare students for careers in the food industry, government, or private business.	
CURRENT CURRICULUM OUTLINE	Required Hours	**PROPOSED CURRICULUM OUTLINE**	Required Hours
English (Ex: EN 1103 English Comp I): 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): 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): Select from University Gen Ed Core	3	Fine Arts (General Education): Select from University Gen Ed Core	3
Natural Sciences BIO 1134 Biology I CH 1213 Chemistry I CH 1211 Investigations in Chemistry I CH 1223 Chemistry II CH 1221 Investigations of Chemistry II	12	Natural Sciences BIO 1134 Biology I CH 1213 Chemistry I CH 1211 Investigations in Chemistry I CH 1223 Chemistry II CH 1221 Investigations of Chemistry II	12
Extra Science (if appropriate)		Extra Science (if appropriate)	
Math (General Education): MA 1313 College Algebra ST/BQA/MA 2113 Introduction to Statistics or ST 3123 Introduction to Statistical Inference	*6*	Math (General Education): MA 1313 College Algebra ST/BQA/MA 2113 Introduction to Statistics or ST 3123 Introduction to Statistical Inference	6
Humanities (General Education): Select from University Gen Ed Core	6	Humanities (General Education): Select from University Gen Ed Core	6
Social/Behavioral Sciences (Gen Ed): AEC 2713 Intro to Food and Resource Economics Select from University Gen Ed Core	6	Social/Behavioral Sciences (Gen Ed): AEC 2713 Intro to Food and Resource Economics Select from University Gen Ed Core	6

Major Core Courses CH 2501 Elem Org Chem Lab CH 2503 Elem Org Chem FNH 2293 Individual and Family Nutrition FNH 3111 FNH Seminar FNH 4243 Food Composition and Reactions MGT 3513 Intro to Human Resource Management CH 2501 Elementary Organic Chemistry Lab CH 2503 Elementary Organic Chemistry CO 1003 Fundamentals of Public Speaking OR CO 1013 Introduction to Communication OR CO 2213 Small Group Communication OR	17	Major Core Courses CH 2501 Elem Org Chem Lab CH 2503 Elem Org Chem FNH 2293 Individual and Family Nutrition FNH 3111 FNH Seminar FNH 4243 Food Composition and Reactions MGT 3513 Intro to Human Resource Management CH 2501 Elementary Organic Chemistry Lab CH 2503 Elementary Organic Chemistry CO 1003 Fundamentals of Public Speaking OR CO 1013 Introduction to Communication OR CO 2213 Small Group Communication	17
Concentration Courses *AIS* 3203 Prof Writing ANR Hum Sci* *AIS* 4203 App Compute Tech *AIS*** FNH 2011 Career Pln/Succ Food Sci FNH 2112 Food Products Evaluation FNH 4114 Analysis of Food Product FNH 4241 Applied Food Chemistry FNH 4333 Food Law FNH 4414 Microbiology of Foods FNH 4480 Food Science Internship (6 hours) FNH 4593 New Food Product Development MKT 3013 Principles of Marketing OR AEC 3413 Intro to Food Marketing PH 1113 General Physics I OR PH 2213 Physics I FNH 4583 Food Preservation Tech OR FNH 4573 Food Engineering Fundamentals Business Electives 12 hrs*****	*51*	Concentration Courses **MA 1323 Trigonometry** **BIO 3304 General Microbiology** **AELC** 3203 Prof Writing ANR Hum Sci* **AELC** 4203 App Compute Tech **AELC**** FNH 2011 Career Pln/Succ Food Sci FNH 2112 Food Products Evaluation FNH 4114 Analysis of Food Product FNH 4241 Applied Food Chemistry FNH 4333 Food Law FNH 4414 Microbiology of Foods FNH 4480 Food Science Internship (6 hours) FNH 4593 New Food Product Development MKT 3013 Principles of Marketing OR AEC 3413 Intro to Food Marketing PH 1113 General Physics I OR PH 2213 Physics I FNH 4583 Food Preservation Tech OR FNH 4573 Food Engineering Fundamentals Business Electives 12-hrs*****	**58**
Electives Processing Electives 6-8 hrs*** *FNH Electives 9 hrs***** *Free Electives 0-2 hrs*	*17*	Electives Processing Electives 6-8 hrs*** **FNH Electives –3 hrs****** **Free Electives 0-1 hrs**	**10**
Total Hours	124	Total Hours	124
* Fulfills Jr/Sr Writing Requirement ** Fulfills Computer Lit Requirement. *** Choose 2 courses (6-8 hours) from the Food Processing Electives: FNH 3314 Introduction to Meat Science: FNH 4613 Seafood Processing: FNH 4513 Poultry Processing: FNH 4123, Fermented Food Processing: or FNH 4143 Dairy Foods Processing: or FNH 4583 Food Industry Unit Operations.		* Fulfills Jr/Sr Writing Requirement ** Fulfills Computer Lit Requirement. *** Choose 2 courses (6-8 hours) from the Food Processing Electives: FNH 3314 Introduction to Meat Science: FNH 4613 Seafood Processing: FNH 4513 Poultry Processing: FNH 4123, Fermented Food Processing: or FNH 4143 Dairy Foods Processing: or FNH 4583 Food Industry Unit Operations.	

**** Choose three additional FNH 3-4000 level courses from all food science, nutrition and health promotion classes ***** Business Electives: (12 credits). A minor in AgEcon, Marketing, Finance, Management or Business Administration will satisfy the requirement for 12 credits of business electives. In lieu of a Minor, students should select 12 credit hours from the following: ACC 2013 Principles of Financial Accounting; MKT 3013 Introduction to Marketing; AEC 3133 Introductory Agribusiness Management; AEC 3213 International Trade in Agriculture; AEC 3413 Introduction to Food Marketing; AEC 4113 Agribusiness Firm Management; AEC 4123 Financial and Commodity Futures Marketing; AEC 4133 Food Markets and Prices; AEC 4343 Advanced Farm Management; All classes listed under the minors for Marketing, Finance, Business Administration, and Management are also acceptable business electives.		**** Choose one additional FNH 3-4000 level courses from all food science, nutrition and health promotion classes ***** Business Electives: (12 credits). A minor in AgEcon, Marketing, Finance, Management or Business Administration will satisfy the requirement for 12 credits of business electives. In lieu of a Minor, students should select 12 credit hours from the following: ACC 2013 Principles of Financial Accounting; MKT 3013 Introduction to Marketing; AEC 3133 Introductory Agribusiness Management; AEC 3213 International Trade in Agriculture; AEC 3413 Introduction to Food Marketing; AEC 4113 Agribusiness Firm Management; AEC 4123 Financial and Commodity Futures Marketing; AEC 4133 Food Markets and Prices; AEC 4343 Advanced Farm Management; All classes listed under the minors for Marketing, Finance, Business Administration, and Management are also acceptable business electives.	

DEGREE MODIFICATION OUTLINE FORM – Food Science Concentration

CURRENT Degree Description	PROPOSED Degree Description
Degree: Bachelor of Science Major: Food Science, Nutrition, and Health Promotion Concentration: Food Science	Degree: Bachelor of Science Major: Food Science, Nutrition, and Health Promotion Concentration: Food Science
The Food Science, Nutrition and Health Promotion major offers the opportunity to gain a broad education in food science, nutrition, and health, as well as the specific academic background to pursue careers as food scientists and dietitians/nutritionists. It involves the integration of new knowledge and advances in technology and the physical and biological sciences with psychological, sociological, and behavioral sciences in the provision of a safe, nutritious food supply. Research, teaching, and outreach extend the continuum from the processing of food to its marketing, consumption, and impact on public health and community.	The Food Science, Nutrition and Health Promotion major offers the opportunity to gain a broad education in food science, nutrition, and health, as well as the specific academic background to pursue careers as food scientists and dietitians/nutritionists. It involves the integration of new knowledge and advances in technology and the physical and biological sciences with psychological, sociological, and behavioral sciences in the provision of a safe, nutritious food supply. Research, teaching, and outreach extend the continuum from the processing of food to its marketing, consumption, and impact on public health and community.
FSSC is designed for students who wish to explore a career in research, pursue graduate studies, work for the government, or work in the food industry.	FSSC is designed for students who wish to explore a career in research, pursue graduate studies, work for the government, or work in the food industry.

CURRENT CURRICULUM OUTLINE	Required Hours	**PROPOSED CURRICULUM OUTLINE**	Required Hours
English (Ex: EN 1103 English Comp I): 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): 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): Select from University Gen Ed Core	3	Fine Arts (General Education): Select from University Gen Ed Core	3
Natural Sciences BIO 1134 Biology I CH 1213 Chemistry I CH 1211 Investigations in Chemistry I CH 1223 Chemistry II CH 1221 Investigations of Chemistry II	12	Natural Sciences BIO 1134 Biology I CH 1213 Chemistry I CH 1211 Investigations in Chemistry I CH 1223 Chemistry II CH 1221 Investigations of Chemistry II	12
Extra Science (if appropriate)		Extra Science (if appropriate)	
Math (General Education): MA 1713 Calculus ST/BQA/MA 2113 Introduction to Statistics or ST 3123 Introduction to Statistical Inference	6	Math (General Education): MA 1713 Calculus ST/BQA/MA 2113 Introduction to Statistics or ST 3123 Introduction to Statistical Inference	6
Humanities (General Education): Select from University Gen Ed Core	6	Humanities (General Education): Any GenEd Courses	6
Social/Behavioral Sciences (Gen Ed): AEC 2713 Intro to Food and Resource Economics Select from University Gen Ed Core	6	Social/Behavioral Sciences (Gen Ed): AEC 2713 Intro to Food and Resource Economics Select from University Gen Ed Core	6

Major Core Courses CH 2501 Elem Org Chem Lab CH 2503 Elem Org Chem FNH 2293 Individual and Family Nutrition FNH 3111 FNH Seminar FNH 4243 Food Composition and Reactions MGT 3513 Intro to Human Resource Management CH 2501 Elementary Organic Chemistry Lab CH 2503 Elementary Organic Chemistry CO 1003 Fundamentals of Public Speaking OR CO 1013 Introduction to Communication OR CO 2213 Small Group Communication	17	Major Core Courses CH 2501 Elem Org Chem Lab CH 2503 Elem Org Chem FNH 2293 Individual and Family Nutrition FNH 3111 FNH Seminar FNH 4243 Food Composition and Reactions MGT 3513 Intro to Human Resource Management CH 2501 Elementary Organic Chemistry Lab CH 2503 Elementary Organic Chemistry CO 1003 Fundamentals of Public Speaking OR CO 1013 Introduction to Communication OR CO 2213 Small Group Communication	17
Concentration Courses ACC 2013 Prin Financial Acct *AIS* 3203 Prof Writing ANR Hum Sci* *AIS* 4203 App Compute Tech *AIS*** BCH 4013 Principles of Biochemistry BIO 1144 Biology II FNH 2011 Career Pln/Succ Food Sci FNH 2112 Food Products Evaluation FNH 4114 Analysis of Food Product FNH 4164 Quality Assurance Food Prod FNH 4241 Applied Food Chemistry FNH 4333 Food Law FNH 4414 Microbiology of Foods FNH 4480 Food Science Internship FNH 4593 New Food Product Development MA 1723 Calculus II MKT 3013 Principles of Marketing PH 1113 Gen Physics I OR PH 2213 Physics I PH 1123 Gen Physics II OR PH 2223 Physics II FNH 4583 Food Preservation Tech OR FNH 4573 Food Engineering Fundamentals	*56*	Concentration Courses ACC 2013 Prin Financial Acct **AELC** 3203 Prof Writing ANR Hum Sci* **AELC** 4203 App Compute Tech **AELC**** BCH 4013 Principles of Biochemistry BIO 1144 Biology II **BIO 3304 General Microbiology** FNH 2011 Career Pln/Succ Food Sci FNH 2112 Food Products Evaluation FNH 4114 Analysis of Food Product FNH 4164 Quality Assurance Food Prod FNH 4241 Applied Food Chemistry FNH 4333 Food Law FNH 4414 Microbiology of Foods FNH 4480 Food Science Internship FNH 4593 New Food Product Development MA 1723 Calculus II MKT 3013 Principles of Marketing PH 1113 Gen Physics I OR PH 2213 Physics I PH 1123 Gen Physics II OR PH 2223 Physics II FNH 4583 Food Preservation Tech OR FNH 4573 Food Engineering Fundamentals	**60**
Electives *Processing Electives 3-4 hrs**** *FNH Electives 4-6 hrs***** *Free Electives 4-6 hrs*	*12*	Electives **Processing Electives 3-4 hrs***** **FNH Electives – 3-4 hrs****** **Free Electives 0-2 hrs**	8
Total Hours	124	Total Hours	124
* Fulfills Jr/Sr Writing Requirement ** Fulfills Computer Lit Requirement. *** Choose 3-4 hours from the Food Processing Electives: FNH 3314 Introduction to Meat Science: FNH 4613 Seafood Processing: FNH 4513 Poultry Processing: FNH 4123, Fermented Food Processing: or FNH		* Fulfills Jr/Sr Writing Requirement ** Fulfills Computer Lit Requirement. *** Choose 3-4 hours from the Food Processing Electives: FNH 3314 Introduction to Meat Science: FNH 4613 Seafood Processing: FNH 4513 Poultry Processing: FNH 4123, Fermented Food Processing: or FNH	

4143 Dairy Foods Processing: or FNH 4583 Food Industry Unit Operations. **** Choose additional FNH 3-4000 level courses from all food science, nutrition and health promotion classes		4143 Dairy Foods Processing: or FNH 4583 Food Industry Unit Operations. **** Choose additional FNH 3-4000 level courses from all food science, nutrition and health promotion classes	

DEGREE MODIFICATION OUTLINE FORM – Food Safety Concentration

CURRENT Degree Description		PROPOSED Degree Description	
Degree: Bachelor of Science Major: Food Science, Nutrition, and Health Promotion Concentration: Food Safety		Degree: Bachelor of Science Major: Food Science, Nutrition, and Health Promotion Concentration: Food Safety	
The Food Science, Nutrition and Health Promotion major offers the opportunity to gain a broad education in food science, nutrition, and health, as well as the specific academic background to pursue careers as food scientists and dietitians/nutritionists. It involves the integration of new knowledge and advances in technology and the physical and biological sciences with psychological, sociological, and behavioral sciences in the provision of a safe, nutritious food supply. Research, teaching, and outreach extend the continuum from the processing of food to its marketing, consumption, and impact on public health and community.		The Food Science, Nutrition and Health Promotion major offers the opportunity to gain a broad education in food science, nutrition, and health, as well as the specific academic background to pursue careers as food scientists and dietitians/nutritionists. It involves the integration of new knowledge and advances in technology and the physical and biological sciences with psychological, sociological, and behavioral sciences in the provision of a safe, nutritious food supply. Research, teaching, and outreach extend the continuum from the processing of food to its marketing, consumption, and impact on public health and community.	
FDS is designed as a Pre-Veterinary option that focuses on factors affecting food safety and all coursework essential for acceptance in the College of Veterinary Medicine.		FDS is designed as a Pre-Veterinary option that focuses on factors affecting food safety and all coursework essential for acceptance in the College of Veterinary Medicine.	
CURRENT CURRICULUM OUTLINE	Required Hours	**PROPOSED CURRICULUM OUTLINE**	Required Hours
English (Ex: EN 1103 English Comp I): 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): 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): Select from University Gen Ed Core	3	Fine Arts (General Education): Select from University Gen Ed Core	3
Natural Sciences BIO 1134 Biology I CH 1213 Chemistry I CH 1211 Investigations in Chemistry I CH 1223 Chemistry II CH 1221 Investigations of Chemistry II	12	Natural Sciences BIO 1134 Biology I CH 1213 Chemistry I CH 1211 Investigations in Chemistry I CH 1223 Chemistry II CH 1221 Investigations of Chemistry II	12
Extra Science (if appropriate)		Extra Science (if appropriate)	
Math (General Education): MA 1313 College Algebra MA 1323 Trigonometry or MA 1713 Calculus I	*6*	Math (General Education): MA 1313 College Algebra MA 1323 Trigonometry or MA 1713 Calculus I	6
Humanities (General Education): Select from University Gen Ed Core	6	Humanities (General Education): Select from University Gen Ed Core	6
Social/Behavioral Sciences (Gen Ed): Select from University Gen Ed Core	6	Social/Behavioral Sciences (Gen Ed): Select from University Gen Ed Core	6
Major Core Courses FNH 2293 Individual and Family Nutrition FNH 3111 FNH Seminar FNH 4243 Food Composition and Reactions	17	Major Core Courses FNH 2293 Individual and Family Nutrition FNH 3111 FNH Seminar FNH 4243 Food Composition and Reactions MGT 3513 Intro to Human Resource	17

MGT 3513 Intro to Human Resource Management CH 2501 Elementary Organic Chemistry Lab or CH 4511 Organic Chemistry Laboratory I CH 2503 Elementary Organic Chemistry or CH 4513 Organic Chemistry I CO 1003 Fundamentals of Public Speaking OR CO 1013 Introduction to Communication OR CO 2213 Small Group Communication OR		Management CH 2501 Elementary Organic Chemistry Lab CH 2503 Elementary Organic Chemistry CO 1003 Fundamentals of Public Speaking OR CO 1013 Introduction to Communication OR CO 2213 Small Group Communication	
Concentration Courses *AIS* 3203 Prof Writing ANR Hum Sci* *AIS* 4203 App Compute Tech *AIS*** ADS 4114 Animal Nutrition (only adds 1 credit because it is taken in the place of FNH 2293 Individual and Family Nutrition) BCH 4013 Principles of Biochemistry BIO 1144 Biology II BIO 3304 General Microbiology CH 4521 Org Chem Lab II CH 4523 Organic Chemistry II FNH 2011 Career Pln/Succ Food Sci FNH 3314 Intro to Meat Science FNH 4241 Applied Food Chemistry FNH 4414 Microbiology of Foods FNH 4514 Poultry Processing FNH 4583 Food Preservation Tech PH 1113 Gen Physics I OR PH 2213 Physics I PH 1123 Gen Physics II OR PH 2223 Physics II	45	Concentration Courses **AELC** 3203 Prof Writing ANR Hum Sci* **AELC** 4203 App Compute Tech **AELC**** ADS 4114 Animal Nutrition (only adds 1 credit because it is taken in the place of FNH 2293 Individual and Family Nutrition) BCH 4013 Principles of Biochemistry BIO 1144 Biology II BIO 3304 General Microbiology CH 4521 Org Chem Lab II CH 4523 Organic Chemistry II FNH 2011 Career Pln/Succ Food Sci FNH 3314 Intro to Meat Science FNH 4241 Applied Food Chemistry FNH 4414 Microbiology of Foods FNH 4514 Poultry Processing FNH 4583 Food Preservation Tech PH 1113 Gen Physics I OR PH 2213 Physics I PH 1123 Gen Physics II OR PH 2223 Physics II	45
* Fulfills Jr/Sr Writing Requirement ** Fulfills Computer Lit Requirement **Electives: (Select 3 -6 credits from the following list)** ACC 2013 Princ of Financial Accounting FNH 3142 Meats Judging FNH 4114 Analysis of Food Products FNH 4143 Dairy Foods Processing FNH 4164 Qual Assur of Food Prod FNH 4513 Poultry Processing FNH 4593 New Food Product Dev *ADS 1114 Animal Science* ADS 3312 Livestock Management Pract ADS 4123 Animal Breeding ADS 4613 Physiology of Reproduction ADS 4611 Practices in Phy of Reproduct *ADS 3123 Perf Analysis of Meat Animals* ADS 4113 Swine Science ADS 4323 Beef Cattle Science BIO 2103 Cell Biology BIO 4413 Immunology BIO 4503 Vertebrate Histology	3-6	* Fulfills Jr/Sr Writing Requirement ** Fulfills Computer Lit Requirement **Electives: (Select 3 -6 credits from the following list)** ACC 2013 Princ of Financial Accounting FNH 3142 Meats Judging FNH 4114 Analysis of Food Products FNH 4143 Dairy Foods Processing FNH 4164 Qual Assur of Food Prod FNH 4513 Poultry Processing FNH 4593 New Food Product Dev ADS **1113** Animal Science **ADS 1121 Animal Science Laboratory** ADS 3312 Livestock Management Pract ADS 4123 Animal Breeding ADS 4613 Physiology of Reproduction ADS 4611 Practices in Phy of Reproduct **ADS 3213 Livestock Growth, Development and Evaluation** ADS 4113 Swine Science ADS 4323 Beef Cattle Science BIO 2103 Cell Biology	3-6

BIO 4514 Animal Physiology VS 2033 Diseases of Poultry VS 3014 Anatomy and Physiology PO 4324 Avian Reproduction PO *4333* Broiler Production PO 4413 Poultry Nutrition PO 4833 Avian Anatomy PO 4843 Avian Physiology **Total hours needed for major through Junior year: 104-107** Students will receive a B.S in Food Science, Nutrition, and Health Promotion upon successful completion of their first year in the College of Veterinary Medicine at Mississippi State University. If students do not obtain admittance into the School of Veterinary Medicine after their Junior year, an optional 4th year that is listed below will allow these students to graduate with a B.S. in Food Science, Nutrition, and Health Promotion (Food Animal Safety Concentration) after their fourth year of studies as well as allow these students another year to attempt to earn admittance into the School of Veterinary Medicine		BIO 4413 Immunology BIO 4503 Vertebrate Histology BIO 4514 Animal Physiology VS 2033 Diseases of Poultry VS 3014 Anatomy and Physiology PO 4324 Avian Reproduction PO **4334** Broiler Production PO 4413 Poultry Nutrition PO 4833 Avian Anatomy PO 4843 Avian Physiology **Total hours needed for major through Junior year: 104-107** Students will receive a B.S in Food Science, Nutrition, and Health Promotion upon successful completion of their first year in the College of Veterinary Medicine at Mississippi State University. If students do not obtain admittance into the School of Veterinary Medicine after their Junior year, an optional 4th year that is listed below will allow these students to graduate with a B.S. in Food Science, Nutrition, and Health Promotion (Food Animal Safety Concentration) after their fourth year of studies as well as allow these students another year to attempt to earn admittance into the School of Veterinary Medicine	
Optional Senior year FNH 4114 Analysis of Food Products, FNH 4164 Qual Assur of Food Prod FNH 4593 New Food Product Dev 6 hours of electives for 3000- 4000 level FNH classes Electives from the Electives list above to reach a minimum of 124 hours	17	Optional Senior year FNH 4114 Analysis of Food Products, FNH 4164 Qual Assur of Food Prod FNH 4593 New Food Product Dev 6 hours of electives for 3000- 4000 level FNH classes Electives from the Electives list above to reach a minimum of 124 hours	17
Total Hours	124	Total Hours	124

DEGREE MODIFICATION OUTLINE FORM – Food and Nutrition Concentration

CURRENT Degree Description	PROPOSED Degree Description
Degree: Bachelor of Science Major: Food Science, Nutrition, and Health Promotion Concentration: Food and Nutrition	Degree: Bachelor of Science Major: Food Science, Nutrition, and Health Promotion Concentration: Food and Nutrition
The Food Science, Nutrition and Health Promotion major offers the opportunity to gain a broad education in food science, nutrition, and health, as well as the specific academic background to pursue careers as food scientists and dietitians/nutritionists. It involves the integration of new knowledge and advances in technology and the physical and biological sciences with psychological, sociological, and behavioral sciences in the provision of a safe, nutritious food supply. Research, teaching, and outreach extend the continuum from the processing of food to its marketing, consumption, and impact on public health and community.	The Food Science, Nutrition and Health Promotion major offers the opportunity to gain a broad education in food science, nutrition, and health, as well as the specific academic background to pursue careers as food scientists and dietitians/nutritionists. It involves the integration of new knowledge and advances in technology and the physical and biological sciences with psychological, sociological, and behavioral sciences in the provision of a safe, nutritious food supply. Research, teaching, and outreach extend the continuum from the processing of food to its marketing, consumption, and impact on public health and community.
The Food and Nutrition concentration in the Food Science, Nutrition, and Health Promotion major is accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) of the Academy of Nutrition and Dietetics (formerly the American Dietetic Association(ADA)) as a Didactic Program in Dietetics (DPD). Successful completion of the bachelor's degree in the Nutrition concentration at MSU qualifies students to compete for placement in ACEND-accredited supervised practice programs (most commonly dietetic internships), which are a required next step toward earning the Registered Dietician/Nutritionist (RDN) credential.	The Food and Nutrition concentration in the Food Science, Nutrition, and Health Promotion major is accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) of the Academy of Nutrition and Dietetics (formerly the American Dietetic Association(ADA)) as a Didactic Program in Dietetics (DPD). Successful completion of the bachelor's degree in the Nutrition concentration at MSU qualifies students to compete for placement in ACEND-accredited supervised practice programs (most commonly dietetic internships), which are a required next step toward earning the Registered Dietician/Nutritionist (RDN) credential.

CURRENT CURRICULUM OUTLINE	Required Hours	**PROPOSED CURRICULUM OUTLINE**	Required Hours
English (Ex: EN 1103 English Comp I): EN 1103 English Comp I EN 1113 English Comp II	6	English (Ex: EN 1103 English Comp I): EN 1103 English Comp I EN 1113 English Comp II	6
Fine Arts (General Education): Any GenEd Course	3	Fine Arts (General Education): Any GenEd Course	3
Natural Sciences BIO 1134 Biology I CH 1211 Investigations in Chemistry I CH 1213 Chemistry I CH 1221 Investigations of Chemistry II CH 1223 Fundamentals of Chemistry II	12	Natural Sciences BIO 1134 Biology I CH 1211 Investigations in Chemistry I CH 1213 Chemistry I CH 1221 Investigations of Chemistry II CH 1223 Fundamentals of Chemistry II	12
Extra Science (if appropriate)		Extra Science (if appropriate)	
Math (General Education): MA 1313 College Algebra OR MA 1713 Calculus I OR MA 1613 Cal Bus & Life Sc I OR MA1463 Fin Ma & Intro Cal ST 2113 Introduction to Statistics OR BQA 2113 Bus Stat Methods I OR ST 3123 Into to Stat. Inf.	6	Math (General Education): MA 1313 College Algebra OR MA 1713 Calculus I OR MA 1613 Cal Bus & Life Sc I OR MA1463 Fin Ma & Intro Cal ST 2113 Introduction to Statistics OR BQA 2113 Bus Stat Methods I OR ST 3123 Into to Stat. Inf.	6

Humanities (General Education): Any GenEd Courses	6	Humanities (General Education): Any GenEd Courses	6
Social/Behavioral Sciences (Gen Ed): PSY 1013 *Per Advisor Approval*	6	Social/Behavioral Sciences (Gen Ed): PSY 1013 **SO 1003 Intro to Sociology OR SO 1103 Contemporary Social Problems OR SO 1203 Sociology of Families**	6
Major Core Courses CH 2501 Elem Org Chem Lab CH 2503 Elem Org Chem FNH 2293 Individual and Family Nutrition FNH 3111 FNH Seminar FNH 4243 Food Composition and Reactions MGT 3513 Intro to Human Resource Management CH 2501 Elementary Organic Chemistry Lab CH 2503 Elementary Organic Chemistry CO 1003 Fundamentals of Public Speaking OR CO 1013 Introduction to Communication OR CO 2213 Small Group Communication OR Co 3213 Small Group Communication	17	Major Core Courses CH 2501 Elem Org Chem Lab CH 2503 Elem Org Chem FNH 2293 Individual and Family Nutrition FNH 3111 FNH Seminar FNH 4243 Food Composition and Reactions MGT 3513 Intro to Human Resource Management CH 2501 Elementary Organic Chemistry Lab CH 2503 Elementary Organic Chemistry CO 1003 Fundamentals of Public Speaking OR CO 1013 Introduction to Communication OR CO 2213 Small Group Communication OR CO 3213 Small Group Communication	17
Concentration Courses BCH 4013 Principles of Biochemistry BIO 1134 Biology I BIO 3014 Human Physiology FNH 2203 Science of Food Prep *FNH 3003 NTR Work Experience* *FNH 3263 Research Mth in Fd &Ntr* FNH 3283 The Foodservice System FNH 3701 NTR Professional Develop FNH 3723 Community Nutrition FNH 4013 Nutrition Assessment FNH 4123 Nutrition and Chronic Disease FNH 4233 Medical Nutrition Therapy FNH 4253 Macronutrients FNH 4284 Quantity Food Prod & Serv FNH 4293 Micronutrients FNH 4353 Nutrition/ Life Cycle FNH 4373 NTR Ed & Counsel Skill KI 2603 Medical Terminology MGT 3114 Prin of Mgt & Prod	*59*	Concentration Courses BCH 4013 Principles of Biochemistry BIO 1134 Biology I **BIO 3004 Human Anatomy** BIO 3014 Human Physiology FNH 2203 Science of Food Prep **FNH 4363 Research Mth in Fd &Ntr** FNH 3283 The Foodservice System FNH 3701 NTR Professional Develop FNH 3723 Community Nutrition FNH 4013 Nutrition Assessment FNH 4123 Nutrition and Chronic Disease FNH 4233 Medical Nutrition Therapy FNH 4253 Macronutrients FNH 4284 Quantity Food Prod & Serv FNH 4293 Micronutrients FNH 4353 Nutrition/ Life Cycle FNH 4373 NTR Ed & Counsel Skill KI 2603 Medical Terminology MGT 3114 Prin of Mgt & Prod	**60**
Electives Free Electives	9	Electives Free Electives	8
Total Hours	124	Total Hours	124

DEGREE MODIFICATION OUTLINE FORM – Culinology Concentration

CURRENT Degree Description		PROPOSED Degree Description	
Degree: Bachelor of Science Major: Food Science, Nutrition, and Health Promotion Concentration: *Culinology*		Degree: Bachelor of Science Major: Food Science, Nutrition, and Health Promotion Concentration: **[None; concentration to be deleted]**	
The Food Science, Nutrition and Health Promotion major offers the opportunity to gain a broad education in food science, nutrition, and health, as well as the specific academic background to pursue careers as food scientists and dietitians/nutritionists. It involves the integration of new knowledge and advances in technology and the physical and biological sciences with psychological, sociological, and behavioral sciences in the provision of a safe, nutritious food supply. Research, teaching, and outreach extend the continuum from the processing of food to its marketing, consumption, and impact on public health and community.			
CN is designed for students who wish to work as a research chef or work in the areas of product development or research and development in the food industry			
CURRENT CURRICULUM OUTLINE	Required Hours	**PROPOSED CURRICULUM OUTLINE**	Required Hours
English (Ex: EN 1103 English Comp I): EN 1103 English Comp I EN 1113 English Comp II	6		
Fine Arts (General Education): Any GenEd Course	3		
Natural Sciences BIO 1134 Biology I CH 1211 Investigations in Chemistry I CH 1213 Chemistry I CH 1221 Investigations of Chemistry II CH 1223 Fundamentals of Chemistry II	12		
Extra Science (if appropriate)			
Math (General Education): MA 1313 College Algebra ST 2113 Introduction to Statistics	6		
Humanities (General Education): Any GenEd Courses	6		
Social/Behavioral Sciences (Gen Ed): Any Additional GenEd Courses	6		
Major Core Courses CH 2501 Elem Org Chem Lab CH 2503 Elem Org Chem FNH 2293 Individual and Family Nutrition FNH 3111 FNH Seminar FNH 4243 Food Composition and Reactions MGT 3513 Intro to Human Resource Management	17		

CH 2501 Elementary Organic Chemistry Lab CH 2503 Elementary Organic Chemistry CO 1003 Fundamentals of Public Speaking OR CO 1013 Introduction to Communication OR CO 2213 Small Group Communication OR Co 3213 Small Group Communication			
Concentration Courses AIS 3203 Prof Writing ANR Hum Sci AIS 4203 App Compute Tech AIS FNH 2011 Career Pln/Succ Food Sci FNH 2112 Food Products Evaluation FNH 2203 Science of Food Prep FNH 4114 Analysis of Food Product FNH 4241 Applied Food Chemistry FNH 4333 Food Law FNH 4480 Food Science Internship FNH 4593 New Food Product Development MKT 3013 Principles of Marketing OR MKT 3013 Prin Financial Acct PH 1113 General Physics I OR PH 2213 Physics I FNH 4583 Food Preservation Tech OR FNH 4573 Food Engineering Fundamentals	40		
Courses to be Transferred from MUW CA 1251 CA 2003 CA 3005 CA 3015 CA 3103 CA 4013	20		
Electives Processing Electives 4-6 hrs FNH Electives 4-6 hrs. Free Electives 0-2 hrs	8		
Total Hours	124		

DEGREE MODIFICATION OUTLINE FORM – Pre-Health Professions Concentration

CURRENT Degree Description		PROPOSED Degree Description	
Degree: Bachelor of Science Major: Food Science, Nutrition, and Health Promotion Concentration: *[None; not currently offered]*		Degree: Bachelor of Science Major: Food Science, Nutrition, and Health Promotion Concentration: **Pre-Health Professions**	
The Food Science, Nutrition and Health Promotion major offers the opportunity to gain a broad education in food science, nutrition, and health, as well as the specific academic background to pursue careers as food scientists and dietitians/nutritionists. It involves the integration of new knowledge and advances in technology and the physical and biological sciences with psychological, sociological, and behavioral sciences in the provision of a safe, nutritious food supply. Research, teaching, and outreach extend the continuum from the processing of food to its marketing, consumption, and impact on public health and community.		The Food Science, Nutrition and Health Promotion major offers the opportunity to gain a broad education in food science, nutrition, and health, as well as the specific academic background to pursue careers as food scientists and dietitians/nutritionists. It involves the integration of new knowledge and advances in technology and the physical and biological sciences with psychological, sociological, and behavioral sciences in the provision of a safe, nutritious food supply. Research, teaching, and outreach extend the continuum from the processing of food to its marketing, consumption, and impact on public health and community.	
		The Pre-Health Professions concentration is designed to develop students who have a thorough understanding of the principles of food science and have also fulfilled the prerequisites for medical school or other health-related professional or graduate school programs (examples include but are not limited to: medicine, nursing, physician's assistant, physical therapy, pharmacy, occupational therapy, public health, optometry, podiatry, and others). Admission requirements for these kinds of programs may vary; therefore any student wishing to pursue medical or other professional or graduate school should work closely with their academic advisor to ensure that they meet all requirements for the particular schools they wish to pursue.	
CURRENT CURRICULUM OUTLINE	Required Hours	**PROPOSED CURRICULUM OUTLINE**	Required Hours
		English (Ex: EN 1103 English Comp I): EN 1103 English Comp I EN 1113 English Comp II	6
		Fine Arts (General Education): Any GenEd Course	3
		Natural Sciences BIO 1134 Biology I CH 1211 Investigations in Chemistry I CH 1213 Chemistry I CH 1221 Investigations of Chemistry II CH 1223 Fundamentals of Chemistry II	12
		Math (General Education): MA 1313 College Algebra ST 2113 Intro to Stats (or MA 2113 or BQA 2113 or ST 3123) MA 1713 Calculus I	9
		Humanities (General Education): Any GenEd Courses	6
		Social/Behavioral Sciences (Gen Ed): Any Gen Ed Courses	6

		SO 1013 Introduction to Sociology recommended PSY 1073 Introduction to Psychology recommended	
		Major Core Courses FNH 2293 Indiv & Family Nutrition FNH 3111 FNH Seminar FNH 4243 Food Comp & Reaction MGT 3513 Intro Human Res Mgt CH 4511 Org Chem Lab I CH 4513 Organic Chemistry I CO 1003 Fund of Public Speaking or CO 1013 Intro to Communication or CO 2213 Small Group Communication or CO 3213 Small Group Communication	17
		Concentration Courses AELC 3203 Prof Writing ANR Hum Sci* AELC 4203 App Computer Tech AELC** BCH 4013 Principles of Biochemistry BIO 1144 Biology II BIO 3014 Human Physiology BIO 3304 General Microbiology CH 4521 Org Chem Lab II CH 4523 Organic Chemistry II FNH 3103: Introduction to Health Professions FNH 3163 Health Promotion Techniques FNH 4123 Nutrition and Chronic Disease FNH 4241 Applied Food Chemistry FNH 4393 Prevention of Disease FNH 4414 Microbiology of Foods FNH 4583 Food Preservation Technology MA 1723 Calculus II PH 1113 Gen Physics I or PH 2213 Physics I PH 1123 Gen Physics II or PH 2223 Physics II PHI 3323 Medical Ethics	57
		Electives (Chose 2-3 classes from the following list based on requirements for specific health professional school) BIO 3004 Human Anatomy BIO 3103 Genetics I BIO 4413 Immunology BIO 4514 Animal Physiology FNH 4233 Medical Nutrition Therapy FNH 4333 Food Law FNH 3314 Intro to Meat Science FNH 4143 Dairy Foods Proc FNH 4114 Analysis of Food Products FNH 4514 Poultry Processing FNH 4593 New Food Product Development PH 1133 Gen Physics III or PH 2233 Physics III KI 2603 Medical Terminology EPP 4173 Medical and Veterinary Entomology COE 4713 Issues in Aging EP 3183 Exercise Psychology	**8**
Total Hours		Total Hours	124

		* Fulfills Jr/Sr Writing Requirement ** Fulfills Computer Lit Requirement	

Justifications for Changes:

In the Food Processing/Business Concentration:
MA 1323 – Trigonometry has been added to the required courses because it is a prerequisite for PH 1113 - Physics I, a required course for the major and concentration.
BIO 3304 – General Microbiology has been added to the curriculum as it was inadvertently deleted in the past.
The FNH elective and free electives that are required were decreased to account for this change.

In the Food Science Concentration:
BIO 3304 – General Microbiology has been added to the curriculum as it was inadvertently deleted in the past. The FNH elective and free electives that are required were decreased to account for this change.

In the Food Safety Concentration: No changes were made

In the Food and Nutrition Concentration:
FNH 3003 – Nutrition Work Experience will no longer be required as it does not meet any of the KRDNs listed on the curriculum map.
BIO 3004 – Human Anatomy will be required as part of the concentration requirements to better prepare students to apply for the dietetic internship program.
Social science (advisor approval) will be changed to SO 1003 – Intro to Sociology, SO 1103 – Contemporary Social Problems, or SO 1203 – Sociology of Families only, to better prepare students to apply for the dietetic internship program.
FNH 4363 - Changing the FNH 3263 Research Methods in Food and Nutrition course to a senior/graduate course has several advantages. Undergraduate students would have taken more courses and would be better prepared for the course and could incorporate more knowledge into course. This may help them develop and conduct research projects more easily and include theory components and advanced nutrition and food science knowledge into their research projects. Graduate students in the course would develop leadership skills and serve as team leaders and help direct and coordinate the projects, in addition to learning how to develop and write a manuscript.

For deletion of the Culinology Concentration:
The Department of Food Science, Nutrition, and Health Promotion currently offers a B.S. degree in Culinology® as well as a B.S. degree in Food Science, Nutrition, and Health Promotion (FSNH) with a concentration in Culinology®. These two degree programs provide similar coursework and training. The B.S. degree in Culinology® is approved by the Research Chefs' Association (RCA). To minimize redundancy and to increase enrollment in the B.S. in Culinology® degree program, we will no longer offer the Culinology® concentration within the FSNH degree program. The 12 students who are currently enrolled will be allowed to complete their degree programs within the Culinology® concentration; however, new students will not be accepted to this concentration within the degree program beginning in Spring 2018. Students interested in Culinology® will be advised to enroll in the B.S. in Culinology® degree program.

For addition of the Pre-Health Professions Concentration:
The proposed new concentration offers an opportunity to gain a broad education in food science while also completing the prerequisite courses needed for medical or other health-related professional school. The Department of Food Science, Nutrition, and Health Promotion offers students a unique perspective that integrates knowledge of the chemical, biological, and physical sciences as well as the psychological, sociological, and behavioral sciences relating to food and health. The courses in the proposed program will help students prepare for the MCAT and to meet medical school entrance requirements. Students will fulfill the University purposes of learning through classroom and hands-on learning; research through internship, class, and other projects; and service through application of this knowledge to improve lives of others either as health professionals or as food industry professionals. Professional school entrance requirements may vary; therefore any student wishing to pursue medical or other professional school should work closely with their academic advisor to ensure that they meet all requirements for the particular schools they wish to pursue.

MISSISSIPPI STATE UNIVERSITY

Department of Food Science, Nutrition, and Health Promotion

March 14st, 2018

To: University Courses and Curriculum Committee

From: M. Wes Schilling
Food Science, Nutrition, and Health Promotion;
Curriculum Committee Chair

Subject: Food Science, Nutrition, and Health Promotion Undergraduate Degree Program Modification

The proposed modifications to the concentrations within the undergraduate degree program have been voted on and approved by Food Science, Nutrition and Health Promotion Teaching Faculty by a vote of 14 yes votes and 0 no votes.

Wes Schilling

M. Wes Schilling
FNH Curriculum Committee Chair

BOX 9805●MISSISSIPPI STATE, MS 39762-9805●PHONE 662.325.4002●www.mstate.edu/dept/fsnhp

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

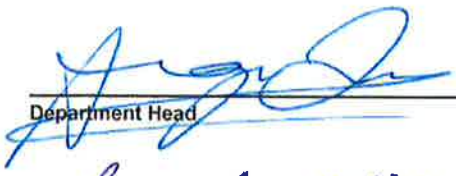
New Degree Program Name:

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

Bonnie Cone O'Neill — 4/5/18

Chair, College or School Curriculum Committee

Nicole Radu — 4/5/18

Dean of College or School

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
No description currently.	**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
BIO 1134 Biology I	4
BIO 1144 Biology II	4
BIO 2103 Cell Biology	3
BIO 3304 General Microbiology	*4*
BIO 4133 Human Genetics	3
Choose one of the following:	3-4
BIO 2113 Plant Biology	3-4 21
BIO 2213 Survey of the Plant Kingdom	
BIO 3303 Parasitology	
BIO 4203 Taxonomy of Spermatophytes	
BIO 3524 Biology of Vertebrates	
WFA 4433 Mammalogy	
WFA 4443 Ornithology	
WFA4453 Ichthyology	
BIO 3104 Ecology	
BIO 4113 Evolution	

PROPOSED CURRICULUM OUTLINE	Req'd Hours
BIO 1134 Biology I	4
BIO 1144 Biology II	4
BIO 2103 Cell Biology	3
BIO 4113 Evolution	**3**
BIO 4133 Human Genetics	3
Choose one of the following: **BIO 2213 Survey of Plants and Fungi** **Any 3000- or 4000-level BIO course*** ***excluding BIO 3004, BIO 3014, and BIO 4000**	3-4

BIO 4213 Plant Ecology Total Hours			

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

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

P. 662.325.3120
F. 662.325.7939

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: 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	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: 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
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.*	**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.**

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:		Oral Communication Requirement:	
CO 1003 or CO 1013	3	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*	**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**	**15-20**
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

3. JUSTIFICATION AND LEARNING OUTCOMES

Rationale: 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:

1. 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 14 comprehensive institutions, 13 require Calculus I for the Biology major and 13 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.

2. 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 14 comprehensive institutions, 12 require 2 credits of organic chemistry lab, 1 program requires 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.

3. 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	Cell Biology
BIO 3104[1,3,4]	Ecology
BIO 4133[2]	Human Genetics
BIO 4113	Evolution

[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.

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 14 other comprehensive universities, Introductory Biology (usually 2 semesters), Cell Biology, and Genetics are required courses for all 14 programs. Courses in Ecology and Evolution are required by 10 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)

2. provide a broad survey of the major taxonomic groups of living organism and
   (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 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.

4. 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. However, 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 departments' offerings: 1) These courses are not always science-based and therefore do not necessarily aid in the objectives of our major (as outlined below), 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.

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

P. 662.325.3120
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 UNIVERSITY

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: degree modification Date Initiated: 2/14/18 Effective Date: 8/1/18
Current Degree Program Name:

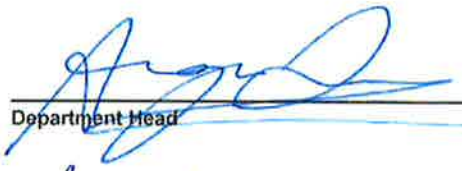
Major: B.S. in Microbiology Concentration:

New Degree Program Name:

Major: N/A Concentration:

Summary of Proposed Changes:

This proposal aims to change the writing requirement for the Microbiology degree. Currently the writing requirement is met by BIO 3013, Writing for Biologists. The Department of Biological Sciences would like to use core courses to meet this obligation. The proposal also includes changes to the current catalog description and added concentrations to reflect pre-professional programs our students are pursuing.

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: B.S. In Microbiology

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 mankind. 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, of all living organisms. Our faculty are actively engaged in highly interdisciplinary cutting-edge research and are committed to providing students with an extensive exposure to 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: Microbiology Concentration: Pre-Veterinarian Medicine	Degree: Bachelor of Science Major: Microbiology Concentration: Pre-Veterinarian Medicine, **Pre-Pharmacy, Pre-Optometry, Pre-Medical, Pre-Dental**
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 mankind. 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.*	**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, of all living organisms. Our faculty are actively engaged in highly interdisciplinary cutting-edge research and are committed to providing students with an extensive exposure to 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.**

CURRENT CURRICULUM OUTLINE	Req'd Hours
English (Ex: EN 1103 English Comp I):	
EN 1103 or EN 1163	3
EN 1113 or EN 1173	3
Fine Arts (General Education): See A&S requirements .	3
Foreign Language: 2 semesters – one Foreign Language	6
Extra Science (if appropriate)	N/A
Math (General Education):	
MA 1713	3
ST 3123	3
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
Oral Communication Requirement: CO 1003 or CO 1013	3
Writing Requirement: *BIO 3013 Professional Writing for Biologists*	3
Computer Literacy Requirement: *BIO 3013 Professional Writing for Biologists*	3
Departmental Core:	
BIO 1134 Biology I	4
BIO 1144 Biology II	4
BIO 2103 Cell Biology	3
Major Core Courses:	
BIO 3304 General Microbiology	4
BIO 4405 Pathogenic Microbiology	5
BIO 4413 Immunology	3
BIO 4433 Principles of Virology	3
BIO 4443 Bacterial Genetics	3
BIO 4442 Bacterial Genetics Lab	2

PROPOSED CURRICULUM OUTLINE	Req'd Hours
English (Ex: EN 1103 English Comp I):	
EN 1103 or EN 1163	3
EN 1113 or EN 1173	3
Fine Arts (General Education): See A&S requirements	3
Foreign Language: 2 semesters – one Foreign Language	6
Extra Science (if appropriate)	N/A
Math (General Education):	
MA 1713	3
ST 3123	3
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
Oral Communication Requirement: CO 1003 or CO 1013	3
Writing Requirement: **Met in core** (Satisfied by successful completion of BIO 3104)	0
Computer Literacy Requirement: **Met in core** (Satisfied by successful completion of BIO 3104)	0
Departmental Core:	
BIO 1134 Biology I	4
BIO 1144 Biology II	4
BIO 2103 Cell Biology	3
Major Core Courses:	
BIO 3304 General Microbiology	4
BIO 4405 Pathogenic Microbiology	5
BIO 4413 Immunology	3
BIO 4433 Principles of Virology	3
BIO 4443 Bacterial Genetics	3

BIO 4463 Bacterial Physiology	3	BIO 4442 Bacterial Genetics Lab	2
Microbiology Electives	8	BIO 4463 Bacterial Physiology	3
Additional department requirements:		Microbiology Electives	8
CH 1213 Chemistry I	3	Additional department requirements:	
CH 1223 Chemistry II	3	CH 1213 Chemistry I	3
CH 1211 Investigations in Chemistry I	1	CH 1223 Chemistry II	3
CH 1221 Investigations in Chemistry II	1	CH 1211 Investigations in Chemistry I	1
CH 4513 Organic Chemistry I	3	CH 1221 Investigations in Chemistry II	1
CH 4523 Organic Chemistry II	3	CH 4513 Organic Chemistry I	3
CH 4511 Organic Chemistry Lab I	1	CH 4523 Organic Chemistry II	3
CH 4521 Organic Chemistry Lab II	1	CH 4511 Organic Chemistry Lab I	1
PH 1113 General Physics I and	3	CH 4521 Organic Chemistry Lab II	1
PH 1123 General Physics II or PH 1133 General Physics III	3	PH 1113 General Physics I and	3
BCH 4603 General Biochemistry I and BCH 4613 General Biochemistry II or	3 – 6	PH 1123 General Physics II or PH 1133 General Physics III	3
BCH 4013 Principles of Biochemistry	3 – 6	BCH 4603 General Biochemistry I and BCH 4613 General Biochemistry II or BCH 4013 Principles of Biochemistry	3 – 6
Concentration Courses N/A			
General Electives	**15–18**	Concentration Courses N/A	
Total Hours	**124**	**General Electives**	**18–21**

3. JUSTIFICATION AND LEARNING OUTCOMES

Addition of concentrations:
Microbiology is becoming an increasingly popular major for students interested in pharmacy, dental school, medical school and optometry school. Adding these official concentrations will help advisors better assist students towards their professional school goals. It will also help to alleviate confusion for students.

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 meet this degree requirement, the Department of Biological Sciences has been substituting courses taught by other departments that fulfill an upper level writing requirement in their curricula.

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 below), and

2. with continued enrollment constraints, registration of our students in these courses is becoming increasingly difficult.

The relevance of microbiology is more obvious than ever before. From the emergence of deadly infectious diseases, to global climate change, to advances in biotechnology, to threats of bioterrorism, the impact of microorganisms on our very existence is stunning. In the 21st century opportunities for careers in microbiology are abundant.

A degree in microbiology provides:

1. Great preparation for professional school (medicine, veterinary medicine, dentistry, optometry, etc)
2. The basis for graduate school leading to a career as an academic or industry researcher (M.S., Ph.D.)
3. Training for a career as a biomedical research technician, science educator, environmental scientist, and many other exciting career paths.

The ability for our majors to communicate science effectively is as important a skill as any laboratory technique or expertise in experimental design. Using our own courses to teach this competence to students is the better option, rather than utilizing a specific course taught outside our department. Required microbiology core courses which require various scientific writing approaches will be used for this requirement. The courses that meet this standard are as follows:

BIO 4405 Pathogenic Microbiology:

- Be able to clearly communicate laboratory findings in written and oral form
- Two comprehensive laboratory reports requirements.
- Oral presentation required.
- Two comprehensive laboratory reports required as well as an oral presentation.

BIO 4442 Bacterial Genetics Lab

- To train the student in proper microbial and molecular biology laboratory documentation procedures.
- Graded laboratory notebook required.

BIO 4463 Bacterial Physiology:

- A Powerpoint presentation with references required. The presentation will cover specific scientific papers.

Questions to Address:

1. Will this program change meet local, state, regional, and national educational and cultural needs?
   The ability of a student to read, write, and communicate science is a very important aspect of this degree and will therefore meet 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 letter of support from Biological Sciences Curriculum Committee as well as the syllabi from the courses that will be used to satisfy the writing requirement.

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

P. 662.325.3120
F. 662.325.7939

www.biology.msstate.edu

February 14, 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 curriculum change for our Bachelors of Science in Microbiology. This change involves using specific core courses within the Microbiology curriculum as the writing requirement for the degree in lieu of BIO 3103, Professional Writing for Biologists.

We are aware that BIO 3103 has not been offered in several years due deficits in biological science's faculty in combination with growing enrollment constraints within the department. Substitutions have been made in place of this course and unfortunately most of the substitutions come from non-science departments. This is not to say that these departments do not offer rigorous writing courses. As a science department, however, learning to communicate science effectively is an important objective of our degree programs. Preparing students for careers in the science field requires specialized skillsets, including scientific communication. Through writing lab reports and oral presentations within our own core classes, students will gain experience and ultimately the expertise to effectively communicate science.

Thank you for your consideration in this important change to the Microbiology 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: 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 Microbiology

Major: **Concentration: N/a**

New Degree Program Name:

Major: N/A **Concentration:**

Summary of Proposed Changes:

The proposal aims to change the minor in Microbiology requirements.

Approved: **Date:**

Department Head — 4-3-18

Brenna Caw O'Neill — 4/5/18

Chair, College or School Curriculum Committee

Nicole Rader — 4/5/18

Dean of College or School

Chair, University Committee on Courses and Curricula

Chair, Graduate Council (if applicable)

Chair, Deans Council

PROPOSAL FOR DEGREE MODIFICATION: Minor in Microbiology

Mary Celeste Reese, Department of Biological Sciences

1. CATALOG DESCRIPTION

Current catalog description:

There is currently no degree description in the catalog.

Proposed catalog description:

The minor in microbiology provides a strong complement for students who are majoring in related scientific majors and have an interest in the role of microorganisms in industry, agriculture or health. Students will develop a comprehensive understanding of microbial processes as well as infectious pathogens and immunological responses to those pathogens.

2. CURRICULUM OUTLINE

CURRENT Degree Description	PROPOSED Degree Description
Minor in Microbiology	Minor in Microbiology
There is currently no degree description in the catalog.	**The minor in microbiology provides a strong complement for students who are majoring in related scientific majors and have an interest in the role of microorganisms in industry, agriculture or health. Students will develop a comprehensive understanding of microbial processes as well as infectious pathogens and immunological responses to those pathogens.**

CURRENT CURRICULUM OUTLINE	Required Hours	**PROPOSED CURRICULUM OUTLINE**	Required Hours
BIO 1134 Biology I	4		
BIO 1144 Biology II	4	BIO 1134 Biology I	4
BIO 3304 General Microbiology	4	BIO 3304 General Microbiology	4
BIO 4405 Pathogenic Microbiology	5	BIO 4405 Pathogenic Microbiology	5
Choose one of the following:	4	**Choose two of the following**	6-8
BIO 3504 Comparative Anatomy		**BIO 4413 Immunology**	

BIO 4214 Plant Physiology		**BIO 4433 Principle of Virology**	
BIO 4324 Microbiology and Ecology of the Soil		**BIO 4443 Bacterial Genetics**	
BIO 4404 Environmental Microbiology		**BIO 4463 Bacterial Physiology**	
BIO 4414 Microbiology of Foods		**BIO 4414 Microbiology of Foods**	
BIO 4514 Animal Physiology		Total Hours	**19-22**
Total Hours	*21*		

3. JUSTIFICATION AND LEARNING OUTCOMES

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

- Deletion of BIO 1144, Biology II: The material covered in Biology II is not relevant for the upper division Microbiology courses proposed in these minor modification. Secondly, some majors do not require Biology II, such as Biomedical Engineering. Therefore, simplifying the requirements for certain majors will make our minor more attainable.
- Deletion of Comparative Anatomy, Plant Physiology, and Animal Physiology: These are Biological Sciences courses and not relevant to a student interested in the subject of Microbiology. Instead, Microbiology-related courses will be required (e.g., Immunology, Virology, Bacterial Physiology, etc.).
- Deletion of Microbiology and Ecology of the Soil and Environmental Microbiology: These courses have been deleted from the course catalog and are therefore no longer being offered at MSU.

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

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

P. 662.325.3120
F. 662.325.7939

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 Microbiology minor requirements. These changes improve the current Microbiology minor requirements which require more Biological Sciences courses rather than Microbiology core courses. We would like the minor requisites to be more reflective of the degree.

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: Arts and Sciences **Department: Biological Sciences**

Contact Person: M. C. Reese **Mail Stop: 9536** **E-mail: mcr4@biology.msstate.edu**
Nature of Change: Degree Modification **Date Initiated: 2/14/18** **Effective Date: 8/1/18**
Current Degree Program Name: B. S. in Medical Technology

Major: **Concentration:**

New Degree Program Name:

Major: **Concentration:**

Summary of Proposed Changes:
This proposal aims to change the writing requirement for the Medical Technology degree. Currently the writing requirement is met by BIO 3013, Writing for Biologists. The Department of Biological Science would like to use core courses to meet this obligation.

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: B.S. In Medical Technology

Christopher Brooks, Department of Biological Sciences

1. CATALOG DESCRIPTION

Current catalog description:
Medical technologists are prepared for positions in hospital laboratories, clinics, research laboratories, the Public Health Service industry, and in various local, state and federal health organizations. The medical technology curriculum leading to the Bachelor of Science degree from Mississippi State University includes three years of study at Mississippi State University and one year of study in a hospital School of Medical Technology accredited by the National Accrediting Agency for Clinical Laboratory Sciences. Admission to the hospital school is competitive. A student who has satisfactorily completed the three years on the campus and has gained admission to a hospital school will register for the hospital phase and will be considered to be enrolled at Mississippi State during the final year of study. Graduates are prepared for certification by several national agencies.

Proposed catalog description:
No change

2. CURRICULUM OUTLINE

CURRENT DEGREE DESCRIPTION	PROPOSED DEGREE DESCRIPTION
Degree: Bachelor of Science Major: Medical Technology	Degree: Bachelor of Science Major: Medical Technology
Medical technologists are prepared for positions in hospital laboratories, clinics, research laboratories, the Public Health Service industry, and in various local, state and federal health organizations. The medical technology curriculum leading to the Bachelor of Science degree from Mississippi State University includes three years of study at Mississippi State University and one year of study in a hospital School of Medical Technology accredited by the National Accrediting Agency for Clinical Laboratory Sciences. Admission to the hospital school is competitive. A student who has satisfactorily completed the three years on the campus and has gained admission to a hospital school will register for the hospital phase and will be considered to be enrolled at Mississippi State during the final year of study. Graduates are prepared for certification by several national agencies.	Medical technologists are prepared for positions in hospital laboratories, clinics, research laboratories, the Public Health Service industry, and in various local, state and federal health organizations. The medical technology curriculum leading to the Bachelor of Science degree from Mississippi State University includes three years of study at Mississippi State University and one year of study in a hospital School of Medical Technology accredited by the National Accrediting Agency for Clinical Laboratory Sciences. Admission to the hospital school is competitive. A student who has satisfactorily completed the three years on the campus and has gained admission to a hospital school will register for the hospital phase and will be considered to be enrolled at Mississippi State during the final year of study. Graduates are prepared for certification by several national agencies.

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		

Fine Arts (General Education): See A&S requirements	3	EN 1113 or EN 1173	3
Foreign Language: 2 semesters – one Foreign Language	6	Fine Arts (General Education): See A&S requirements	3
Extra Science (if appropriate)	N/A	Foreign Language: 2 semesters – one Foreign Language	6
Math (General Education): MA 1713 ST 3123	 3 3	Math (General Education): MA 1713 ST 3123	 3 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 Professional Writing for Biologists*	*3*	Writing Requirement: **Met in core** (Satisfied by successful completion of BIO 3104)	**0**
Computer Literacy Requirement: *BIO 3013 Professional Writing for Biologists*	*3*	Computer Literacy Requirement: **Met in core** (Satisfied by successful completion of BIO 3104)	**0**
		Computer Literacy Requirement: **Met in core** (Satisfied by successful completion of BIO 3104)	**0**
Major Core Courses:		Major Core Courses:	
BIO 1134 Biology	4	BIO 1134 Biology	4
BIO 3004 Human Anatomy	4	BIO 3004 Human Anatomy	4
BIO 3303 Parasitology	3	BIO 3303 Parasitology	3
BIO 3304 General Microbiology	4	BIO 3304 General Microbiology	4
BIO 4133 Human Genetics	3	BIO 4133 Human Genetics	3
BIO 4303 Bioinstrumentation	3	BIO 4303 Bioinstrumentation	3
BIO 4405 Pathogenic Microbiology	5	BIO 4405 Pathogenic Microbiology	5
BIO 4413 Immunology	3	BIO 4413 Immunology	3
BIO 4610 Urinalysis	2-6	BIO 4610 Urinalysis	2-6
BIO 4620 Hematology	1-9	BIO 4620 Hematology	1-9
BIO 4630 Special Topics	2-9	BIO 4630 Special Topics	2-9
BIO 4640 Clinical Microbiology	2-9	BIO 4640 Clinical Microbiology	2-9
BIO 4650 Immunohematology	2-9	BIO 4650 Immunohematology	2-9
BIO 4660 Serology/Immunology	2-9	BIO 4660 Serology/Immunology	2-9
BIO 4670 Clinical Chemistry	2-9	BIO 4670 Clinical Chemistry	2-9
BCH 4013 Principles of Biochemistry	3	BCH 4013 Principles of Biochemistry	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
Concentration Courses	N/A	Concentration Courses	N/A
General Electives	*9-12*	**General Electives**	**12-15**
Total Hours	124	Total Hours	124

3. JUSTIFICATION AND LEARNING OUTCOMES

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. However, 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 below), 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 utilizing a specific course taught outside our department. Microbiology core courses, which have scientific writing components and utilize Blackboard, will be used for this requirement. The courses are as follows:

BIO 4405 Pathogenic Microbiology:

- Two comprehensive laboratory reports required as well as an oral presentation.

BIO 4303 Bioinstrumentation:

- Four laboratory reports required. Students will download typed formal laboratory reports to MyCourses.

BIO 3303 Parasitology:

- Lab notebooks are required as well as group presentations.

Questions to Address:

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

The ability of a student to read, write, and communicate science is a very important aspect of this degree and will therefore meet 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 letter of support from Biological Sciences Curriculum Committee as well as the syllabi from the courses that will be used to satisfy the writing requirement.

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

P. 662.325.3120
F. 662.325.7939
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 curriculum change for our Bachelors of Science in Medical Technology. This change involves using specific core courses within the Medical Technology curriculum as the writing requirement for the degree in lieu of BIO 3103, Professional Writing for Biologists.

We are aware that BIO 3103 has not been offered in several years due to deficits in the Department's faculty (because of departures) in combination with growing need elsewhere within the department because of increased enrollment. Substitutions have been made in place of this course and unfortunately most of the substitutions have come from non-science departments, in which the students are not necessarily exposed to the specific nature of scientific communication. Preparing students for careers in biological sciences requires specialized skillsets, including scientific communication, and learning to communicate science effectively is an important objective of our degree programs. Through writing lab reports and oral presentations within our own core classes, students will gain experience of these specific requirements and ultimately the expertise to effectively communicate science.

Thank you for your consideration in this important change to the Medical Technology 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, along with all required copies, to UCCC, Garner Hall, Room 279, Mail Stop 9702.

College: Business **Department: Finance & Economics**

Contact Person: Claudia R. Williamson **Mail Stop: 9580** **E-mail:** Cwilliamson@msstate.edu

Nature of Change: Modification **Date Initiated: 03/18** **Effective Date: Fall 2018**

Degree to be offered at: Starkville (Campus 1)

Current Degree Program Name: Doctor of Philosophy

Major: Business Administration **Concentrations: Business Information Systems**
Finance
Management
Marketing

New Degree Program Name: Doctor of Philosophy

Major: Business Administration **Concentrations: Business Information Systems**
Finance
Management
Marketing
Economics

Summary of Proposed Changes:

- **Add a concentration in Economics within the Ph.D. in Business Administration degree program**

Finance & Economics has offered a Doctor of Philosophy in Applied Economics for over 15 years. The Economics faculty have already been teaching the 'EC' courses listed below in this program, and as support for the concentration in Finance. The proposed concentration will require no change in courses taught. It is merely a movement of the current program under the Business Administration umbrella.

Approved:	Date:
Department Head	MARCH 30, 2018
Chair, College or School Curriculum Committee	4/9/18
Dean of College or School	4-5-18
Chair, University Committee on Courses and Curricula	
Chair, Graduate Council(if applicable)	
Chair, Deans Council	

GRADUATE DEGREE MODIFICATION OUTLINE FORM

Use the chart below to make modifications to an existing Graduate Degree. All deleted courses and information should be shown in *italics* and all new courses and information in **bold**. Please include the course prefix, number, and title in both columns. Expand rows as needed.

CURRENT Degree Description	PROPOSED Degree Description
Degree: Ph.D. Major: Business Administration Concentrations: Finance Information Systems Management Marketing	Degree: Ph.D. Major: Business Administration Concentrations: Finance Information Systems Management Marketing **Economics**
Graduate Studies in Business Director: Dr. Nicole Ponder McCool Hall, Room 200 Box 9587 Mississippi State, MS 39762 Telephone: 662-325-1891 E-mail: nponder@business.mssate.edu The College of Business currently offers a Doctor of Philosophy in Business Administration with concentrations in Finance (Coordinator, Dr. Brandon Cline), Information Systems (Coordinator, Dr. Merrill Warkentin), Management (Coordinator, Dr. James Vardaman), and Marketing (Coordinator, Dr. Joel Collier). These programs share a common core of 9 hours. Afterward, the requirements of each are set within the individual discipline.	Graduate Studies in Business Director: Dr. Nicole Ponder McCool Hall, Room 200 Box 9587 Mississippi State, MS 39762 Telephone: 662-325-1891 E-mail: nponder@business.mssate.edu The College of Business currently offers a Doctor of Philosophy in Business Administration with concentrations in Finance (Coordinator, Dr. Brandon Cline), Information Systems (Coordinator, Dr. Merrill Warkentin), Management (Coordinator, Dr. James Vardaman), Marketing (Coordinator, Dr. Joel Collier), **and Economics (Coordinator, Dr. Claudia Williamson)**. These programs share a common core of 9 hours. Afterward, the requirements of each are set within the individual discipline.

CURRENT CURRICULUM OUTLINE	Required Hours	PROPOSED CURRICULUM OUTLINE	Required Hours
College Required Courses	9	College Required Courses	9
BQA 9333 Statistical Analysis	3	BQA 9333 Statistical Analysis	3
BQA 9533 Quantitative Methods	3	BQA 9533 Quantitative Methods	3
EC 8990 Business Academics	3	EC 8990 Business Academics	3
Concentration Required Courses Varies by concentration		**Economics Concentration Required Courses**	**24**
		EC 8063 Foundations of Micro Theory	**3**
		EC 8123 Quantitative Economic Analysis	**3**
		EC 8173 Macroeconomics I	**3**
		EC 8133 Econometrics I	**3**
		EC 8163 Microeconomics I	**3**
		EC 8143 Econometrics II	**3**
		EC 8263 Microeconomics II	**3**
		FIN 9413 Inv. and Portfolio Theory	**3**

		Economics Concentration Elective Courses (Select at least 5 of the following): **EC 8113 Labor Theory and Analysis** **EC 8323 Econ. Anal. Of Developing Nations** **EC 8423 Seminar in Public Finance** **EC 8473 Public Choice** **EC 8643 Adv. Estimation Ec. Mod.** **EC 8653 Microeconometrics**	**15-18** **3** **3** **3** **3** **3** **3**
		EC 9000 Research/Dissertation	**20**
Total Hours		**Total Hours**	**68-71**

3. JUSTIFICATION AND LEARNING OUTCOMES

Add an Economics concentration to the Doctor of Philosophy in Business Administration degree program. The Department of Finance & Economics has offered a Doctor of Philosophy in Applied Economics since about 2000. The move to the Business Administration aligns the degree to other areas in the College, including Finance students within our department who have already been taking the economics required courses.

Student learning outcomes remain unchanged by this proposal and include the following:

1. Students will develop an in-depth knowledge of economic theory and empirical methods.
2. Students will demonstrate an ability to conceptualize and implement research based on economic theory.
3. Students will demonstrate the ability to conduct research supported by appropriate research methodologies and to disseminate research findings to a variety of audiences.

4. SUPPORT

A letter of support from Graduate Studies in Business as well as one from the Department of Finance & Economics are included with this proposal.

5. EFFECTIVE DATE

Fall 2018

MISSISSIPPI STATE UNIVERSITY™

COLLEGE OF BUSINESS
Graduate Studies in Business
P.O. Box 5288
Mississippi State, MS 39762
P. 662.325.1891
F. 662.325.8161
business.msstate.edu

Date: April 10, 2018

To: University Curriculum Committee Members

From: Nicole Ponder, Director, Graduate Studies in Business

Re: PhD in Business Administration – Economics Proposal

I am happy to support the proposal to include Economics as a major under the PhD in Business Administration degree.

As you can see from the proposal, the Economics doctoral program is currently structured as a degree separate from the PhD in Business Administration. As such, its admissions process is separate and its assessment process is separate. Bringing in Economics under the Business Administration umbrella will certainly help to make these processes more efficient. For example, in the Institutional Effectiveness reports, we can have one set of learning goals for all business majors rather than having to modify them for the separate Economics program. The assessment measures for each of the learning goals could now all be the same as well. As Assessment Coordinator for the College, I could more easily gather these data across majors and be able to make comparisons across majors more easily as well.

Other benefits would include streamlining recruiting efforts, tracking applicants more efficiently, providing consistent information to all incoming doctoral students during our College's orientation (rather than having to modify instructions and advice for the separate Economics program), and developing programs of study that are more consistent across all majors.

Our College has a PhD Advisory Committee consisting of the doctoral coordinators for each business major. The Committee voted unanimously in favor of including Economics as a Business Administration major. I hope the UCCC members feel the same way. If you have any questions about the proposal, I can be reached at nponder@business.msstate.edu or 325-1284. Thank you for your consideration!

MISSISSIPPI STATE UNIVERSITY

College of Business
Department of Finance and Economics

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40 Old Main – 312 McCool Hall
Mississippi State, MS 39762

P. 662.325.2342
F. 662.325.1977
www.business.msstate.edu

To: University Curriculum Committee

From: Economics Faculty, Department of Finance & Economics
College of Business

Re: Approval of Economics Concentration within PhD in Business Administration

Date: March 8, 2018

This proposal includes adding a concentration in economics under the current PhD program in Business Administration.

Finance & Economics has offered a Doctor of Philosophy in Applied Economics for over 15 years. The Economics faculty have already been teaching the necessary courses to support the economics concentration. The proposed concentration will require no change in courses taught. It is merely a movement of the current program under the Business Administration umbrella.

The Economics faculty has reviewed this submission. We support creating this concentration. If you have any questions, or need any additional information, please feel free to contact me (Claudia Williamson, 325-6717, crw433@msstate.edu).

Thank you for your time in considering these requests.

Michael Highfield, Department Head

Dan Parisian, Assistant Professor

Randall Campbell, Professor

Cheng Li, Assistant Professor

Kevin Rogers, Professor

Claudia Williamson, Associate Professor

M. Kathleen Thomas, Associate Professor

Sandra Orozco, Assistant Professor

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: Deletion **Date Initiated: 3/1/18** **Effective Date: Upon Approval**
Current Degree Program Name: Bachelor of Science

Major: Kinesiology **Concentration: Health Fitness Studies**

New Degree Program Name: NA

Major: NA **Concentration: NA**

Summary of Proposed Changes:
We are deleting the concentration titled Health Fitness Studies in lieu of the addition of a similar concentration titled Performance Fitness (see the specific program 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.

Approved: **Date:**

Ann Brown — 3-1-18

Department Head

Rebecca Rohrbaugh Davis — 4-4-18

Chair, College or School Curriculum Committee

Teresa Jayroe — 4-4-18

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: Health Fitness Studies*	Degree: Major: Concentration:
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.*	"[Click here and type new degree description]"
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*	"[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	Required Hours	PROPOSED CURRICULUM OUTLINE	Required Hours
English *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
Fine Arts (General Education): *PE 1323 History & Appreciation of Dance OR Any Gen Ed Course*	*3*	Fine Arts (General Education):	3
Natural Sciences *(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
Extra Science (if appropriate)		Extra Science (if appropriate)	
Math *MA 1313 College Algebra OR Above* *ST 2113 Introduction to Statistics*	*6-9*	Math (General Education):	6-9
Humanities *Any Gen Ed Course(s)*	*6*	Humanities (General Education):	6
Social/Behavioral Sciences *PSY 1013 Psychology* *EC 2113 Principles of Macroeconomics*	*6*	Social/Behavioral Sciences (Gen Ed):	6
Major Core Courses *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	

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

Epidemiology *PSY 3363 Behavioral Modification* *PSY 3353 Motivation* *COE 4023 Introduction to Counseling* *CO 3203 Communication and Group Leadership*			
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 Cosumer Aspects of Aging*			
Oral Communication Requirement *CO 1003 Fundamentals of Public Speaking*	*3*		
Computer Literacy Requirement *TKT 1273 Computer Applications (or other approved course)*	*3*		
Writing Requirement *EDF 3413 Writing for Thinking (or other approved junior-level writing course)*	*3*		
Total Hours	*124*	Total Hours	

MISSISSIPPI STATE UNIVERSITY

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www.kinesiology.msstate.edu

February 09, 2018

Dr. Stanley P. Brown
Professor and Head

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

John Lamberth, Ph.D.
Exercise Science Undergraduate Curriculum Coordinator

Faculty Signatures For

Faculty Signatures Against

MISSISSIPPI STATE
UNIVERSITY™

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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,

Stan Brown

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

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: Addition **Date Initiated: 3/1/18** **Effective Date: Upon Approval**
Current Degree Program Name:

Major: **Concentration:**

New Degree Program Name: Bachelor of Science

Major: Kinesiology **Concentration: Performance Fitness**

Summary of Proposed Changes:
We are deleting the concentration titled Health Fitness Studies in lieu of the addition of a similar concentration titled Performance Fitness (see the specific program 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.

Approved: **Date:**

[illegible] Brown — 3-1-18

Department Head

Rebecca Robichaux-Davis — 4-4-18

Chair, College or School Curriculum Committee

Teresa Jayroe — 4-4-18

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: Major: Concentration:	Degree: Bachelor of Science Major: Kinesiology Concentration: **Performance Fitness**
"[Click here and type old degree description]"	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).** 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.
"[Click here and type old concentration description]"	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.

CURRENT CURRICULUM OUTLINE	Required Hours	PROPOSED CURRICULUM OUTLINE	Required Hours
English (Ex: EN 1103 English Comp I):	6	English 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	Natural Sciences 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	Math MA 1313 College Algebra OR Above ST 2113 Introduction to Statistics	6
Humanities (General Education):	6	Humanities Any Gen Ed Course(s)	6
Social/Behavioral Sciences (Gen Ed):	6	Social/Behavioral Sciences PSY 1013 Psychology OR other approved Gen Ed Course SO 1003 Introduction to Sociology OR other approved Gen Ed Course	6
Major Core Courses		Exercise Science Core 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		**Kinesiology Core Courses** **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
		Electives (consent of advisor – must meet student's career goals)	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
		Adjunct Courses 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.

1. Students will demonstrate discipline specific knowledge in Performance and Fitness.
2. Students will display the ability to identify performance and fitness needs of athletes and generally healthy populations.
3. Students will display the ability to design exercise prescriptions to improve performance and fitness in athletes and generally healthy populations.
4. Students will complete an appropriate and successful internship experience in Performance and Fitness.

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

MISSISSIPPI STATE UNIVERSITY

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February 09, 2018

Dr. Stanley P. Brown
Professor and Head

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Sincerely,

John Lamberth

John Lamberth, Ph.D.
Exercise Science Undergraduate Curriculum Coordinator

Faculty Signatures For

Faculty Signatures Against

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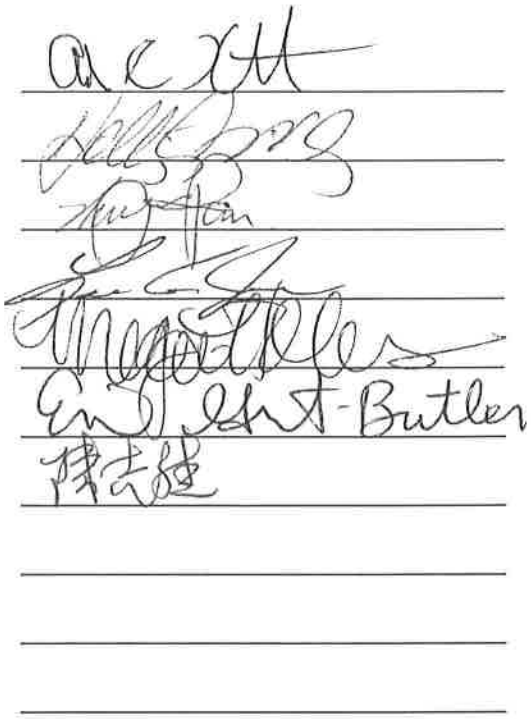
Faculty Signatures For



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February 28, 2018

Rebecca Robichaux-Davis
Box Council Chair

Dear Dr. Robichaux-Davis:

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Sincerely,

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

APPROVAL FORM FOR

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College: Education **Department: Kinesiology**

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

Major: **Concentration:**

New Degree Program Name: Bachelor of Science

Major: Kinesiology **Concentration: Neuromechanics**

Summary of Proposed Changes:
We propose the addition of the concentration titled Neuromechanics. As you can see from the degree form, the concentration adds a 15 hour block specific to Neuromechanical Kinesiology. Coupled with their directed internship experience, the Neuromechanics concentration prepares students for significant career paths unavailable to students following the other concentrations in the department.

Approved:	Date:
Department Head	3-1-18
Chair, College or School Curriculum Committee	4-4-18
Dean of College or School	4-4-18
Chair, University Committee on Courses and Curricula	
Chair, Graduate Council(if applicable)	
Chair, Deans Council	

DEGREE MODIFICATION OUTLINE FORM

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CURRENT Degree Description	PROPOSED Degree Description
Degree: Major: Concentration:	Degree: Bachelor of Science Major: Kinesiology **Concentration: Neuromechanics**
"[Click here and type old degree description]"	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).** 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.
"[Click here and type old concentration description]"	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

		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	English 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	Natural Sciences 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	Math MA 1313 College Algebra OR Above ST 2113 Introduction to Statistics	6
Humanities (General Education):	6	Humanities Any Gen Ed Course(s)	6
Social/Behavioral Sciences (Gen Ed):	6	Social/Behavioral Sciences PSY 1013 Psychology OR other approved Gen Ed Course SO 1003 Introduction to Sociology OR other approved Gen Ed Course	6

Major Core Courses		Exercise Science Core 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		**Kinesiology Core Courses** **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
		Electives (consent of advisor – must meet student's career goals)	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

		Adjunct Courses 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).

1. Students will demonstrate discipline specific knowledge in Neuromechanics, which combines the fields of neuroscience and biomechanics.
2. Students will gain an understanding of the control and production of human movement accomplished by the interaction of the nervous, muscular and skeletal systems of the human body.
3. Students will display the ability to analyze and quantify human movements to help minimize injury-related movement deficits and improve performance in a variety of populations including; athletic, clinical, occupational, geriatric, pediatric and daily living.
4. Students will complete an appropriate and successful internship experience in Neuromechanics.

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

MISSISSIPPI STATE UNIVERSITY™

DEPARTMENT OF KINESIOLOGY
P.O. Box 6186
216 McCarthy Gym
Mississippi State, MS 39762

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F. 662.325.4525
www.kinesiology.msstate.edu

February 09, 2018

Dr. Stanley P. Brown
Professor and Head

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

John Lamberth, Ph.D.
Exercise Science Undergraduate Curriculum Coordinator

Faculty Signatures For

Faculty Signatures Against

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UNIVERSITY™

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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

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: Clinical Exercise Physiology**

New Degree Program Name: Bachelor of Science

Major: Kinesiology **Concentration: Clinical Exercise Physiology**

Summary of Proposed Changes:
We propose a modification to the Clinical Exercise Physiology (CLEP) concentration that adds a Kinesiology Core, an Exercise Science Core, a CLEP concentration, a few course changes, and reduces the number of elective hours from 20 to 15.

Approved:	Date:
Steve Brown Department Head	3-1-18
Rebecca Rehbaum Davis Chair, College or School Curriculum Committee	4-4-18
Teresa Jayroe Dean of College or School	4-4-18
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
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.	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)**. 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.
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	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

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
English EN 1103 English Comp I OR EN 1163 Accelerated Comp I and EN 1113 English Comp II OR EN 1173 Accelerated Comp II	6	English 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
Natural Sciences Biology Course with Lab From Approved List Chemistry Course with Lab From Approved List	8	Natural Sciences 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	Math MA 1313 College Algebra OR Above ST 2113 Introduction to Statistics	6
Humanities Approved List	6	Humanities Any Gen Ed Course(s)	6
Social/Behavioral Sciences From Approved List	6	Social/Behavioral Sciences PSY 1013 Psychology OR other approved Gen Ed Course SO 1003 Introduction to Sociology OR other approved Gen Ed Course	6

Major Core Courses 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	Exercise Science Core 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
EP Elective (Choose two of the following) EP 4123, Aging and Physical Activity EP 4143, Aging and Disability *EP 4503, Mechanical Analysis of Movement* EP 4703, Neural Control of Human Movement Concentration Courses	6	**Kinesiology Core Courses** **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
Major Electives See advisor for approved list of courses	20	Electives (consent of advisor – must meet student's career goals)	15
Oral Communication Requirement CO 1003, Fundamentals of Public	3	See Adjunct Courses	-0-

Speaking OR CO 1013, Introduction to Communication, OR CO 2253, Fundamentals of Interpersonal Communication			
Computer Literacy Requirement *Satisfied by successful completion of EP 4803*		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	Adjunct Courses 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
Final Semester: Clinical Exercise Physiology Internship *EP 4803 Professional Seminar in Exercise Science* *EP 4810 Clinical Exercise Physiology Internship*	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.

1. Students will demonstrate discipline specific knowledge in Clinical Exercise Physiology.
2. Students will display the ability to apply therapeutic exercise prescriptions to individuals with chronic diseases (i.e., coronary heart disease, hypertension, cancer, diabetes, pulmonary disease) and the generally healthy population.
3. Students will display the ability to design appropriate exercise tests to assess the functional capacities of individuals with chronic diseases and the generally healthy populations.
4. Students will complete an appropriate and successful internship experience in Clinical Exercise Physiology.

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

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February 09, 2018

Dr. Stanley P. Brown
Professor and Head

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
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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

John Lamberth, Ph.D.
Exercise Science Undergraduate Curriculum Coordinator

Faculty Signatures For

Faculty Signatures Against

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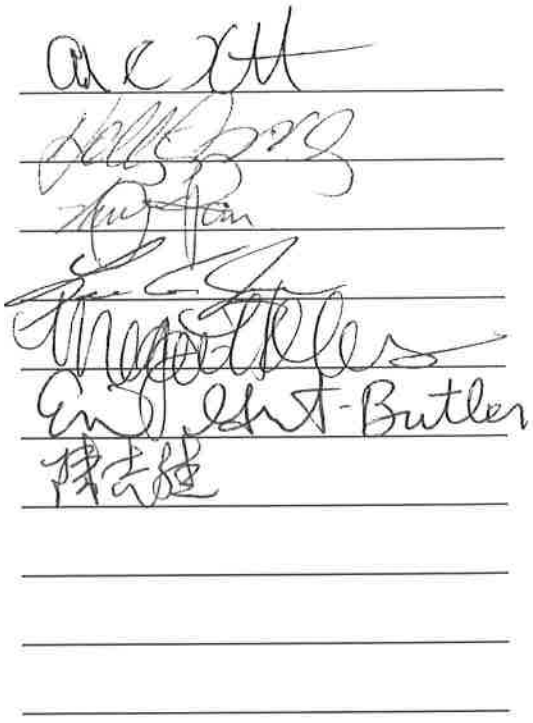
Faculty Signatures For



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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

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: Dr. Gregg Twietmeyer Mail Stop: E-mail: gjt67@msstate.edu
Nature of Change: modification Date Initiated: 2/9/18
Effective Date: Fall 18
Current Degree Program Name: Kinesiology/Sport Studies

Major: Kinesiology Concentration: Sport Studies

New Degree Program Name: Kinesiology/Sport Administration

Major: Kinesiology Concentration: Sport Administration

Summary of Proposed Changes:

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.

Approved: **Date:**

Steve Brown — 3-6-18

Department Head

Rebecca Richard Davis — 4-4-18

Chair, College or School Curriculum Committee

Teresa Jaynes — 4-4-18

Dean of College or School

Chair, University Committee on Courses and Curricula

Chair, Graduate Council (if applicable)

Chair, Deans Council

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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. Younghan 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. Younghan 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

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: *Sport Studies*	Degree: Kinesiology Major: Concentration: **Sport Administration**
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.*	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).** 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.**
The Sport *Studies* concentration provides students with knowledge and skills necessary for careers in the sport industry. A concentration in Sport *Studies* 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 *sport business* 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 *Studies* choose either the Business or Communication cognate field.	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.

CURRENT CURRICULUM OUTLINE	Required Hours	PROPOSED CURRICULUM OUTLINE	Required Hours
English EN 1103 English Comp I OR EN 1163 Accelerated Comp I and EN 1113 English Comp II OR EN 1173 Accelerated Comp II	6	English 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 *any two* 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 *SS 4303 Globalization & Sport* SS 4396 Sports Studies Internship SS 4803 Seminar in Sports Studies *TKT 1273 Computer Applications (Satisfies Computer requirement)* *CO 1003 Fundamentals of Public Speaking.(Satisfies Communication requirement)*	*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 *six* 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.

1. Students will demonstrate discipline specific academic and theoretical knowledge in sport administration.

2. Students will understand the important place that sport plays in human well-being and culture so as to guide their professional philosophy and practice.

3. Students will build practical skills in sport funding, law, sponsorship and ethics so as to better manage sports events and facilities and to better shape and guide sport policy.

4. Students will complete appropriate and successful practicum and internship experiences in sport administration.

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-LETTERABBREVIATION**
SPAD.

6. **EFFECTIVE DATE**
Upon approval.

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
Professor and Head, Dept. of Classical & Modern Languages and Literatures
www.cmll.msstate.edu
Lee Hall 1500
P.O. Box FL
Mississippi State University
Starkville MS 39762
phone: 662.325.3480
FAX: 662.325.8209
email: corrigan@cmll.msstate.edu

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

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: Brad Vickers **Mail Stop: 9575** **E-mail: bv44@msstate.edu**

Nature of Change: Add Kinesiology Core **Date Initiated: 3/1/18** **Effective Date: Fall 2018**

Current Degree Program Name: Bachelor of Science

Major: Kinesiology **Concentration: Physical Education and Coaching**

New Degree Program Name:

Major: **Concentration:**

Summary of Proposed Changes:

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

Approved:	Date:
Steve Brown Department Head	3-1-18
Rebecca Richard-Davis Chair, College or School Curriculum Committee	4-4-18
Teresa Jayroe Dean of College or School	4-4-18
Chair, University Committee on Courses and Curricula	
Chair, Graduate Council(if applicable)	
Chair, Deans Council	

MISSISSIPPI STATE UNIVERSITY™

DEPARTMENT OF KINESIOLOGY
P.O. Box 6186
216 McCarthy Gym
Mississippi State, MS 39762
P. 662.325.2963
F. 662.325.4525
www.kinesiology.msstate.edu

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

MISSISSIPPI STATE
UNIVERSITY

Mr. Glen Young

Dr. Gregg Twietmeyer

Dr. Matthew Zimmerman

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216 McCarthy Gyr
P.O. Box 618
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

DEGREE PROGRAM MODIFICATION

B.S. in Kinesiology: Concentration in PE and Coaching

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	
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.		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.	
CURRENT CURRICULUM OUTLINE	Hrs	**PROPOSED CURRICULUM OUTLINE**	Hrs
English EN 1103 English Comp I OR EN 1163 Accelerated Comp I EN 1113 English Comp II OR EN 1173 Accelerated Comp II	6	English 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 PE 1323 History & Apprec of Dance or other approved FA	3	Fine Arts PE 1323 History & Apprec of Dance or other approved FA	3
Natural Sciences 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	Natural Sciences 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
Math MA 1313 College Algebra ST 2113 Introduction to Statistics or math above 1313	6	Math MA 1313 College Algebra ST 2113 Introduction to Statistics or math above 1313	6
Humanities 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	Humanities 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
Social/Behavioral Sciences PSY 1013 General Psychology SO 1203 Marriage & Family or other approved Social Science	6	Social/Behavioral Sciences PSY 1013 General Psychology SO 1203 Marriage & Family or other approved Social Science	6

Major Core Courses PE 1243 Methods of Teaching Games and Sports PE 1253 Methods of Teaching Lifetime Activities PE 1263 Methods of Teaching Rhythms *KI 1803 Health Trends and Topics* 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*	Major Core Courses 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 **EP 3304 Exercise Physiology** PE 3533 Coaching Sports PE 4533 Developing Coaching Expertise PE 4283 Sport Biomechanics **Kinesiology Core Courses** **PE 1000 or 2 Activity Class Electives** **PE 3163 Sport Psychology** **EP 3233 Anatomical Kinesiology** **EP 2013 Fundamentals of Kinesiology**	42
Select one of the following KI 3273 Athletic Training OR KI 2213 Emergency Health Care Professional Education Courses EDF 3333 Social Foundations in Education EDX 3213 Psychology & Education of Exceptional Children and Youth Required for Admission into Teacher Ed PE 4163 Principles and Methods of 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 Final Semester: Teaching Internship PE 4873 Professional Seminar PE 4886 Teaching Intern PE 4896 Teaching Intern	45	Select one of the following KI 3273 Athletic Training OR KI 2213 Emergency Health Care Professional Education Courses EDF 3333 Social Foundations in Education EDX 3213 Psychology & Education of Exceptional Children and Youth Required for Admission into Teacher Ed PE 4163 Principles and Methods of Secondary PE 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 Final Semester: Teaching Internship PE 4873 Professional Seminar PE 4886 Teaching Intern PE 4896 Teaching Intern	45
Total Hours	124	Total Hours	124

3. Justification and Student Learning Outcomes

Recently, the faculty of the department recognized the need for a Kinesiology Core that would be common to all of the undergraduate degree concentrations within the department. 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) among our disparate curricula. With the addition of

the new core we have had to reorganize the Physical Education and Coaching curriculum slightly by removing KI 1803 and adding the 4 semester hour exercise physiology course (EP 3304) which replaces PE 3313 (Sport Physiology). These changes will allow more movement/physical activity (the core requires all department majors to take physical activity courses) for our students, something that was vitally needed in the physical education and coaching curriculum.

1. Students will demonstrate discipline specific content and skill knowledge in Physical Education and Coaching.

2. Students will plan and implement learning experiences based on expected developmental progressions.

3. Students will use a variety of formal and informal assessment strategies to guide their instruction.

4. Students will complete an appropriate and successful internship experience in Physical Education.

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

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: Educational Leadership**

Contact Person: Eric Moyen **Mail Stop: 9698**
E-mail: emoyen@colled.msstate.edu
Nature of Change: Modification for new concentration in "Teacher Leadership"
Date Initiated: February 2, 2018 **Effective Date: Upon Approval**
Current Degree Program Name: MS in Educational Leadership

Major: Educational Leadership **Concentration:**

New Degree Program Name: MS in Educational Leadership

Major: Educational Leadership **Concentration: Teacher Leadership**

Summary of Proposed Changes:
This modification includes a new concentration in Teacher Leadership. Teacher leadership has become a growing trend in P-12 education, and it is the desire of the Educational Leadership department to be at the forefront of this change in the state of Mississippi. In order to do so, we have created four new courses that will focus on four critical educational components and their relationship to teacher leadership: assessing content knowledge, differentiated instruction, effective and reflective practitioners, and teaching practice and learning environment. Those courses will be coupled with five existing courses in the Educational Leadership master's program along with one graduate elective course.

Approved: **Date:**

Eric Moyen Eric Moyen **2/2/18**
Department Head

Rebecca Rolichaux Davis 2/16/18
Chair, College or School Curriculum Committee

Teresa Jayroe 2.16.18
Dean of College or School

Chair, University Committee on Courses and Curricula

Chair, Graduate Council(if applicable)

Chair, Deans Council

Program Modification: Master of Science in Educational Leadership

CURRENT Degree Description	**PROPOSED Degree Description**
Degree: Master of Science Major: Educational Leadership Concentration: School Administration	**Degree: Master of Science** **Major: Educational Leadership** **Concentration: Teacher Leadership**
Program candidates in the School Administration concentration learn to analyze data, evaluate instruction, improve student achievement, make strategic decisions, creatively solve problems, involve families in their children's education, empower others, supervise staff, promote change, establish positive school culture, understand budgets, and manage resources. The program is nationally accredited by the Educational Leadership Constituent Council (ELCC) and approved for administrative licensure by the Mississippi Department of Education. Graduates are prepared for a wide range of professional positions in education, including principal, assistant principal, coordinator, and director.	Program candidates in the School Administration concentration learn to analyze data, evaluate instruction, improve student achievement, make strategic decisions, creatively solve problems, involve families in their children's education, empower others, supervise staff, promote change, establish positive school culture, understand budgets, and manage resources. **Program candidates in the Teacher Leadership concentration area learn to analyze data, evaluate instruction, improve student achievement, make strategic decisions, creatively solve problems, promote collaborative learning, empower others, supervise staff, promote change, establish positive school culture. Teacher-leadership candidates also focus on developing positive school culture by supporting and improving pedagogy among P-12 instructors. Degree completers will be skilled at helping other teachers better understand their subject matter, how they teach it, how to monitor student learning, how to think systematically about curriculum and pedagogy, and how to develop healthy learning communities.** **The program is nationally accredited by the Educational Leadership Constituent Council (ELCC) and approved for administrative licensure by the Mississippi Department of Education. Graduates are prepared for a wide range of professional positions in education, including principal, assistant principal, coordinator, and director.**

CURRENT CURRICULUM OUTLINE	Required Hours	**PROPOSED CURRICULUM OUTLINE**	**Required Hours**
EDL 8413 School Legal and Ethical Perspectives	3	**EDL 8423 School Leadership**	**3**
EDL 8423 School Leadership	3	**EDL 8433 Using Data for School Improvement**	**3**
EDL 8433 Using Data for School Improvement	3	**EDL 8523 Educating Diverse Learners**	**3**
EDF 8443 Evaluation of School Programs	3	**EDL 8623 Leading Curriculum, Instruction and Assessment**	**3**
EDL 8523 Educating Diverse Learners	3	**EDL 8723 Leadership for Positive School Culture**	**3**
EDL 8623 Leading Curriculum, Instruction and Assessment	3	**8313 Assessing Content Knowledge for Teacher Leadership**	**3**
EDL 8633 Human Resources Leadership for Schools	3	**EDL 8323 Differentiation of Instruction for Teacher Leadership**	**3**

EDL 8713 School Business and Facilities	3	**EDL 8333 Teaching Practice and Learning Environment for Teacher Leadership**	**3**
EDL 8723 Leadership for Positive School Culture	3	**EDL 8343 Effective and Reflective Practitioner for Teacher Leadership**	**3**
EDL 8513 School Leadership Internship I	3	**EDL/EDF/EDE/EDS/EPY Elective**	**3**
EDL 8613 School Leadership Internship II	3		
Total Hours	33	**Total Hours**	**30**

JUSTIFICATION AND STUDENT LEARNING OUTCOMES

Justification

The proposed modification to add a concentration in Teacher Leadership to the MS program in Educational Leadership is designed to provide current P-12 school teachers with an option for an advancement in educational leadership that does not remove them entirely from direct contact with students or classroom teaching. Because of the growing emphasis in teacher leadership this program will be well situated to make a positive impact both in and outside Mississippi. As more P-12 schools hiring teaching/instructional coaches, curriculum leaders, and lead teachers multiple states are considering teacher leadership licensure endorsements. The new courses will assist current teachers in attaining National Board Certification, enhancing the desirability of the program. However, this is not a required path of the curriculum. Courses in teacher leadership will be offered alongside traditional educational leadership classes, allowing for an important and trend setting degree opportunity.

Student Learning Outcomes

Students will gain an understanding of school leadership and the ways in which educational administration can provide leadership for the improvement of school culture, policy, instruction, and learning.

Students will develop deep knowledge of content areas and pedagogical practices.

Students will develop the ability to think systematically about the school environment, student learning, curriculum and instruction, and educational leadership. Students will be able to understand the connections between all of these various components of the educational enterprise.

Students will understand the importance of professional learning communities and the ways in which the foster diversity, collaboration, engagement, and learning.

Distance Learning

The teacher leadership concentration courses will be offered in a face-to-face format. Other Educational Leadership courses will continue with an online option.

Comparison with Leading Academic Programs in the Discipline

The proposed concentration in Teacher Leadership is a growing trend nationally. However, Mississippi State University would be one of the first research universities in the South to implement such a program

- Northwestern University offers a master's concentration in teacher leadership. https://www.sesp.northwestern.edu/msed/teacher-leadership/teacher-leadership-curriculum.html
- Pennsylvania State University offers a special emphasis in its master's program in Educational Leadership. https://ed.psu.edu/eps/edldr/graduate-degrees/masters-degree
- Mount Holyoke offers an MA in Teacher Leadership that in centered on the National Board Certification Modules. https://www.mtholyoke.edu/professional-graduate/master-arts-teacher-leadership
- In the metro Atlanta area Kennesaw State University, which has an enrollment in excess of 35,000, offers a master's degree in teacher leadership. http://bagwell.kennesaw.edu/majors-programs/masters-degrees/master-education/med-teacher-leadership/

An examination of the above programs reveals a variety of courses and curricula aimed at allowing P-12 teachers to develop leadership skills outside of the traditional path to a principal's position. While the exact courses vary in each program, utilizing research to improve professional practice, leadership, diversity, assessment, and developing learning communities or teaching teams are common themes. This proposed program attempts to take the key courses and develop leadership skills in a school setting that will lead to positions in teacher leadership such as mentors, teaching coaches, curriculum specialists and developers of professional learning communities.

Advisory Board Assessment and Feedback of the Degree Program

The Mississippi Department of Education has recognized the importance of teacher leadership and created a task force on teacher leadership. One Educational Leadership Department faculty member serves on the task force. The Mississippi Department of Education is exploring various ways in which to promote teacher leadership. The National Board Certification Project Director, Dr. Stacey Donaldson, has also expressed interest in, and support of, this program concentration modification.

Questions

1. Will this program change meet local, state, regional, and national educational and cultural needs? If so, please describe. Yes. More schools and state departments of education are looking for ways to keep the best teachers in the classroom. Teacher leadership offers and opportunity for promotion and more influence in decision making while allowing continued direct contact with students.
2. Will this program change result in duplication in the System? No
3. Will this program change/advance student diversity within the discipline? No
4. Will this program change result in an increase in the potential placement of graduates in MS, the Southeast, and the U.S.? If so, please describe. Yes. As stated above, states are creating more positions for instructional coaches, curriculum leaders, and lead teachers.
5. Will this program change result in an increase in the potential salaries of graduates in MS, the Southeast, and the U.S.? If so, please describe. Yes. The teacher leadership concentration will allow students to earn a master's degree and receive the subsequent pay increase. The Mississippi Department of Education is

studying the possibility of a teacher leadership certification area which would also result in a pay increase. Additionally, courses are designed to help current teachers work toward National Board certification which has an annual pay increase of $7,000-$10,000. However, the program is designed to be broader than simply a National Board course sequence, and candidates may complete the program without engaging in the National Board certification process.

SUPPORT

A letter of support from the department faculty is included with the course proposal. The letter contains a majority of the faculty members' signatures.

No changes in support, including personnel and material requirements, are anticipated.

PROPOSED 4-LETTER ABBREVIATION

No change

EFFETIVE DATE

Upon Approval

NEW COURSES AND THEIR CATALOG DESCRIPTIONS

EDL 8313: Assessing Content Knowledge for Teacher Leadership

Three hours lecture. This course addresses the assessment of content knowledge necessary to be an effective teacher leader. It involves developing an understanding of the relationship between content knowledge, pedagogy, and assessment. Students learn strategies for these key elements of the teaching profession.

EDL 8323: Differentiation of Instruction for Teacher Leadership

Three hours lecture. This course will address the importance of differentiated instruction in effective teacher leadership. It will involve developing teacher-leaders' abilities to evaluate students' learning styles, plan and implement differentiated instruction, and analyze instructional strategies and materials based on ongoing assessment.

EDL 8333: Teaching Practice and Learning Environment for Teacher Leadership

Three hours lecture. This course will address the knowledge of teaching practices and learning environments necessary to be an effective teacher leader. This will include content in instructional planning, pedagogical strategies, student engagement, development of motivational, safe learning environments, and assessment of these best practices.

EDL 8343: Effective and Reflective Practitioner for Teacher Leadership

Three hours lecture. This course involves developing teacher-leaders' abilities in applying knowledge of students as well as collaborating with all educational stakeholders to develop learning communities. Ultimately, this course enhances the teacher leader's commitment to advancing student learning and achievement in the K-12 setting.

MISSISSIPPI STATE UNIVERSITY

COLLEGE OF EDUCATION
Department of Educational Leadership
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February 1, 2018

To: The Box Council and the University Committee on Courses and Curricula

From: Eric Moyen and the Department of Educational Leadership

RE: Support of a modification in the

To further develop graduate degrees in the Educational Leadership (P-12 program), we the undersigned faculty members in the department of Educational Leadership support the proposal for a degree modification to include "Teacher-Leadership" as a concentration area.

This letter of support is offered by the Educational Leadership faculty for the proposed modification to the MS in Educational Leadership to include a new concentration in Teacher Leadership. As indicated by the signatures below, a majority of the program area faculty have approved the proposal as written for submission to the Box Council and the UCCC.

Program Area Faculty

Stephanie King 2/2/18
[Signature of approving faculty member 1] [Date]

Angela Farmer 2/2/18
[Signature of approving faculty member 2] [Date]

2/2/18
[Signature of approving faculty member 3] [Date]

Leigh Ann Hailey by permission AWJ 2/2/18
[Signature of approving faculty member 4] [Date]

2/2/2018
[Signature of approving faculty member 5] [Date]

[Signature of approving faculty member 6] [Date]

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, along with all required copies, to UCCC, Garner Hall, Room 279, Mail Stop 9702.

College: Engineering **Department:** Dean's Office

Contact Person: Kari Babski-Reeves **Mail Stop:** 9544 **E-mail:** kari@bagley.msstate.edu

Nature of Change: Modification **Date:** 3/20/2018

Program will be offered at: Starkville (Campus 1)

Current Degree Program Name: Master **Effective Date:** Summer 2018

Major: Engineering **Concentration:**

New Degree Program Name: Master

Major: Engineering **Concentration:** Engineering, Military Engineering

Summary of Proposed Changes:

This modification is to allow the offering of two concentrations, a general engineering concentration which represents the current program and a military engineering concentration which has selected courses for students to select from.

Kari Babski Reeves
Department Head

Andy D. Perkins
Chair, College or School Curriculum Committee

Kari Babski Reeves
Dean of College or School

Chair, University Committee on Courses and Curricula

Chair, Graduate Council (if applicable)

Chair, Deans Council

☐ **SACS Letter Sent**

1. CATALOG DESCRIPTION

Please see table below for the current and proposed catalog descriptions.

2. GRADUATE DEGREE MODIFICATION OUTLINE FORM

Use the chart below to make modifications to an existing Graduate Degree. All deleted courses and information should be shown in *italics* and all new courses and information in **bold**. Please include the course prefix, number, and title in both columns. Expand rows as needed.

CURRENT Degree Description	PROPOSED Degree Description
Degree: Master of Engineering Major: Engineering Concentrations: N/A	Degree: Master of Engineering Major: Engineering Concentrations: Engineering, Military Engineering
Graduate study is offered through the Office of the Dean, James Worth Bagley College of Engineering, leading to the degree of Master of Engineering (M Eng). The M Eng, designed primarily for the professional engineer, is an interdisciplinary program which is delivered online and combines graduate-level courses from different engineering programs into an advanced-level educational experience. *All courses are delivered in a flexible, web-based format. This program is restricted to off-campus students only* and has both the thesis and non-thesis options. *The M Eng upholds the same rigorous academic requirements as all engineering programs offered on the MSU campus and is a unique program in the state of Mississippi. Students enrolled in courses in this program may use credit hours to satisfy continuing education hours for the Mississippi Engineering Board of Registration. Licensed professional engineers from other states also may use these courses to satisfy licensing requirements.* All students admitted to the M Eng should become familiar with all academic requirements and processes associated with graduate studies in the Bagley College of Engineering and Mississippi State University as noted in the MSU Graduate Catalog in the General Requirements of the Graduate School and General Master's Degree Requirements sections. The Graduate Catalog is available at http://catalog.msstate.edu/graduate/. For specific information about the program, *contact*	Graduate study is offered through the Office of the Dean, James Worth Bagley College of Engineering, leading to the degree of Master of Engineering (M Eng) **with a concentration in General Engineering or Military Engineering**. The M Eng is an interdisciplinary program which combines graduate-level courses from different engineering programs into an advanced-level educational experience that is thematic in nature to allow students to specialize in areas critical to their career advancement. This has both a thesis and non-thesis option. All students admitted to the M Eng should become familiar with all academic requirements and processes associated with graduate studies in the Bagley College of Engineering and Mississippi State University as noted in the MSU Graduate Catalog in the General Requirements of the Graduate School and General Master's Degree Requirements sections. The Graduate Catalog is available at http://catalog.msstate.edu/graduate/. For specific information about the program, **email graduate@bagley.msstate.edu**. Admission Criteria In addition to meeting the requirements set forth by the Graduate School as noted in the admission section of this publication, the basic requirements for admission to the M Eng include a minimum 3.00/4.00 GPA on a B.S. degree in an engineering discipline or closely related area, or remedial engineering coursework. Students should refer to the General Requirements for

Tamra Swann, Coordinator for Distance Education, James Worth Bagley College of Engineering.

Admission Criteria

In addition to meeting the requirements set forth by the Graduate School as noted in the admission section of this publication, the basic requirements for admission to the M Eng include a minimum 3.00/4.00 GPA on a B.S. degree in an engineering discipline or closely related area, or remedial engineering coursework. Students should refer to the General Requirements for Admission section in the Graduate Catalog regarding University admission policy. A satisfactory performance is required on the GRE for students with a degree from a program that is not EAC/ABET-accredited. Consideration may be given to students who hold non-engineering undergraduate degrees on a case-by-case basis. Admission decisions are made by the Associate Dean for Research and Graduate Studies.

As part of the standard engineering undergraduate program, a student will have had:

- Calculus I – IV and Differential Equations
- One year of calculus-based physics
- One semester of general chemistry class
- Two or three engineering science courses (e.g., electronic circuits, engineering mechanics, thermodynamics, production control systems)

The commonality in fundamental coursework in ABET-accredited engineering programs generally allows for the offering of graduate-level engineering courses with a prerequisite of "graduate standing." A student with a significant practical work experience in an area will have "consent of Instructor" as a standard prerequisite. If specific, significant prerequisites are required for any course, these will be clearly identified when the course is posted.

Provisional Admission—A student who does not meet *the 3.00 GPA requirement for the M Eng* may be admitted to the program on a provisional basis. If provisional admission is granted, the student must achieve a GPA of 3.00 on the first 9 credit hours of graduate courses. Courses with an S grade, transfer credits, or credits earned while in Unclassified status cannot be used to satisfy this requirement. Upon meeting the provisional admission requirements, the student receives regular admission status. If the student does not meet **this requirement**, the student **will** be terminated from the M Eng program.

Admission section in the Graduate Catalog regarding University admission policy. A satisfactory performance is required on the GRE for students with a degree from a program that is not EAC/ABET-accredited. Consideration may be given to students who hold non-engineering undergraduate degrees on a case-by-case basis. Admission decisions are made by the Associate Dean for Research and Graduate Studies.

As part of the standard engineering undergraduate program, a student interested in the M Eng program will have had:

- Calculus I – IV and Differential Equations
- One year of calculus-based physics
- One semester of general chemistry class
- Two or three engineering science courses (e.g., electronic circuits, engineering mechanics, thermodynamics, production control systems)

The commonality in fundamental coursework in ABET-accredited engineering programs generally allows for the offering of graduate-level engineering courses with a prerequisite of "graduate standing." A student with a significant practical work experience in an area will have "consent of Instructor" as a standard prerequisite. If specific, significant prerequisites are required for any course, these will be clearly identified when the course is posted.

Provisional Admission—A student who does not meet **a programmatic or university admission** criteria may be admitted on a provisional basis. If provisional admission is granted, the student must achieve a GPA of 3.00 on the first 9 credit hours of graduate courses. Courses with an S grade, transfer credits, or credits earned while in Unclassified status cannot be used to satisfy this requirement. Upon meeting the provisional admission requirements, the student receives regular admission status. If the student does not meet **this requirement**, the student **will** be terminated from the M Eng program.

Program of Study

The curriculum for the M Eng **(both concentrations)** is flexible with a minimum requirement of 30 credit hours for both the thesis

S grade, transfer credits, or credits earned while in Unclassified status cannot be used to satisfy this requirement. Upon meeting the provisional admission requirements, the student receives regular admission status. If the student does *not achieve a 3.00 GPA*, the student *may* be terminated from the M Eng program.

Unclassified Admission—In certain circumstances, a student may be granted admission in unclassified status. Only 9 hours of graduate coursework received as an unclassified student may be transferred to the M Eng with the approval of the Associate Dean for Research and Graduate Studies. Hours completed in unclassified status may not be used to satisfy provisional admission requirements.

Program of Study

The curriculum for the M Eng is flexible with a minimum requirement of 30 credit hours for both the thesis and non-thesis. Engineering Statistics I and Project Management must have been completed as part of another degree program or show on the M Eng program of study. For the thesis option, 24 hours of graduate level coursework is required, with a minimum of 12 hours at the 8000 level, and 6 hours of research thesis. For the non-thesis option, 30 hours of graduate level coursework is required, with a minimum of 15 hours at the 8000 level. Coursework is selected from courses offered across the Bagley College of Engineering. Up to 12 hours may be taken from outside the engineering field (normally business, science, mathematics, or statistics; upon petition to the Associate Dean for Research and Graduate Studies, other areas may be considered).

Academic Performance

To be in good academic standing, a student is required to maintain a cumulative graduate GPA of 3.00 after admission to the program. If a graduate student's cumulative GPA falls below 3.00, the student will be placed on academic probation. The student must raise the cumulative GPA to at least a 3.00 on the next 9 hours of approved coursework in order to return to

and non-thesis **tracks**. Engineering Statistics I and Project Management **(or their equivalent)** must have been completed as part of another degree program or **will be required** on the M Eng program of study. For the thesis option, 24 hours of graduate level coursework is required, with a minimum of 12 hours at the 8000 level, and 6 hours of research thesis. For the non-thesis option, 30 hours of graduate level coursework is required, with a minimum of 15 hours at the 8000 level. Coursework is selected from courses offered across the Bagley College of Engineering. Up to 12 hours may be taken from outside the engineering field (normally business, science, mathematics, or statistics; upon petition to the Associate Dean for Research and Graduate Studies, other areas may be considered). **For the Military Engineering concentration, courses are selected from a set of identified courses that are applicable to this focus. Additionally, non-thesis students in either concentration must complete GE 8003 as the final capstone course for this program.**

Academic Performance

To be in good academic standing, a student is required to maintain a cumulative graduate GPA of 3.00 after admission to the program. If a graduate student's cumulative GPA falls below 3.00, the student will be placed on academic probation. The student must raise the cumulative GPA to at least a 3.00 on the next 9 hours of approved coursework in order to return to satisfactory academic performance (DIS credits, transfer credits and courses with S grades cannot be used to satisfy this requirement). A student will be dismissed from the M Eng if:

- In any subsequent semester the student's cumulative GPA again falls below 3.00
- A student makes a grade of D, F, or more than two Cs.

In the case of academic dismissal, the student may appeal his/her academic dismissal according to Appeal of Academic Dismissal as outlined in the Graduate Catalog.

satisfactory academic performance (DIS credits, transfer credits and courses with S grades cannot be used to satisfy this requirement. A student will be dismissed from the M Eng if: • In any subsequent semester the student's cumulative GPA again falls below 3.00 • A student makes a grade of D, F, or more than two Cs. In the case of academic dismissal, the student may appeal his/her academic dismissal according to Appeal of Academic Dismissal as outlined in the Graduate Catalog.	
N/A	N/A

PROPOSED CURRICULUM OUTLINE	PROPOSED CURRICULUM OUTLINE	PROPOSED CURRICULUM OUTLINE	Required Hours
College Required Courses	College Required Courses	College Required Courses	
Major Required Courses IE 6613 Engineering Statistics I or equivalent IE 6533 Engineering Management or equivalent XX 8000 Research/Thesis (thesis option only) Any Bagley College of Engineering distance education class in combination with up to 12 hours outside of engineering	 3 3 6 (thesis only) 18 (thesis) or *24* (non-thesis)	Major Required Courses IE 6613 Engineering Statistics I or MA/ST 8114 or equivalent IE 6533 Project Management or CE 6703 or equivalent **GE 8003 MEng Capstone Course (non-thesis only)** XX 8000 Research/Thesis (thesis option only)	 3 3 **3** 6 (thesis only)
Concentration 1. Courses	N/A	**Concentration 1.** **Any Bagley College of Engineering class in combination with up to 12 hours outside of engineering**	**18 (thesis) or 21 (non-thesis)**
Concentration 2. Courses	N/A	**Concentration 2.** **Military Engineering Approved Elective courses (Requires approval of the Graduate Coordinator)**	**18 (thesis) or 21 (non-thesis)**
Total Hours	30	Total Hours	30

3. JUSTIFICATION AND STUDENT LEARNING OUTCOMES

MSU currently seeks to enhance its international reputation by building a number of relationships with international universities. Many degree programs at these universities are more thematic in nature (e.g., Transportation, Robotics, and Energy) than discipline specific (e.g., Civil Engineering, Electrical Engineering, Industrial Engineering) as is the current structure within the Bagley College of Engineering (BCoE). As such, many of these students are required to complete courses across various disciplines to complete their degree. As MSU and the BCoE, specifically, continue to establish dual degree graduate programs, the need for a flexible Master's program that facilitates degree completion across international borders becomes more critical. While this program remains targeted at the distance level towards practicing engineers looking to enhance job advancement opportunities, the on-campus program's primary target will be support of these international collaborations.

Additionally, MSUs strong working relationship with the Engineering Research and Development Center (ERDC) in Vicksburg, MS has led to the identification of the need to develop curricula in Military Engineering. There are no degree granting programs within the US that focus on the issues surrounding military installations and projects (social, economic, structural, etc.). A few certificate programs are available, and degree programs are available internationally; however, the creation of this concentration will provide the only formal graduate degree focused on this unique topical area. It is anticipated that employees at other military research centers in the US would be interested in completing this degree resulting in an increase in graduate enrollment for the Bagley College of Engineering.

The learning outcomes will remain identical prior to expansion to non-distance students: to allow students a flexible program to advance current or planned employment plans/directions.

Since the program's inception in 2007, over 50 students have graduated from the distance program, with approximately over 30 students currently in progress. These students have varied engineering backgrounds with mostly engineering jobs. Educational prerequisites are described in the outline but are designed to ensure a general engineering education background.

This is the only Master of Engineering program in the state and one of the few in this region, and as stated above the Military Engineering concentration will be the only degree granting program of its kind in the US. This program will continue to meet the needs of these students and their employers who are seeking state-of-the-art knowledge in the field of engineering. It is expected that this program will help to improve diversity, certainly from an age group level, but also from a cultural, regional, and ethnic level as this type of program is highly sought after across the US and supports graduate program structures internationally.

APPENDIX A: Proposed Military Engineering Specific Courses
(for illustrative purposes only-not to be included in the graduate catalogue)

Engineering

CE 6513	Engineering Hydrology
CE 6523	Open Channel Hydraulics
CE 6533	Comp Methods in Water Resources Eng
CE 6923	Structural Dynamics
CE 8303	Materials Characterization
CE 8433	Advanced Foundation
CE 8443	Soil Behavior
CE 8503	Data Analysis for CEE
CE 8673	Blast Effects & Structural Response
CE 8683	Finite Elem Analy in Struc Engineering
CE 8933	Surface Water Quality Modeling II
CSE 6253	Secure Software Engineering
CSE 6273	**Intro to Computer Forensics**
CSE 6363	**Software Reverse Engineering**
CSE 6383	**Crypto & Network Secur**
CSE 6503	**Database Management Systems**
CSE 6633	**Artificial Intell**
CSE 6643	AI Robotics
CSE 6653	**Cognitive Science**
CSE 6753	**Computation Fundamentals**
CSE 6763	Cyber Law
CSE 8153	**Advanced Data Comm**
CSE 8673	**Machine Learning**
CSE 8713	Advanced Cyber Operations
CSE 8723	Cyber Law and Policy
CSE 8743	Advanced Network Security
EM 6123	Intro to Finite Elem Method
EM 6213	Advanced Mech of Materials
IE 6333	Production Control I
IE 6513	Engineer Administration
IE 6533	Project Management
IE 6543	Logistics Engineering
IE 6573	Process Improve Engineer
IE 6613	Eng Statistics I
IE 6753	Systems Eng and Analysis
IE 6773	Systems Simulation I
IE 8583	Enterprise Sys Engineering
ME 6123	Failure of Eng Materials
ME 8253	Fatigue in Engineering Design
XX 6990/8990	Special Topics (requires prior approval before enrolling)
XX 7000	Directed Individual Study (content must be approved prior to enrolling)

Non-Engineering Campus Five Approval

AEC 6353	Intro to Regional Econ Develop
BL 8113	Law Ethics Dispute Resolution
CO 6213	Political Communication
EC 6323	International Economics
GR 6303	Principles of GIS
MGT 8813	Organizational Behavior
PPA 8703	Govt Org & Admin Theory

Non-Engineering/Non-Campus Five Approval

AELC 6503	International Ag Ed
AELC 8413	Methods of Planned Change AEE
CO 6273	Intercultural Communication
GR 6123	Urban Geog
HI 6493	Terrorism in America
HI 8893	History of ISIS
MGT 8823	Org Development
PPA 8103	Sem. In Public Admin
PPA 8133	City and County Mgt.
PPA 8193	Sem. In Intergov Relations
PPA 8703	Gov Org and Admin Theory
PPA 8713	Public Personnel Mgt.
PPA 8723	Public Budgeting and Financial Mgt.
PPA 8733	Public Program Eval.
PPA 8743	Admin Law
PPA 8903	Public Policy (same as PS 8903)
PS 6363	Int. Peacekeep and Post-Conflict Nat
PS 6383	Natl. Security Ploicy
SO 6113	Soc Org & Change
SO 6123	Poverty Analysis
SO 6173	Environment-Society

Bold indicates that the course is not currently approved for distance education.

MISSISSIPPI STATE UNIVERSITY
JAMES WORTH BAGLEY COLLEGE OF ENGINEERING

OFFICE OF THE
DEAN OF ENGINEERING

Dr. Kari Babski-Reeves, CPE
Professor
kari@bagley.msstate.edu

March 6, 2018

RE: Master of Engineering Degree Modification

Dean Curriculum Committee Members

The graduate committee for the Master's of Engineering supports the modification to the Master of Engineering degree. The proposed change to the Master of Engineering to include the following:

1. Campus 1 Offering
2. Two concentrations: Engineering and Military Engineering

Below, the committee members have indicated their support of the proposal.

Kindest Regards,

Kari Babski-Reeves
Associate Dean for Research and Graduate Studies
Chair, MEng graduate Committee
IRB Chair

3/20/2018

Farshid Vahedifard, Civil and Environmental Engineering

Edward Luke
Digitally signed by Edward Luke
DN: cn=Edward Luke, o=CSE, ou=Computer Science and Engineering, email=luke@cse.msstate.edu, c=US
Date: 2018.03.20 08:19:50 -06'00'

Ed Luke, Computer Science Engineering

03/19/18

Linkan Bian, Industrial and Systems Engineering

Tamra Swann, Dean of Engineering

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DEAN OF ENGINEERING

Dr. Kari Babski-Reeves, CPE
Professor
kari@bagley.msstate.edu

March 6, 2018

RE: Master of Engineering Degree Modification

Dean Curriculum Committee Members

The Dean's office presented the proposed change to the Master of Engineering to include the following:

1. Campus 1 Offering
2. Two concentrations: Engineering and Military Engineering

Below, the Bagley College of Engineering Department Heads/Directors have indicated their support or non-support of the proposal.

Kindest Regards

Kari Babski-Reeves

Kari Babski-Reeves
Associate Dean for Research and Graduate Studies
IRB Chair

Davy Belk, Aerospace Engineering	For ✓	Against
Jonathan Pote, Agricultural and Biological Engineering	For ✓	Against
Bill Elmore, Chemical Engineering	For ✓	Against
Dennis Truax, Civil and Environmental Engineering	For X	Against
Donna Reese, Computer Science Engineering — Sarah B Lee for Ed Swan	For X	Against
Nicolas H. Younan — Ed Swan	For ✓	Against
Nick Younan, Electrical and Computer Engineering		

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Dr. Karl Babski-Reeves, CPE
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John Usher, Industrial and Systems Engineering — For / Against

Pedro Mago, Mechanical Engineering — For / Against