



MISSISSIPPI STATE
UNIVERSITY™

*UNIVERSITY COMMITTEE ON
COURSES AND CURRICULA*

A MEMORANDUM

DATE: February 10, 2016
TO: UCCC Members
FROM: Kirk Swortzel, Chair
SUBJECT: February 19, 2016 Meeting

Enclosed are the minutes from the meeting on January 22, 2016 and the agenda and proposals for the meeting on **Friday, February 19, 2016 beginning at 1:30 p.m.** The February meeting will be held in Room 324 of the Student Union. Please contact the UCCC office if you are unable to attend.

Thank you.

Enclosures: January 22, 2016 Meeting Minutes
Course/Curriculum Proposals

AGENDA
UNIVERSITY COMMITTEE ON COURSES AND CURRICULA
February 19, 2016

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

AGRICULTURE AND LIFE SCIENCES

Modification	AIS 4503	International Agricultural Education
Modification	AIS 6503	International Agricultural Education
Modification +Maymester	HS 4832	Child Life Clinical
Modification	PO 4334	Broiler Production
Modification	PO 6334	Broiler Production

ARTS AND SCIENCES

Addition	AN 2103	Nutritional Anthropology
+Distance +Gen. Ed.	FLG 1113	German I
+Distance	HI 4133 /6133	Civil War and Reconstruction 1850 to 1877
Addition	GR 4883 /6883	Radar Meteorology

EDUCATION

Modification	EPY 8493	Self-Emotional and Behavioral Assessment
Modification	PE 4853	Motor Learning and Skill Analysis

ENGINEERING

Addition +Distance	IE 8763	Stochastic Programming
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4. Degree proposals by college/school

EDUCATION

Name Change	Ph.D.	Elementary, Middle, and Secondary Education to Educational Leadership
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ENGINEERING

Modification	MS	Mechanical Engineering (Campus 1 & 5)
Modification	Ph.D.	Mechanical Engineering (Campus 1 & 5)

University Committee on Courses and Curricula
Mississippi State University
January 22, 2016

Present: Amy Adkerson, Shrinidhi Ambinakudige, Russell Carr, Mike Cox, Dana Franz, Robert Frey, Robert Harland, Kevin Hunt, Skip Jack, Brenda Kirkland, Sundar Krishnan, Rob Moore, Alayna Naro, Bob Otondo, Emily Owen, Tommy Parker, Andy Perkins, Lynn Reinschmiedt, John Riggins, John Rigsby, Pam Sullivan, Kirk Swortzel, Jenny Turner, Arnelle Woods, Chien Yu

Excused: Tracey Baham, Amy Crumpton, Christina Hillesheim, Trey Howell, Qingmin Meng, Lynda Moore, Kelly Moser, Barry Stewart, Robert Wolverton

Proxy: Bob Wolverton for Pat Matthes

Absent: Tom White

Guests: Kenneth Anthony, Kathryn Barbier, Tammy Coleman, Sally Gray, James Henderson, Galyna Melnychuk, Bonnie O'Neill, Rebecca Robichaux-Davis, Kevin Rogers, James Warnock, John Willis,

Swortzel called the meeting to order at 1:30 p.m. on Friday, January 22, 2016 in Room 324 of the Student Union. The election for the 2016-2017 UCCC Chair was conducted by ballots, and Lacrisha Nail from the Provost Office was present and will count the ballots. Swortzel reminded the Committee that he did not seek re-election based upon the reasons he outlined in an email distributed to UCCC members. Swortzel will also be stepping down from the UCCC at the end of the academic year, and his resignation will leave an unexpired term (one year) for the College of Agriculture and Life Sciences.

Franz moved to approve the minutes the December 15, 2015 minutes. Harland seconded the motion. The December 15, 2015 minutes were approved unanimously.

Cox moved to approve addition of ADS 4772/6772 Equine Training and Clinic Development. Hunt seconded the motion. Committee members questioned whether prerequisites are needed at this course level; if legal counsel has reviewed the waiver form; whether the initiators intended for this to be a 2 or 3 hour course due to remarks in the undergraduate letter of support; if requiring students to have their own equipment will limit the number of students in the class; and why a letter of support from the graduate committee was not attached. Franz moved to pass ADS 4772/6772 contingent upon the above concerns being addressed. Rigsby seconded the motion. The motion to pass the addition of ADS 4772/6772 contingent was approved unanimously.

Carr moved to approve the addition of EN 4893/6893 American Literature to 1800. Yu seconded the motion. The motion to approve the addition of EN 4893/6893 was approved unanimously.

Harland moved to approve the addition of distance learning to FLG 1123 German II. Otondo seconded the motion. The motion to approve the addition of distance learning to FLG 1123 was approved unanimously.

Otondo moved to approve the modification and addition of distance learning to HI 4263/6263 America's Vietnam War. Franz seconded the motion. Committee members pointed out the title of the course and the proposed 30 character abbreviation had inconsistent spellings of a word in the title. Committee members were concerned this would be confusing. Carr moved to pass HI 4263/6263 contingent upon the above concern being addressed. The motion to pass the modification and addition of distance learning to HI 4263/6263 contingent was approved unanimously.

Rigsby moved to approve the modification of the Bachelor of Accountancy/Writing Requirement. Carr seconded the motion. Committee members questioned why there were not letters of support from the English Department and the Leadership and Foundations Department since the modifications affected those departments. Franz moved to pass the modification of the Bachelor of Accountancy/Writing Requirement contingent upon the above concerns being address. Yu seconded the motion. The motion to pass the modification of the Bachelor of Accountancy/Writing Requirement contingent was approved unanimously.

Rigsby moved to approve the modification of the Bachelor of Accountancy/Meridian and the modification of the Bachelor of Business Administration/Meridian. Otondo seconded the motion. Dr. Kevin Rogers appeared in support of the proposals. Committee members pointed out that since the Bachelor of Accountancy/Writing Requirement proposal was passed contingent and that writing requirement was included in the modification Bachelor of Accountancy/Meridian proposal, the Bachelor of Accountancy/Meridian should be passed contingent until the Bachelor of Accountancy/Writing Requirement clears its contingency. Franz moved to pass the Bachelor of Accountancy/Meridian contingent until the Bachelor of Accountancy/Writing Requirement is cleared. Cox seconded the motion. The motion to pass the Bachelor of Accountancy contingent was approved unanimously. The Committee then voted unanimously to approve the modification of the BBA/Meridian.

Franz moved to approve the modification of the Master of Science in Elementary Education: General Elementary Education, Early Childhood, Middle Level Education; the modification and addition of distance education for EDE 8313 Theory and Development of Early Childhood Education and EDE 8713 Educating Young Adolescents; and the addition of distance education for EDE 8473 The Elementary Social Studies Curriculum, EDE 8623 Content Area Literacy Instruction, EDE 8633 The Teaching of Writing, RDG 8713 Teaching Struggling Readers and Writers. Yu seconded the motion. Committee members noted there Title IX statements were not included on the syllabi for EDE 8473, EDE 8633, and RDG 8713. Otondo moved to pass the

modification of the Master of Science in Elementary Education: General Elementary Education, Early Childhood, Middle Level Education; the modifications and addition of distance education for EDE 8313 and EDE 8713; and the addition of distance education for EDE 8473, EDE 8623, EDE 8633 and RDG 8713 based upon the concern outline above. Rigsby seconded the motion. The motion to pass contingent was approved unanimously.

Franz moved to approve the modification of EPY 8763 Advanced Applied Behavior Analysis. Yu seconded the motion. Committee members were concerned the syllabus and the proposal did not match. Kirkland moved to pass the modification of EPY 8763 contingent upon the above concern being addressed. Rigsby seconded the motion. The motion to pass EPY 8763 contingent was approved unanimously.

Perkins moved to approve the deletion of ME 3533 Thermodynamics. Rigsby seconded the motion. The motion to approve the deletion of ME 3533 Thermodynamics was approved unanimously.

Perkins moved to approve the modification of ME 4111 Professional Development Seminar. Yu seconded the motion. The motion to approve the modification of ME 4111 Professional Development Seminar was approved unanimously.

Perkins moved to approve the addition of a minor in Global Engineering Leadership and the addition of GE 3813 Challenges in Global Engineering. Rigsby seconded the motion. The motion to approve the addition of a minor in Global Engineering Leadership and the addition of GE 3813 Challenges in Global Engineering was approved unanimously.

Perkins moved to approve the modification of the Bachelor of Science in Aerospace Engineering. Otondo seconded the motion. The motion to approve the modification of the Bachelor of Science in Aerospace Engineering was approved unanimously.

Perkins moved to approve the modification of the Bachelor of Science in Mechanical Engineering. Krishnan seconded the motion. The motion to approve the modification of the Bachelor of Science in Mechanical Engineering was approved unanimously.

Hunt moved to approve the modification of NREC 3213 Environmental Measurements. Ambinakudige seconded the motion. The motion to approve the modification of NREC 3213 was approved unanimously.

Hunt moved to approve the addition of and distance education designation for FO 8673 Planning and Evaluation in Natural Resources Outreach Education. Franz seconded the motion. Committee members discussed whether this class overlapped with classes in the School of Human Sciences. The motion to approve the addition of and distance education designation for FO 8673 was approved unanimously.

Hunt moved to approved the addition of and distance education designation for FO 4663/6663 Consulting Forestry. Kirkland seconded the motion. Committee members felt the justification statement for the distance delivery needed to be stronger. Rigsby moved to approve the addition of and distance education designation for FO 4663/6663 contingent upon the above concern being addressed. Otondo seconded the motion. The motion to pass FO 4663/6663 contingent was approved unanimously.

Hunt moved to approve the addition of and distance education designation for FO 4683/6683 Introduction to Urban and Community Forestry. Ambinakudige seconded the motion. Committee members noticed the wrong person is listed as the contact for distance education. Franz moved to pass FO 4683/6683 contingent upon the above concern being addressed. Rigsby seconded the motion. The motion to pass FO 4683/6683 contingent was approved unanimously.

Hunt moved to approve the addition of and distance education designation for FO 4573/6573 Ecology of Managed Forests. Ambinakudige seconded the motion. Committee members were concerned the justification for distance education is weak, there is no contact for distance learning, and the prerequisites are not consistent. Rigsby moved to approve the addition of and distance education designation for FO 4573/6573 contingent upon the above concerns being addressed. Otondo seconded the motion. The motion to pass FO 4573/6573 contingent was approved unanimously.

Hunt moved to approve the addition of and distance education designation of FO 8571 Emerging Issues in Forest Ecosystems. Harland seconded the motion. Committee members were concerned the Campus 5 course syllabus is missing, the justification for distance learning is weak, the contact for distance learning needs to be updated, and the catalog description still references a special topic proposal. Rigsby moved to pass FO 8571 contingent upon the above concerns being addressed. Cox seconded the motion. The motion to pass FO 8571 contingent was approved unanimously.

Hunt moved to adjourn. Rigsby seconded the motion. The motion to adjourn was approved unanimously.

The meeting was adjourned at 3:35 p.m.

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: Education **Department:** Educational Leadership

Contact Person: Angela Farmer **Mail Stop:** 9698 **E-mail:** asfarmer@colled.msstate.edu

Nature of Change: Name Change **Date Initiated:** 9/11/15 **Effective Date:** upon approval

Degree to be offered at: Mississippi State University, Starkville Campus


Current Degree Program Name: Ph.D. in Elementary, Middle, and Secondary Education

Major: **Concentration:**

New Degree Program Name: Ph.D. in Educational Leadership

Major: **Concentration:**

Summary of Proposed Changes: Name change only.

Approved: 

Department Head



Chair, College or School Curriculum Committee



Dean of College or School

Chair, University Committee on Courses and Curricula

Chair, Graduate Council (if applicable)

Chair, Deans Council

Date: 1/21/16

1/29/16

215 116

IHL Action Required

SACS Letter Sent

CURRENT TITLE AND DESCRIPTION:

Ph.D. in Elementary, Middle, and Secondary Education

The area is concerned with extending our knowledge of education and applying this knowledge to the development and operation of effective educational endeavors. It requires knowledge of research, education, management, operations, and leadership.

PROPOSED TITLE AND DESCRIPTION:

Ph.D. in Educational Leadership

The program is designed for experienced professional educators interested in leading and managing schools, school districts, higher education institutions, foundations, and state departments of education. Program candidates learn state-of-the-art executive skills, applied theory, ethical decision making and problem solving, organizational structure and function, system analysis, strategic planning, curriculum assessment and improvement, human resource management, educational law, educational finance, facility design, and public relations.

JUSTIFICATION:

The home department, Educational Leadership, formally changed its name in 2015. As part of the ongoing transition to the new name and focus, it was determined by the faculty that the academic programming at the graduate level should be updated and renamed appropriately.

RELATION TO EXISTING CURRICULA:

There is only one other similarly named degree in IHL.

PROPOSED 4-LETTER ABBREVIATION:

EDL (3 letter) / EDLD (if 4 letter is needed)

EFFECTIVE DATE:

Spring 2016



MISSISSIPPI STATE
UNIVERSITY™

COLLEGE OF EDUCATION
Department of Educational Leadership
P.O. Box 6037
245 Allen Hall
175 President's Circle
Mississippi State, MS 39762
P. 662.325.0969
F. 662.325.0975
educ.msstate.edu

January 7, 2016

The department of Educational Leadership, listed below, support the change in program name for the following: Doctor of Philosophy in Elementary, Middle, and Secondary Education Administration to the following: Doctor of Philosophy in Educational Leadership

Dr. James E. Davis, Department Head

Dr. Jack Blendinger

Dr. Linda Coats

Dr. Angela Farmer

Dr. Leigh Ann Hailey

Dr. Stephanie King

Dr. Danielle Molina

Dr. Dan Stumpf

James E. Davis
Jack Blendinger
Linda Coats
Angela Farmer
Leigh Ann Hailey
Stephanie King
Danielle Molina
Dan Stumpf

**Appendix 9a: Modifications to Existing Degree Program Proposal
(Renaming)**

Institution:			
Date of Implementation:	Present Six Digit CIP Code(s):	New Six Digit CIP Code:	
1/1/2016	13.0408	13.0401	
Present Program Title(s) as Appear(s) on Academic Program Inventory, Diploma, and Transcript: Elementary, Middle, and Secondary Education Administration		New Program Title as will Appear on Academic Program Inventory, Diploma, and Transcript: Educational Leadership	
Degree(s) to be Awarded:		Credit Hour Requirements:	
Doctor of Philosophy		79 hours	
List any institutions within the state offering similar programs:			
University of Mississippi			
Responsible Academic Unit(s):		Institutional Contact:	
College of Education		Dr. James E. Davis	
Number of Students Enrolled in Last Six Years:		Number of Graduates Expected in Next Six Years:	
Year One	10	Year One	10
Year Two	10	Year Two	10
Year Three	10	Year Three	10
Year Four	10	Year Four	10
Year Five	10	Year Five	10
Year Six	10	Year Six	10
Total	60	Total	60
Program Summary:			
<p>The program for the Doctor of Philosophy (Ph.D.) degree in Educational Leadership is designed for experienced professional educators interested in leading and managing schools, school districts, higher education institutions, foundations, and state departments of education. Program candidates learn state-of-the-art executive skills, applied theory, ethical decision making and problem solving, organizational structure and function, system analysis, strategic planning, curriculum assessment and improvement, human resource management, educational law, educational finance, facility design, and public relations.</p>			
_____		_____	
Institutional Executive Officer Signature		Date	

Institution:

1. Describe how the proposed modification fits within the mission of the institution.

This degree promotes the education and training of students at the doctoral level. This modification is a name change of an existing degree program which currently educates and trains educational professionals in this particular field of study at MSU.

2. Is this modification unnecessarily duplicative of other programs within the System?

No, there is only one other program resembling the current program proposed.

3. Describe the anticipated institutional impact including any research efforts associated with this program.

This proposed name change associated with this existing program will better serve and connect with students who wish to study, learn about, and ultimately work in educational leadership.

4. Are there any anticipated budget savings associated with the proposed modification?

None

5. Are there any changes to the educational objectives of the degree program associated with the proposed modification?

None

6. Are there any changes to the curriculum of the degree program associated with the proposed modification?

No

7. Describe how the proposed modification will affect program faculty.

There will be no change.

8. Describe the evaluation process which led to the request for the proposed modification.

The home department, Educational Leadership (formerly known as Leadership and Foundations) formally changed its name in 2015. As part of the ongoing transition to the new name and focus, it was determined by the faculty that the academic programming at the graduate level should be updated and renamed appropriately.

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: Bagley College of Engineering Department: Mechanical Engineering

Contact Person: Keith Walters Mail Stop: 9552 E-mail: waiters@me.msstate.edu

Nature of Change: Graduate Degree Modification Date Initiated: 10/2015 Effective Date: 1/2016

Degree to be offered at: Campus 1, Campus 5

Current Degree Program Name: Master of Science

Major: Mechanical Engineering Concentration:

New Degree Program Name:

Major: Concentration:

Summary of Proposed Changes:

This modification will formalize course hour requirements, including limiting Directed Individual Study hours and including a requirement of one semester of Graduate Seminar (ME 8011). It also clarifies aspects of program policy such as the appeals process for academic dismissal.

Approved:

Department Head

Date:

10/20/15

Chair, College or School Curriculum Committee

1/5/15

Dean of College or School

1/5/15

Chair, University Committee on Courses and Curricula

Chair, Graduate Council (if applicable)

Chair, Deans Council

IHL Action Required

SACS Letter Sent



**MISSISSIPPI STATE
UNIVERSITY**

Mechanical Engineering

October 20, 2015

To Whom It May Concern,

The Graduate Committee of the Department of Mechanical Engineering have carefully reviewed the attached degree modification proposal, and fully endorse the recommended changes. These changes serve to update the policies on program requirements and administration to be in agreement with current practice in the department, and to clarify the requirements for the benefit of students and faculty. A one semester requirement to take the one-hour Graduate Seminar (ME 8011) course has been added. Students have historically taken this course so it is appropriate to make it a formal requirement in the program description.

We recommend approval of this degree modification.

Sincerely,

D. Keith Walters, Chair

Heejin Cho

Steven Daniewicz

Haitam El Kadiri

Mark Horstemeyer

Kalyan Srinivasan

Tonya Stone



JAMES WORTH
BAGLEY
COLLEGE OF ENGINEERING
MISSISSIPPI STATE UNIVERSITY

DEGREE MODIFICATION PROPOSAL

1. CATALOG DESCRIPTION

See below.

2. CURRICULUM OUTLINE

CURRENT Degree Description	PROPOSED Degree Description
<p>Degree: Master of Science Major: Mechanical Engineering</p>	<p>Degree: Master of Science Major: Mechanical Engineering</p>
<p>The Mechanical Engineering <i>faculty</i> offers graduate study leading to the degrees of Master of Science and Doctor of Philosophy. The major areas of study are fluid mechanics, solid mechanics, thermal sciences, materials and manufacturing, mechanical design, and system dynamics. Specific programs of graduate study are established by consultation between students and their advisors. Graduate assistantships and fellowships are available in the department. For further information contact: Graduate Coordinator, Mechanical Engineering Department, <i>PO Drawer ME</i>, Mississippi State, MS 39762.</p>	<p>The Mechanical Engineering program offers graduate study leading to the degrees of Master of Science and Doctor of Philosophy in Engineering with a Mechanical Engineering concentration. The major areas of study are fluid mechanics solid mechanics thermal sciences, materials and manufacturing, mechanical design, and system dynamics. Specific programs of graduate study are established by consultation between students and their advisors. Graduate assistantships and fellowships are available in the department. For further information contact: Graduate Coordinator, Mechanical Engineering Department, Box 9552, Mississippi State, MS 39762.</p>
<p>Admission Criteria—An entering graduate student with a bachelor's degree from a program that is not accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (EAC/ABET) must submit GRE general-test scores. <i>Only applications with a Verbal plus Quantitative GRE score above 1100 will be considered. An international student must have a minimum TOEFL score of 550 (213 computer-based test).</i></p>	<p>Admission Criteria—A minimum GPA of 2.75 is required for admission. An entering graduate student with a bachelor's degree from a program that is not accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (EAC/ABET) must submit GRE general-test scores. An international student must have a minimum TOEFL score of 550 PBT (213 CBT or 79 iBT) or IELTS score of 6.5.</p>
<p>Program of Study/Completion Requirements—Both thesis and non-thesis M.S. options are available. For the thesis option, 24 hours of course work, with at least one-half at the 8000 level or above, are required along with six hours credit for the thesis and a final oral exam. For the non-thesis option, 33 hours are required along with an oral presentation and final exam; at least 15 hours must be at the 8000 level or above.</p>	<p>Provisional Admission—A provisional student must receive a 3.00 GPA on the first 9 hours of graduate level courses on his or her program of study taken at Mississippi State University (courses with an S grade, transfer credits, or credits earned while in Unclassified status cannot be used to satisfy this requirement) in order to achieve regular status. If a 3.00 is not attained, the provisional student shall be dismissed from graduate study. While in the provisional status, a student is not eligible to hold a graduate assistantship.</p>
<p>For the Ph.D., specific course requirements are determined by the student's major professor and graduate committee. A written and oral qualifying examination is required <i>during the first semester of course work</i>. An oral preliminary examination is required <i>upon completion of course work and determination of dissertation topic</i>. A final oral dissertation defense is required.</p>	<p>Academic Performance—For students enrolled in either the M.S. or Ph.D. program, all issues related to academic probation, dismissal and appeal will be governed by university policy, as outlined by the Office of the Graduate School.</p>
<p>Provisional Admission—A provisional student must receive a 3.00 GPA on the first nine hours of graduate level courses on his or her program of study taken at</p>	<p>Program of Study/Completion Requirements (M.S.)—Both thesis and non-thesis M.S. options are available. For the thesis option, at least 25 hours of course work (includes 1 hour ME 8111 Seminar—S grade), including 12 hours at the 8000 level or above, are required along</p>

Mississippi State University (*transfer and unclassified graduate hours will not apply*) in order to achieve regular status. If a 3.00 is not attained, the provisional student may be dismissed from graduate study. While in the provisional status, a student is not eligible to hold a graduate assistantship.

Academic Performance—Unacceptable academic performance includes: failure to maintain an overall GPA of at least 3.00, a single grade of U, D, or F in any course, more than two grades below a B in any semester, more than two grades below a B in courses taken for graduate credit or unsatisfactory research progress as determined by the student's major advisor. Any one of these is grounds for academic dismissal.

The academic dismissal process is

- (a) deficiency recognition by student's major advisor or the graduate program coordinator;
- (b) case consideration and findings by the faculty;
- (c) concurrence by the department head, and
- (d) recommendation of dismissal to the Dean of Engineering.

with six or more hours research credit and a final oral exam. For the non-thesis option, 31 hours (includes 1 hour ME 8111 Seminar—S grade) are required along with an oral presentation and final exam; at least 15 hours must be at the 8000 level or above. No more than 6 hours of Directed Individual Study may be counted toward the course work requirement. Directed Individual Study courses are considered to be at the 8000 level for the purposes of the program of study. In addition to the above, M.S. students must also complete one semester of graduate seminar (ME 8011). Each M.S. student will have a graduate committee, including the advisor and at least two other faculty members (at least one must be from Mississippi State University). The student's program of study, including all coursework, must be approved by the committee and the graduate coordinator.

Program of Study/Completion Requirements (Ph.D.)—Each Ph.D. student will have a graduate committee, including the advisor (major professor) and at least three other faculty members (at least two must be from Mississippi State University). Specific course requirements are determined by the student's major professor and graduate committee. At least 44 total hours of graduate course work above the baccalaureate degree are required, including hours earned at Mississippi State University or another institution as approved by the graduate committee. Students who received their M.S. degree at an institution other than Mississippi State may count up to 24 hours toward the total of 44 hours. No more than 6 hours of Directed Individual Study may be counted toward the total course work requirement of 44 hours. Three hours of course work must satisfy a mathematics requirement. In addition, Ph.D. students must complete two semesters of graduate seminar, and 20 or more hours of research credit. A written qualifying examination is required within 24 months of beginning the Ph.D. program. An oral preliminary comprehensive examination is required at least six months prior to graduation, and after determination of dissertation topic. A final oral dissertation defense is required. The student's program of study, including all coursework, must be approved by the committee and the graduate coordinator.

CURRENT CURRICULUM OUTLINE	Required Hours	PROPOSED CURRICULUM OUTLINE	Required Hours
Master of Science (Thesis option)		Master of Science (Thesis option)	
XX 8XXX	12	ME 8011	1
Other graduate coursework	12	XX 8XXX OR ME 7000 (6 hours maximum)	12
Research credits	6	Other graduate coursework	12

Master of Science (Non-thesis option) XX 8XXX	15	Research credits	6
Other graduate coursework	18	Master of Science (Non-thesis option) ME 8011	1
		XX 8XXX OR ME 7000 (6 hours maximum)	15
		Other graduate coursework	15
Total Hours		Total Hours	
M.S. Thesis	30	M.S. Thesis	31
M.S. Non-thesis	33	M.S. Non-thesis	31

3. JUSTIFICATION AND STUDENT LEARNING OUTCOMES

This degree modification proposal intends to formalize graduate curriculum requirements which have been adopted by the Mechanical Engineering faculty, and to standardize the curriculum for all students at the M.S. level. In particular, the proposal addresses several issues with the current curriculum description. It explicitly defines the requirement for the one-hour graduate seminar course, which is to be taken for one semester by all M.S. students. It clarifies the limitation on Directed Individual Study courses, which may comprise only six hours of the total coursework for M.S. These changes will be beneficial to ME graduate students because they will more clearly define the policies, procedures, and program requirements for the M.S. degree.

Learning outcomes for the M.S. program are not expected to be significantly affected by the proposed changes. As discussed above, the chief advantage will be more uniformity across programs of study for different students, in agreement with degree program objectives, and increased clarity regarding the requirements and expectations of the program.

APPROVAL FORM FOR

DEGREE PROGRAMS

MISSISSIPPI STATE UNIVERSITY

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College: Bagley College of Engineering Department: Mechanical Engineering

Contact Person: Keith Walters Mail Stop: 9552 E-mail: waiters@me.msstate.edu

Nature of Change: Graduate Degree Modification Date Initiated: 10/2015 Effective Date: 1/2016

Degree to be offered at: Campus 1, Campus 5

Current Degree Program Name: Doctor of Philosophy

Major: Engineering Concentration: Mechanical Engineering

New Degree Program Name:

Major: Concentration:

Summary of Proposed Changes:

This modification will formalize course hour requirements, including limiting Directed Individual Study hours and including a requirement of two semesters of Graduate Seminar (ME 8011). It also clarifies aspects of program policy such as the appeals process for academic dismissal. A course hour requirement has been added to replace the existing course hour recommendation, and a mathematics course requirement has been added.

Approved: [Signature]
Department Head

Date: 10/20/15

[Signature]
Chair, College or School Curriculum Committee

1/5/15

[Signature]
Dean of College or School

1/8/15

Chair, University Committee on Courses and Curricula

Chair, Graduate Council (if applicable)

Chair, Deans Council

IHL Action Required

SACS Letter Sent



MISSISSIPPI STATE UNIVERSITY

Mechanical Engineering

October 20, 2015

To Whom It May Concern,

The Graduate Committee of the Department of Mechanical Engineering have carefully reviewed the attached degree modification proposal, and fully endorse the recommended changes. These changes serve to update the policies on program requirements and administration to be in agreement with current practice in the department, and to clarify the requirements for the benefit of students and faculty. In addition to addressing several minor policy guidelines, the proposed modification will initiate a course hour requirement for the Ph.D. program. Previously there has only been a recommended number of course hours for the Ph.D., which has often led to confusion among students, faculty members, and other units on campus. The modification also introduces a mathematics requirement for the Ph.D. program. This requirement was unanimously approved by the ME faculty, and will ensure that all Ph.D. graduates are well prepared to do rigorous research work.

We recommend approval of this degree modification.

Sincerely,

D. Keith Walters, Chair

Heejin Cho

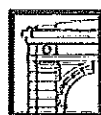
Steven Daniewicz

Haitham El Kadiri

Mark Horstemoeyer

Kalyan Srinivasan

Tonya Stone



COLLEGE OF ENGINEERING
MISSISSIPPI STATE UNIVERSITY

DEGREE MODIFICATION PROPOSAL

1. CATALOG DESCRIPTION

See below.

2. CURRICULUM OUTLINE

CURRENT Degree Description	PROPOSED Degree Description
<p>Degree: Doctor of Philosophy Major: Engineering Concentration: Mechanical Engineering</p>	<p>Degree: Doctor of Philosophy Major: Engineering Concentration: Mechanical Engineering</p>
<p>The Mechanical Engineering <i>faculty</i> offers graduate study leading to the degrees of Master of Science and Doctor of Philosophy. The major areas of study are fluid mechanics, solid mechanics, thermal sciences, materials and manufacturing, mechanical design, and system dynamics. Specific programs of graduate study are established by consultation between students and their advisors. Graduate assistantships and fellowships are available in the department. For further information contact: Graduate Coordinator, Mechanical Engineering Department, <i>PO Drawer ME</i>, Mississippi State, MS 39762.</p>	<p>The Mechanical Engineering program offers graduate study leading to the degrees of Master of Science and Doctor of Philosophy in Engineering with a Mechanical Engineering concentration. The major areas of study are fluid mechanics solid mechanics thermal sciences, materials and manufacturing, mechanical design, and system dynamics. Specific programs of graduate study are established by consultation between students and their advisors. Graduate assistantships and fellowships are available in the department. For further information contact: Graduate Coordinator, Mechanical Engineering Department, Box 9552, Mississippi State, MS 39762.</p>
<p>Admission Criteria—An entering graduate student with a bachelor's degree from a program that is not accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (EAC/ABET) must submit GRE general-test scores. <i>Only applications with a Verbal plus Quantitative GRE score above 1100 will be considered. An international student must have a minimum TOEFL score of 550 (213 computer-based test).</i></p>	<p>Admission Criteria—A minimum GPA of 2.75 is required for admission. An entering graduate student with a bachelor's degree from a program that is not accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (EAC/ABET) must submit GRE general-test scores. An international student must have a minimum TOEFL score of 550 PBT (213 CBT or 79 iBT) or IELTS score of 6.5.</p>
<p>Program of Study/Completion Requirements—Both thesis and non-thesis M.S. options are available. For the thesis option, 24 hours of course work, with at least one-half at the 8000 level or above, are required along with six hours credit for the thesis and a final oral exam. For the non-thesis option, 33 hours are required along with an oral presentation and final exam; at least 15 hours must be at the 8000 level or above.</p>	<p>Provisional Admission—A provisional student must receive a 3.00 GPA on the first 9 hours of graduate level courses on his or her program of study taken at Mississippi State University (courses with an S grade, transfer credits, or credits earned while in Unclassified status cannot be used to satisfy this requirement) in order to achieve regular status. If a 3.00 is not attained, the provisional student shall be dismissed from graduate study. While in the provisional status, a student is not eligible to hold a graduate assistantship.</p>
<p>For the Ph.D., specific course requirements are determined by the student's major professor and graduate committee. A written and oral qualifying examination is required <i>during the first semester of course work</i>. An oral preliminary examination is required <i>upon completion of course work and determination of dissertation topic</i>. A final oral dissertation defense is required.</p>	<p>Academic Performance—For students enrolled in either the M.S. or Ph.D. program, all issues related to academic probation, dismissal and appeal will be governed by university policy, as outlined by the Office of the Graduate School.</p>
<p>Provisional Admission—A provisional student must receive a 3.00 GPA on the first nine hours of graduate</p>	<p>Program of Study/Completion Requirements (M.S.)—Both thesis and non-thesis M.S. options are available. For the thesis option, at least 25 hours of course work (includes 1 hour ME 8111 Seminar—S grade), including</p>

level courses on his or her program of study taken at Mississippi State University (*transfer and unclassified graduate hours will not apply*) in order to achieve regular status. If a 3.00 is not attained, the provisional student may be dismissed from graduate study. While in the provisional status, a student is not eligible to hold a graduate assistantship.

Academic Performance—Unacceptable academic performance includes: failure to maintain an overall GPA of at least 3.00, a single grade of U, D, or F in any course, more than two grades below a B in any semester, more than two grades below a B in courses taken for graduate credit or unsatisfactory research progress as determined by the student's major advisor. Any one of these is grounds for academic dismissal.

The academic dismissal process is
 (a) deficiency recognition by student's major advisor or the graduate program coordinator;
 (b) case consideration and findings by the faculty;
 (c) concurrence by the department head, and
 (d) recommendation of dismissal to the Dean of Engineering.

12 hours at the 8000 level or above, are required along with six or more hours research credit and a final oral exam. For the non-thesis option, **31 hours** (includes 1 hour ME 8111 Seminar—S grade) are required along with an oral presentation and final exam; at least **15 hours** must be at the 8000 level or above. **No more than 6 hours of Directed Individual Study** may be counted toward the course work requirement. **Directed Individual Study** courses are considered to be at the **8000 level for the purposes of the program of study**. In addition to the above, M.S. students must also complete one semester of graduate seminar (ME 8011). Each M.S. student will have a graduate committee, including the advisor and at least two other faculty members (at least one must be from Mississippi State University). The student's program of study, including all coursework, must be approved by the committee and the graduate coordinator.

Program of Study/Completion Requirements (Ph.D.)— Each Ph.D. student will have a graduate committee, including the advisor (major professor) and at least three other faculty members (at least two must be from Mississippi State University). Specific course requirements are determined by the student's major professor and graduate committee. **At least 44 total hours of graduate course work above the baccalaureate degree** are required, including hours earned at Mississippi State University or another institution as approved by the graduate committee. Students who received their M.S. degree at an institution other than Mississippi State may count up to 24 hours toward the total of 44 hours. **No more than 6 hours of Directed Individual Study** may be counted toward the total course work requirement of 44 hours. **Three hours of course work must satisfy a mathematics requirement.** In addition, Ph.D. students must complete two semesters of graduate seminar, and 20 or more hours of research credit. A written qualifying examination is required within 24 months of beginning the Ph.D. program. An oral preliminary comprehensive examination is required at least six months prior to graduation, and after determination of dissertation topic. A final oral dissertation defense is required. **The student's program of study, including all coursework, must be approved by the committee and the graduate coordinator.**

CURRENT CURRICULUM OUTLINE	Required Hours	PROPOSED CURRICULUM OUTLINE	Required Hours
Ph.D. N/A	N/A	Ph.D. (beyond B.S.) ME 8011 Math: ME 8213 OR MA 6313 OR	2 3

		MA 6323 OR MA 8203 OR MA 8463 XX 8XXX OR ME 7000 (6 hours maximum) Other graduate coursework Research credits	18 21 20
Total Hours Ph.D.	N/A	Total Hours Ph.D. (above baccalaureate)	64

3. JUSTIFICATION AND STUDENT LEARNING OUTCOMES

This degree modification proposal intends to formalize graduate curriculum requirements which have been adopted by the Mechanical Engineering faculty, and to standardize the curriculum for all students at the Ph.D. level. In particular, the proposal addresses several issues with the current curriculum description. It explicitly defines the requirement for the one-hour graduate seminar course, which is to be taken for two semesters by all Ph.D. students. It clarifies the limitation on Directed Individual Study courses, which may comprise only six hours of the total coursework for Ph.D. It introduces a mathematics requirement for Ph.D. students, and lists the courses which may be taken in order to satisfy this requirement. It should be noted that all courses listed, including those in the Mathematics and Statistics Department, have been approved for distance education. The proposal also implements, for the first time, a minimum number of course work hours required for the Ph.D. The catalog description includes a change to the timeframe in which the Ph.D. Qualifying Exam must be taken, extending it from the first semester to within the first 24 months of Ph.D. study. This change was adopted in part because the Mechanical Engineering Department now holds qualifying exams annually instead of every semester.

These changes will be beneficial to ME graduate students because they will clearly define the policies, procedures, and program requirements for the Ph.D. degree. The two most significant changes, i.e. the math requirement and course hour requirement for the Ph.D. program, will help to ensure that all Ph.D. students will complete the program with sufficient training in fundamental competencies, in addition to their research experience. The changes will ensure that students will not leave the program with deficient course work, which was at least a possibility under the old description that only included recommended (rather than required) course loads. The minimum course hour requirement will also bring the MSU ME department more in line with peer and peer plus institutions, many of which have similar policies.

Learning outcomes for the Ph.D. program are not expected to be significantly affected by the proposed changes. As discussed above, the chief advantage will be more uniformity across programs of study for different students, in agreement with degree program objectives, and increased clarity regarding the requirements and expectations of the program.