Dr. Burnette Hamil introduced herself as Vice Chair of the Graduate Council. She explained that Dr. Dwayne Wise is on sabbatical and that she will be chairing the remaining Graduate Council meetings in his absence.

Dr. Hamil asked for revisions to the minutes (November 19, 2009).

Motion was made by Dr. Kathy Dooley and seconded by Dr. David Lewis to accept the minutes.

Minutes were approved by acclamation.

University Committee on Courses and Curricula (UCCC)

Dr. Tim Chamblee could not provide a report because the UCCC meeting coincided with Graduate Council meeting. However, he submitted four proposals for review.

- Modification of Master of Science in Forestry – AOCE Approval (Handout)

Dr. Lewis made a motion to approve the modification to the MS in Forestry. The motion was seconded by Dr. Dan Seale.

A brief discussion followed. Dr. Gilbert asked whether academic honesty is being addressed in these AOCE courses. Ms. Jodi Roberts from Academic Outreach and Continuing Education stated that every course now offered through AOCE has a statement about Academic Honesty. Ms. Roberts confirmed that assistantships are available to graduate students in distance degree programs.

Graduate Council voted and the MS in Forestry was approved by acclamation. One Graduate Council member voted nay.
• Modification for the MS in Geosciences - (add concentration and AOCE approval)

Dr. Lewis made a motion to approve the addition of an Applied Meteorology Concentration for the MS in Geosciences, along with AOCE approval. The motion was seconded by Dr. Juan Silva.

Upon discussion, Graduate Council members realized that they had been sent the wrong proposal via email. Dr. George Adebiyi made a motion to table the MS in Geosciences proposal. Dr. Dan Reynolds seconded the motion.

Graduate Council members tabled the MS in Geosciences proposal.

• Modification of Master Science in Kinesiology (Handout)

Dr. Silva made a motion to approve the modifications to the Master of Science in Kinesiology which includes changing the current emphases to concentrations and changing the name of the degree from Master of Science in Physical Education. Dr. Dooley seconded the motion.

Dr. Gilbert pointed out that a name change request has to go through IHL after Graduate Council approval.

After a brief discussion, Graduate Council members voted and the Modification to the Master of Science in Kinesiology (Physical Education) was approved by acclamation. One Graduate Council member abstained.

• Add Doctor of Philosophy in Industrial and Systems Engineering (Handout)

Dr. Lewis made a motion to approve the addition of the Doctor of Philosophy degree in Industrial and Systems Engineering. Dr. Silva seconded the motion.

A brief discussion followed. Dr. Gilbert stated that this addition also requires IHL approval. He noted that IHL will look very closely at the projected number of graduates in a new degree program before they give approval.

Graduate Council members voted and the Doctor of Philosophy in Industrial and Systems Engineering was approved. One Graduate Council member abstained.

4. Report from the Office of the Graduate School (OGS)

Dr. Louis D’Abramo presented the following information:

• 68 prospective TAs participated in the General Teaching Assistant Workshop on January 4 and 5, 2010. 21 of these participants achieved TA1 level certification. 82 TAs participated in the Evaluation for Classroom Certification on January 5; 66 (percentage passed = 80.5 %) of these students achieved TA2/TA3 level certification. 23 faculty, staff, and administrators assisted with the workshop as either presenters or evaluators.
- 57 graduate students were awarded doctoral degrees at the fall (December) commencement ceremony. 72% of these degrees were awarded by the College of Education and the College of Engineering. For 2009-2010, the total number of Ph.D.s award is 94 with spring 2010 commencement totals needing to be added. If the four-year mean for the spring commencement is used to estimate the number of graduate students that are awarded Ph.D. degrees in the spring (May) commencement, then 139 Ph.D.s will have been awarded for the 2009-2010 year. That number would be the highest in the history of the University and represent a 30% increase over the last three years.

- We had approximately 85 new graduate students attend orientation. Using the unofficial enrollment counts, there are 207 newly admitted graduate students on the Starkville campus this spring giving us about a 41% participation rate from new students in the orientation program. In spring 2008, we had 65 students participate.

- There was an 8.6% increase in the number of applications and a 10.5% increase in students admitted for spring 2010 when compared to spring 2009. The total number of graduate students admitted was 661 which is exactly the five year average for the years 2006-2010. Of the total admitted 86% were domestic and 14% were internationals. The unofficial total number of new graduate students for the spring 2010 semester is 353, 11.3% (40) are international, 34% are AOCE. The total unofficial number of graduate students enrolled for the spring semester is 3486.

- For the spring 2010 semester, 1,085 assistantships were awarded, 595 GRAs, 336 GTAs and 154 GSAs. 44% of Starkville campus graduate students have an assistantship.

- The new Graduate Faculty and Graduate Participant status appointment forms are now available online.

- Effective yesterday, all requests for religious affiliation on graduate school admission forms have been removed.

- I distributed the proposed time limit policy (passed by the Graduate Council last November) at the Deans Council meeting earlier this month. There was general support, but members wanted another month to review for additional comment. I am scheduled to attend the next Associate Deans Council meeting and also present the policy there for comment.

- Approximately 20 of our AGEM Scholars are attending the annual Winter Scholar Symposium hosted by the University of Southern Mississippi on January 21-23, 2010. Several of the AGEM Scholars are participating in the paper presentation competition.

- An information workshop for the National Science Foundation Graduate Fellowship Program for 2011 has been scheduled on March 31, 2010 in the Grisham Room of Mitchell Memorial Library from 2:00 to 4:00 p.m.
• An information workshop for the Fulbright Fellowship program for 2011 has been scheduled on April 14, 2010 in the Fowlkes Auditorium of the Colvard Student Union from 3:00 to 5:00 p.m.

5. Report from Graduate Student Association (GSA)

GSA President Beth Rauhaus presented the following report:

The GSA held a meeting on Tuesday, January 19, 2010 which featured Mr. James Nail from the Office of Thesis and Dissertation Format Review at Mitchell Memorial Library as the guest speaker. Approximately 28 graduate students attended the meeting. The next meeting will be held on February 24, 2010 and Dr. Hank Flick will be the guest speaker.

The annual GSA Banquet is scheduled for April 6, 2010. Please be on the lookout for a call for nominations for outstanding graduate assistant.

6. New Business

• Graduate Student Grievance Process

Dr. D’Abramo stated that numerous grievances were filed by graduate students against faculty and/or administrators in the past few months. He discovered that no policy or protocol is currently in place that guides the filing of grievances. Since there were a large number of these grievances that are now still ongoing, he developed a protocol for graduate student grievances that is an essentially an analog of the faculty grievance protocol.

Dr. D’Abramo asked that a Graduate Council subcommittee review the draft of a Protocol for Graduate Student Grievance and make a recommendation to this body for inclusion in the Graduate Bulletin.

Dr. Jerry Gilbert reminded Graduate Council members that there are already policies in place that deal with grade appeal and status appeal (dismissal) for graduate students. He urged the subcommittee to consider whether a disagreement with a program of study should be dealt with by the Grade Appeal Committee or whether such a grievance should fall under the proposed Protocol for Graduate Student Grievance.

Dr. Meghan Millea made a motion to form a Graduate Council Grievance Subcommittee. Dr. Radhakrishnan Srinivasan seconded the motion. Graduate Council voted by acclamation to form a subcommittee.

Dr. Hamil asked for volunteers to serve on the Grievance Subcommittee. Dr. Srinivasan, Dr. Lewis, and Ms. Rauhaus volunteered to serve on the committee, Dr. Dooley agreed to chair.

Dr. David Shaw, Vice President of Research, presented Graduate Council members with a handout concerning the necessity to provide graduate students with guidance regarding required research ethics, particularly when the funding comes from NSF and NIH.
Dr. D’Abramo pointed out that two such courses already exist and they are advertised on the Graduate School website.

Meeting adjourned at 2:25 p.m.

The date for the next Graduate Council meeting has been set for Friday, February 26, 2010, at 1:30 p.m. in 611 Allen Hall.
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, Butler-Williams Building, Suite B, 100 Walker Road, Mail Stop 9699 (325-0831).

College or School: Forest Resources  Department: Forestry
Contact Person: Dr. Andrew Ezell  Phone: 5-4532  E-mail: aezell@cfr.msstate.edu
Nature of Change: AOCE Approval  Date Initiated: 050409  Effective Date: 010110
Current Degree Program Name: Master of Science in Forestry
Major:  Concentration:

Summary of Proposed Changes:

To modify the Master of Science degree program offered by the Department of Forestry for online delivery.

Approved:

Date: 10/27/09
10-28-09
10/6/09
12/3/09

Chair, University Committee on Courses and Curricula
Chair, Graduate Council (if applicable)
Chair, Deans Council
## APPENDIX 8: DECLARATION OF INTENT TO OFFER A DEGREE PROGRAM BY DISTANCE LEARNING

<table>
<thead>
<tr>
<th>Institution:</th>
<th>Mississippi State University</th>
</tr>
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<tbody>
<tr>
<td>Date of Initial Program Approval:</td>
<td>Date of Implementation:</td>
</tr>
<tr>
<td>Cost of Implementation:</td>
<td>No additional cost.</td>
</tr>
<tr>
<td>Program Title as Appears on Academic Program Inventory, Diploma, and Transcript:</td>
<td>Six Digit CIP Code:</td>
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<tr>
<td>Master of Science, Forestry</td>
<td>030501</td>
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<tr>
<td>Degree(s) to be Awarded:</td>
<td>Credit Hour Requirements:</td>
</tr>
<tr>
<td>Master of Science, Forestry</td>
<td>30 semester hours</td>
</tr>
<tr>
<td>Percentage of Program Completed by Distance Learning:</td>
<td>Percentage of Program Requiring Campus Visit:</td>
</tr>
<tr>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>Will students be allowed to mix on-campus and distance learning courses within this program?</td>
<td>Yes</td>
</tr>
<tr>
<td>Will this program require separate admission from those offered on-campus?</td>
<td>Yes</td>
</tr>
<tr>
<td>Will this program have different fees or tuition rates from those offered on-campus?</td>
<td>Yes</td>
</tr>
<tr>
<td>Responsible Academic Unit(s):</td>
<td>Institutional Contact:</td>
</tr>
<tr>
<td>Department of Forestry</td>
<td>Andrew Ezell, Interim Dept. Head, Forestry</td>
</tr>
<tr>
<td>Number of Students Expected to Enroll in First Six Years:</td>
<td>Number of Graduates Expected in First Six Years:</td>
</tr>
<tr>
<td>Year One</td>
<td>Year One</td>
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<td>Year Two</td>
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</tbody>
</table>

Program Summary:
The Master of Science in Forestry program will be a 30 semester hour web-based Master's program geared toward working professionals desiring a flexible graduate degree. The majority of the students will have a Bachelor of Science degree but for personal or work related reasons are wishing to pursue a graduate degree. These students typically will reside in rural areas not within commuting distance to the university nor another institution with an advanced forestry degree curriculum. This curriculum is currently offered on the Starkville main campus but will be modified for web-based delivery.

Institutional Executive Officer Signature ____________________________ Date _______________
Degree Program Modification

Master of Science Degree, Department of Forestry

1. CATALOG DESCRIPTION

Graduate study is offered in the Department of Forestry leading to the degrees of Master of Science (M.S.) in Forestry and Doctor of Philosophy (Ph.D.) in Forest Resources with a concentration in Forestry. Specialized areas of study include forest business, forest management and economics, forest genetics and biotechnology, forest hydrology and soils, silviculture, forest biometrics, spatial technologies in natural resource management, forest harvesting and operations, urban forestry, forest recreation, and wildlife and other natural resource economics. Graduate research assistantships are available to qualified students.

2. CURRICULUM OUTLINE

There are no required courses in the Department of Forestry’s MS degree program, although the Department does expect all students to take two courses – FO 8111 and FO 8211. Students will work with their graduate committee to develop a program of study that best suits the needs and interests of the individual student while meeting the overall program requirements of the Department. Table 1 provides a listing of the courses currently scheduled to be developed and offered by the Department of Forestry for the on-line MS degree program, along with the catalog description for each of these courses. Two of the courses, FO 6323 and FO 6423, have already been approved by the UCCC for on-line delivery.

In addition to the courses offered by the Department of Forestry, graduate students in the MS program will have numerous other on-line course offerings potentially available to augment their program of study. This includes nearly 175 graduate courses offered through member institutions of the NRDLC, many of which would be suitable for students in the MSU Department of Forestry’s on-line MS degree program. Other programs at MSU also offer on-line graduate courses which may potentially be available and useful to forestry students. This includes the MBA program which currently has at least 20 on-line courses, although these courses are not currently available to students outside of the MBA program. The Public Policy Administration program currently offers eight on-line graduate courses. The Department of Geosciences currently offers five on-line graduate courses. The Department of Agricultural Economics currently offers two on-line graduate courses. MSU also has an on-line Master of Arts in Interdisciplinary Studies program offering several courses, some of which might be appropriate for students in the Department of Forestry’s on-line MS degree program.
### Table 1 – Courses to be offered part of the on-line MS degree program in the Department of Forestry.

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title and Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FO 6113</td>
<td>Forest Resource Economics. Three hours lecture. Basic principles of forest resource valuation; economics applied to production, conversion, marketing and consumption of forest products and benefits.</td>
</tr>
<tr>
<td>FO 6253</td>
<td>Forest Procurement. Lectures and field exercises dealing with the problems of timber procurement to include planning for harvest, methods of handling and transport, legal and safety considerations.</td>
</tr>
<tr>
<td>FO 6323</td>
<td>Forest Resource Management. Three hours lecture. Three hours laboratory. Application of quantitative decision making techniques to stand-level and forest-wide management problems. Topics include land classification, forest production, optimal rotation analysis, and harvest scheduling.</td>
</tr>
<tr>
<td>FO 6343</td>
<td>Forest Administration &amp; Organization. Three hours lecture. Hierarchy and land structuring of forest organizations. Legal aspects of administering forest land holdings.</td>
</tr>
<tr>
<td>FO 6353</td>
<td>Natural Resource Law. Three hours lecture. A comprehensive study of the laws relating to forestry and forest operations with emphasis on real property law, environmental law, forest taxation law and contract law.</td>
</tr>
<tr>
<td>FO 6413</td>
<td>Natural Resource Policy. Three hour lecture. This course focuses on public policies of natural resources in the United States and briefly in the world. Policy process will be discussed in order to help conceptualize how policy is made. Participants in the policy process will be examined. Finally, various programs related to federal, state, private, and global natural resource policies will be scrutinized. This integration of process, participants, and programs should help students understand how public values and opinions about natural resources have been formed and developed into public programs.</td>
</tr>
<tr>
<td>FO 6423</td>
<td>Professional Practice. Three hours lecture. Four hours laboratory. Forest resource data collection and analysis. Development of forest resource alternatives and recommendations for a specific forest property.</td>
</tr>
<tr>
<td>FO 6443</td>
<td>International Forest Resource &amp; Trade. Three hours lecture. A study of the world’s wood consumption, marketing arrangements, community forestry, and forestry in economic development.</td>
</tr>
<tr>
<td>FO 8111</td>
<td>Graduate Seminar. One credit hour. Survey of topics useful for success in graduate studies in the Department of Forestry, with particular emphasis on development of a research study plan.</td>
</tr>
<tr>
<td>FO 8143</td>
<td>Advanced Forest Economics. Three hours lecture. Application of current theory and techniques of economics to forestry. Emphasis is on the use of quantitative tools to improve decision-making in forest resource management.</td>
</tr>
<tr>
<td>FO 8163</td>
<td>Nonmarket Forest Values. Three hours lecture. (Prerequisites: FO 4113 or equivalent or consent of instructor). The course will deal with the valuation of nonmarket, non-timber outputs or amenities derived from the forest.</td>
</tr>
<tr>
<td>FO 8211</td>
<td>Graduate Seminar. One credit hour. Review of and discussion of current forestry issues. Presentation of student research.</td>
</tr>
<tr>
<td>FO 8243</td>
<td>Advanced Forest Resource Management and Planning. (Prerequisite: FO 8143). Three hours lecture. Emphasis is on the assessment of multiple-use alternatives. Data needs, resource trade-offs, and economic and policy implications are discussed.</td>
</tr>
<tr>
<td>FO 8293</td>
<td>Professional Paper. For Master of Science non-thesis option students only. Demonstration of the ability to compile, synthesize, and evaluate information, and to effectively communicate analyses and conclusions.</td>
</tr>
</tbody>
</table>
3. JUSTIFICATION FOR AOCE OFFERING

This proposal seeks formal authorization to modify the Master of Science (MS) degree program offered by the Department of Forestry in the College of Forest Resources (CFR) for on-line delivery and to enable the Department to offer an on-line degree. The on-campus MS program has been an important part of the CFR for 41 years. The Department seeks to add this distance education component primarily to meet the demands of working professionals who may wish to seek a graduate degree in forestry, but cannot leave their current employment. In addition to courses offered by the Department of Forestry, the on-line MS degree will utilize other on-line courses offered at MSU, as well as courses available from other universities and offered through the Natural Resources Distance Learning Consortium (NRDLC), of which the CFR is a member. The NRDLC consists of 10 universities with specialty programs in various fields of natural resources. Members of the NRDLC currently include Mississippi State University, Virginia Tech, University of Idaho, Utah State University, University of Montana, Steven F. Austin University, Penn State University, University of Tennessee at Martin, Oregon State University and North Carolina State University.

4. LEARNING OUTCOMES

Graduates of the on-line MS degree program will develop extensive knowledge of their specific forestry sub-discipline. The degree program offered by the Department of Forestry consists of both a non-thesis option and a thesis option. Students in both the non-thesis and thesis options will be provided with an opportunity to improve and expand their knowledge base and professional skills, thereby improving their performance and career opportunities. Students in the thesis option will gain knowledge of how to do research; including conceiving of an appropriate research problem, development of a suitable research protocol, management and analysis of research data sets, and interpretation of research results. All students in the MS on-line degree program will gain experience on how to effectively communicate results from their graduate project, be that a professional paper under the non-thesis option, or a Master’s thesis under the thesis option.

5. PROPOSAL SUBMISSION

See attached AOCE course modification forms for the courses listed above as well as the Declaration of Intent to Offer a Degree Program by Distance Learning as required by IHL.

6. EFFECTIVE DATE

Spring 2010
7. CONTACT PERSON

Dr. Andrew Ezell, Interim Department Head
aezell@cfr.msstate.edu
662.325.4532

8. MASTER SCHEDULE

This course will be offered through AOCE beginning Spring 2010.
October 28, 2009

Dr. George Hopper  
Dean/Director  
CFR/FWRC  
MS State, MS 39762  

Dr. Hopper,

I am writing to inform you that we are submitting the approval forms for the following FO courses: 4413/6413, 4353/6353, 4443/6443, 4343/6343, 4253/6253, 4113/6113, 8243, 8211, 8163, 8143, 8111, and 8293. We are also submitting an approval form for a degree program modification to provide an opportunity to deliver our Master of Science degree in an online format. The appropriate departmental committees (UGCC and Graduate) have reviewed, revised, and approved the forms and the departmental faculty approved all the work. Pursuant to all these efforts, I have approved the forms. If you have questions regarding this matter, please let me know.

Sincerely,

Andrew W. Ezell  
Professor & Interim Head
MEMO TO: Dr. Tim Chamblee, Chair, University Committee on Courses and Curricula (UCCC)
FROM: Dr. Scott D. Roberts, Chair, Department of Forestry Graduate Committee
       Dr. Stephen C. Grado, Chair, Department of Forestry Undergraduate Committee
DATE: October 29, 2009
SUBJECT: On-line Master of Science (MS) Degree Program Offered by the Department of Forestry

As per UCCC policy, we are providing documentation that the Department of Forestry’s Graduate and Undergraduate Committees have reviewed and evaluated the courses involved in the Master of Science (M.S.) degree program proposed by the Department of Forestry for on-line delivery along with the offering of an on-line degree. Members of both Committees have indicated below their approval or disapproval relative to this proposal. 6 of the 6 Graduate Committee members, and 6 of the 8 Undergraduate Committee members approved the course proposals and the packet that were developed.

The revised packet was also presented to the faculty via e-mail for review and approval. 16 faculty voted to support this proposal and 2 did not.

Graduate Committee:

<table>
<thead>
<tr>
<th>Approve</th>
<th>Disapprove</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scott D. Roberts</td>
<td>Disapprove</td>
</tr>
<tr>
<td>James Henderson</td>
<td>Signature</td>
</tr>
<tr>
<td>Jeff Murrell</td>
<td></td>
</tr>
<tr>
<td>V.P. Stuart</td>
<td></td>
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<tr>
<td>Cetin Yuces</td>
<td>Cetin Yuces</td>
</tr>
<tr>
<td>Stephen C. Grado</td>
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Undergraduate Committee:

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</tr>
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<tbody>
<tr>
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<td>Signature</td>
</tr>
<tr>
<td>Print Name</td>
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<td>Print Name</td>
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College of Forest Resources
Forest and Wildlife Research Center
Extension Service
Approval Form For Curricula/Programs
MISSISSIPPI STATE UNIVERSITY

Note: This is an administrative approval form not to be confused with or used as a proposal for curriculum/program changes. The original proposal should be prepared in accordance with format requirements provided in the Guide and Format for Submitting Course/Curriculum Proposals in the UCCC Curriculum Change Policies and Procedures booklet. It should be attached to this form and submitted along with all required copies to UCCC, Room 100, Industrial Education Building (325-2281).

College or School: Arts and Sciences Date Initiated: August 20, 1992
Department: Geology and Geography 325-3915
Department Head: Charles L. Wax
(Print) (Signature)
Semester for Proposed Change to Become Effective: Spring 1993
Proposal Contact Person: Charles L. Wax 325-3915
(Name) (Phone)
Nature of Change (Circle One): ADD DELETE MODIFY REVIEW MODIFY/REVIEW

Current Listing or Brief Description:
BACHELOR OF SCIENCE IN GEOLOGY AND
MASTER OF SCIENCE IN GEOLOGY, TO:

New or Modified Listing or Brief Description:
BACHELOR OF SCIENCE IN GEOSCIENCE AND
MASTER OF SCIENCE IN GEOSCIENCE

Approved:
Chair, College or School Curriculum Committee
Date: 10/22/92
Dean of College or School
10/26/92
Chair, Univ. Comm. on Courses & Curr.
11-23-92
Chair, Graduate Council (if applicable)
1-8-93
Chair, Deans Council
2-9-93

UCCC CONTROL NO.
A PROPOSAL SUBMITTED TO THE
BOARD OF TRUSTEES OF STATE
INSTITUTIONS OF HIGHER LEARNING
STATE OF MISSISSIPPI
FOR A DEGREE NAME CHANGE
JULY 1992

COLLEGE OF ARTS AND SCIENCES

DEPARTMENT OF GEOLOGY AND GEOGRAPHY

MISSISSIPPI STATE UNIVERSITY
Current Title and Description

Bachelor of Science in Geology
Master of Science in Geology

Proposed New Title and Description

Bachelor of Science in Geoscience
Master of Science in Geoscience

Justification

In its final report issued March 16, 1992, MSU’s Priorities and Planning Committee, Phase I (PPC I), recommended changes for the Department of Geology and Geography. In subsequent deliberations, the Council of Deans and the Provost and Vice President for Academic Affairs made final recommendations that the Department change its name and the name of its degrees. These recommendations were accepted by the IHL Board in April 1992, and this proposal initiates those changes.

This degree name change proposal is accompanied by a simultaneous proposal for a change in the name of the Department. The Department, under separate documentation, is proposing that it change its name to the Department of Geosciences. The degree name change will allow the Department to incorporate all current programs and offerings into a single option for all students. Within the one Geoscience degree, emphasis areas are proposed in professional geology, geography, meteorology/climatology, and environmental science. The new degree name and focus areas will allow the Department to maximize existing strengths in the sub-disciplines of geophysics, karst geomorphology, mineralogy, paleontology, sedimentology, hydrogeology, climatology, broadcast meteorology, and geography. These areas of expertise are representative of the interdisciplinary nature of the earth sciences, and a student educated in these traditions truly is a geoscientist.

This degree name change will strengthen the Department's ability to demonstrate its unique mission at Mississippi State University and within the state of Mississippi. The Department is the only place in the state where the expertise of geologists and geographers is combined, not only in name but in actual execution. The geology program at UM is housed within Engineering. At USM, geology and geography are separate departments, with little if any overlap in expertise. At MSU, the department has teaching, service and research programs that draw on the interdisciplinary expertise of geology and geography faculty. A degree name change will remove any ambiguity about the qualifications of the department's graduates, and will
convey that the degree truly integrates a combined set of subdisciplines into a focused, rigorous curriculum that produces graduates capable of obtaining employment in a variety of positions.

The all-encompassing title of "Geoscience" provides a unique and accurate identity, while providing a forum for the strengths of a diverse and productive faculty. It is anticipated that this provision will have the double benefit of attracting more students and pooling into one option the students we currently have, while simultaneously streamlining and compressing the number of upper-division courses needed—a benefit that would enhance the enrollment management efforts already in place—and maintaining the low-cost, high-efficiency delivery of our introductory level courses.

An additional area of growth and interest in climatology and meteorology also mitigates for this change in name for the degree. Since 1986 the Department has committed resources to create a Broadcast Meteorology Program (BMP) and the Mississippi State University Climatology Laboratory (MSUCL). These entities have now fully joined an already functioning Office of State Climatologist within the department to bring a strong focus on the atmospheric component of the earth sciences into the program. Students following course work in these areas of the geosciences are better served by a degree in geoscience rather than geology, whereas students following course work in geology or geography are equally served by a degree in geoscience as compared to a degree in geology.

This name change proposal stems from the desire to develop fully the potential of the mutual interests of the geology and geography disciplines existing within the Department so as to better complement the University's Focus Areas and Action Priority Areas. A geoscience degree can more easily be identified with those areas of Environmental Quality, Science and Technology, Instructional Technology, and Globalization. Additionally, the proposal to change the name of the Department communicates the need and the desire to combine the new area of strengths in climatology and meteorology with the traditionally interdisciplinary strengths of the Department. It is rational to concentrate these earth science components in a single degree program, and it is appropriate to change the name of the degree that already incorporates all these mutually supportive areas to Geoscience.
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, Butler-Williams Building, Suite B, 100 Walker Road, Mail Stop 9699 (325-0831).

College or School: Education  
Contact Person: Stanley P. Brown  
Nature of Change: Modify  
Current Degree Program Name: Master of Science  
Major: Physical Education  
New Degree Program Name: Kinesiology  
Major: Kinesiology  
Concentration: Teaching and Coaching, Sports Administration, Exercise Science  
Date Initiated: Spg 09  
Effective Date: Fall 2010  
Concentration: Sport Pedagogy, Sport Administration, Exercise Physiology

Summary of Proposed Changes:
1. Request renaming the major to Kinesiology affecting three existing emphasis areas.
2. Request renaming the three existing emphasis areas to: Sport Pedagogy (replaces the term Teaching and Coaching), Sport Administration (replaces the term Sports Administration), and Exercise Physiology (replaces the term Exercise Science).
3. Request modification of the three curricular emphases.
DEGREE (MAJOR) NAME CHANGE (M.S.) – FROM PHYSICAL EDUCATION TO KINESIOLOGY

A. MODIFICATION OF EXISTING EXERCISE SCIENCE EMPHASIS IN THE MASTER OF SCIENCE CURRICULUM

CATALOG DESCRIPTION

Current: Graduate study is offered in the Department of Kinesiology leading to the degree of Master of Science in Physical Education with concentrations in Exercise Science, Sport Administration and Teaching/Coaching.

Proposed: Graduate study is offered in the Department of Kinesiology leading to the degree of Master of Science in Kinesiology. A concentration in Exercise Physiology prepares professionals for careers in fitness and allied health. A concentration in Sport Administration prepares professionals for advanced careers in the expanding sport industry. A concentration in Sport Pedagogy prepares professionals for leadership roles as physical educators. These degree concentrations also prepare students for advanced study at the doctoral level.

JUSTIFICATION AND STUDENT LEARNING OUTCOMES

Program Review

The Exercise Science graduate program has been modified with a view towards two important goals: 1) a favorable comparison with leading programs in the discipline and 2) employer assessment and feedback of student’s preparedness for employment. First, graduate programs at institutions such as the University of Florida serve as model state-of-the-art programs for those throughout the country. While our degree program has been successful in attracting students, faculty feel it is time to seek qualitative growth to compare more favorably to our peer institutions in the southern region. We have strengthened the curricular offerings in two existing tracks: Clinical Exercise Physiology and Strength & Conditioning. While our modified curriculum is stronger now in its core courses, these tracks are also strengthened with courses that will increase the professional competence of graduates. Changes to the clinical track should result in our students having greater competence in the psychology of exercise resulting in increased clinical skills in exercise programs where patient compliance is hard to achieve (as is typically the case in clinical exercise programs). Second, strengthening the strength & conditioning track in the sciences is needed to increase student content area competence.

Other Important Questions

Will this program change meet local, state, regional, and national educational and cultural needs? The changes are designed to better prepare students as clinical exercise physiologists and strength and conditioning specialists.

Will this program change result in duplication in the System? No

Will this program change / advance student diversity within the discipline? No

Will this program change result in an increase in the potential placement of graduates in MS, the Southeast, and the U.S.? Yes. We anticipate that strengthening the science component will result in broader opportunities through greater developed competencies for these students.

Will this program change result in an increase in the potential salaries of graduates in MS, the Southeast, and the U.S.? Yes
SUPPORT: SEE THE COVER LETTER OF FACULTY SUPPORT AND THE LETTER FROM THE DEPARTMENT OF PSYCHOLOGY

PROPOSED 4-LETTER ABBREVIATIONS: EXPY

EFFECTIVE DATE: FALL 2010
CURRENT CURRICULUM OUTLINE: EXERCISE SCIENCE (33 OR 36 SEMESTER HOURS)

Research Requirement (9 – 12 hours)
KI 8303: Research in Kinesiology
KI 8313: Interpretation of Data in Kinesiology

33 Hour Program
Option 1: KI 8006 Thesis (6 hours)
Option 2: KI 7003 Directed Individual Study (3 hours)

Core Courses (9 hours)
EP 8243 Cardiorespiratory Exercise Physiology
EP 8263 Exercise Biochemistry
EP 8273 Lab Instrumentation

Emphasis 1: Clinical Exercise Physiology (6 hours)
EP 8323 Science and Practice in Cardiopulmonary Rehabilitation
EP 8423 Graded Exercise testing

Emphasis 2: Strength and Conditioning (6 hours)
EP 6153 Training Techniques for Exercise and Sport
EP 8253 Doping and Supplement Use in Sport

Elective Courses (6 – 12 hours selected in consultation with advisor)*
EP 8323 Science and Practice in Cardiopulmonary Rehabilitation
EP 8423 Graded Exercise testing
EP 8433 Psychological Aspects of Exercise*
EP 8443 Neuromuscular Mechanisms in Exercise*

PROPOSED CURRICULUM OUTLINE: EXERCISE PHYSIOLOGY (33 SEMESTER HOURS)

Research Core (15 hours)
KI 8303 Research in Kinesiology
KI 8313 Interpretation of Data in Kinesiology
EP 8273 Laboratory Instrumentation

Thesis Option (6 hours) Non-Thesis Option (6 hours)
KI 8006 Thesis Research KI 7006 Directed Individual Study

Exercise Physiology Core (9 hours)
EP 8243 Cardiorespiratory Exercise Physiology
EP 8263 Exercise Biochemistry
EP 8283 Environmental Exercise Physiology

Exercise Physiology Tracks (9 hours)
Clinical Exercise Physiology (Choose 3)
EP 8323 Science and Practice in Cardiopulmonary Rehabilitation
EP 8423 Graded Exercise testing
EP 8433 Psychological Aspects of Exercise*
EP 8443 Neuromuscular Mechanisms in Exercise*

Strength and Conditioning (Choose 3)
EP 6153 Training Techniques for Exercise and Sport
EP 8253 Doping and Supplement Use in Sport
PE 8203 Psychological Aspects of Sport*
EP 8443 Neuromuscular Mechanisms in Exercise*
EP 8453 Biomechanics of Human Movement*

*Proposed new courses

Additional 6 hours of course work

KI 8710 Internship
NTR 6253 Human Nutrition I
PE 8163 Seminar in Physical Education

*Courses from any of the other areas of emphasis may be selected as electives.
DEGREE (MAJOR) NAME CHANGE (M.S.) – FROM PHYSICAL EDUCATION TO KINESIOLOGY, CONTINUED
B. MODIFICATION OF EXISTING TEACHING AND COACHING EMPHASIS IN THE MASTER OF SCIENCE CURRICULUM

CATALOG DESCRIPTION
Current: Graduate study is offered in the Department of Kinesiology leading to the degree of Master of Science in Physical Education with concentrations in Exercise Science, Sport Administrations, and Teaching/Coaching.

Proposed: Graduate study is offered in the Department of Kinesiology leading to the degree of Master of Science in Kinesiology. The concentration in Exercise Physiology prepares students for careers in fitness and allied health. The concentration in Sport Administration prepares professionals for advanced careers in the expanding sport industry. The concentration in Sport Pedagogy prepares professionals for leadership roles as physical educators. These degree concentrations also prepare students for advanced study at the doctoral level.

JUSTIFICATION AND STUDENT LEARNING OUTCOMES
Program Review
The Teaching and Coaching graduate program has been modified with a view towards two important goals: 1) a favorable comparison with leading programs in the discipline and 2) employer assessment and feedback of student’s preparedness for employment. First, graduate programs at institutions such as the University of Southern Carolina serve as model state-of-the-art programs for those throughout the country. Our degree program has been moderately successful in attracting students. However, departmental faculty feel it is time to seek qualitative growth to compare more favorably to our peers in the southern region. We have, therefore, sharpened our curricular offerings by re-focusing on sport pedagogy. Our modified curriculum is now stronger in its core and elective courses.

Other Important Questions
Will this program change meet local, state, regional, and national educational and cultural needs? The changes are designed to better prepare students as leaders in physical education.
Will this program change result in duplication in the System? No
Will this program change/advance student diversity within the discipline? No
Will this program change result in an increase in the potential placement of graduates in MS, the Southeast, and the U.S.? Yes. We anticipate that strengthening the science component will result in broader opportunities through greater developed competencies for these students.
Will this program change result in an increase in the potential salaries of graduates in MS, the Southeast, and the U.S.? Yes.

SUPPORT: SEE THE COVER LETTER OF FACULTY SUPPORT AND THE LETTER FROM THE DEPARTMENT OF PSYCHOLOGY

PROPOSED 4-LETTER ABBREVIATION: SPPD

EFFECTIVE DATE: FALL 2010
CURRENT CURRICULUM OUTLINE: 33 SEMESTER HOURS – TEACHING & COACHING

Non-Thesis Option

Research Core (9 hours)
KI 8303 Research in Kinesiology OR
EDF 8363 Functions and Methods of Research in Education
KI 7003 Directed Individual Study
KI 8313 Interpretation of data in Kinesiology
Core (9 hours)
PE 8113 Curriculum Construction in Physical Education
PE 8163 Seminar in Physical Education
PE 8193 Professional Preparation in Physical Education
Electives (15 hours)
EP 6153 Training Techniques for Exercise and Sport
FNH 8153 Wellness and Aging
FNH 8193 Problems in Health Education
PE 8213 Problems in Administration of Athletics Rehabilitation
EP 8323 Science and Practice in Cardiopulmonary Rehabilitation
FNH 8513 Theory and Practice of Health Education
SS 8803 Sport Law
SS 8883 Ethical Issues in Sport

Thesis Option

Research Core (12 hours)
KI 8303 Research in Kinesiology OR
EDF 8363 Functions and Methods of Research in Education
KI 8313 Interpretation of data in Kinesiology
KI 8006 Thesis
Core (9 hours)
PE 8113 Curriculum Construction in Physical Education
PE 8163 Seminar in Physical Education
PE 8193 Professional Preparation in Physical Education
Electives (12 hours)
EP 6153 Training Techniques for Exercise and Sport
FNH 8153 Wellness and Aging
FNH 8193 Problems in Health Education
PE 8213 Problems in Administration of Athletics Rehabilitation
EP 8323 Science and Practice in Cardiopulmonary Rehabilitation
FNH 8513 Theory and Practice of Health Education
SS 8823 Sport Law
SS 8883 Ethical Issues in Sport

PROPOSED CURRICULUM OUTLINE: 33 SEMESTER HOURS – SPORT PEDAGOGY

Non-Thesis Option

Research Core (12 hours)
KI 8303 Research in Kinesiology
KI 8313 Interpretation of Data in Kinesiology
KI 7006 Directed Individual Study
Sport Pedagogy Core (12 hours)
PE 8103 Developing Coaching Expertise
PE 8163 Seminar in Physical Education
SS 8883 Ethical Issues in Sport
PE 8203 Psychological Aspects of Sport*
Electives (9 hours)
EP 6153 Training Techniques for Exercise and Sport
EP 8253 Doping and Supplement Use in Sports
SS 8213 Funding of Sport*
SS 8803 Sport Law
EP 8453 Biomechanics of Human Movement*

Thesis Option

Research Core (12 hours)
KI 8303 Research in Kinesiology
KI 8313 Interpretation of Data in Kinesiology
KI 8006 Thesis
Sport Pedagogy Core (12 hours)
PE 8103 Developing Coaching Expertise
PE 8163 Seminar in Physical Education
SS 8883 Ethical Issues in Sport
PE 8203 Psychological Aspects of Sport*
Electives (9 hours)
EP 6153 Training Techniques for Exercise & Sport
EP 8253 Doping and Supplement Use in Sports
SS 8213 Funding of Sport*
SS 8823 Sport Law
EP 8453 Biomechanics of Human Movement*

*Proposed new courses
DEGREE NAME CHANGE (M.S.) – FROM PHYSICAL EDUCATION TO KINESIOLOGY, CONTINUED

C. MODIFICATION OF EXISTING SPORTS ADMINISTRATION EMPHASIS IN THE MASTER OF SCIENCE CURRICULUM

CATALOG DESCRIPTION

Current: Graduate study is offered in the Department of Kinesiology leading to the degree of Master of Science in Physical Education with concentrations in Exercise Science, Sport Administration, and Teaching/Coaching.

Proposed: Graduate study is offered in the Department of Kinesiology leading to the degree of Master of Science in Kinesiology. The concentration in Exercise Physiology prepares students for careers in fitness and allied health. The concentration in Sport Administration prepares professionals for advanced careers in the expanding sport industry. The concentration in Sport Pedagogy prepares professionals for leadership roles as physical educators. These degree concentrations also prepare students for advanced study at the doctoral level.

JUSTIFICATION AND STUDENT LEARNING OUTCOMES

The program is undergoing minimal changes in addition to the minor name change (the word Sports becomes Sport). Basically, students will no longer have the internship as a requirement, but it may still be selected as an option. Also, the program is now at 33 CH instead of a maximum of 36 CH. These changes allow for there to be semester hour conformity across M. S. concentrations.

SUPPORT: SEE THE COVER LETTER OF FACULTY SUPPORT

PROPOSED 4-LETTER ABBREVIATION: STAD

EFFECTIVE DATE: FALL 2010
CURRENT CURRICULUM OUTLINE: 33 OR 36 SEMESTER HOURS – SPORTS ADMINISTRATION

Core (21 hours)
SS 8123 Sports Management
SS 8803 Sport Law
SS 8823 Sport Sponsorships
SS 8883 Ethical Issues in Sport
KI 8303 Research in Kinesiology
KI 8313 Interpretation of Data in Kinesiology
KI 8710 Internship

Electives (9 hours) - Graduate-level courses subject to approval of graduate advisor.

Concluding Options (3 or 6 hours)
Option 1: KI 8003 Thesis (3 credit hours) – 33 hour program
Option 2: KI 7003 Directed Individual Study (3 credit hours) – 33 hour Program
Option 3: Additional 6 hours of graduate courses subject to approval of committee – 36 hour program

PROPOSED CURRICULUM OUTLINE: 33 SEMESTER HOURS – SPORT ADMINISTRATION
(Note: This represents less than 15% modification)

Core (18 hours)
SS 8123 Sport management
SS 8803 Sport Law
SS 8823 Sport Sponsorships
SS 8883 Ethical issues in Sport
KI 8303 Research in Kinesiology
KI 8313 Interpretation of Data in Kinesiology

Electives (9-12 hours) - Graduate-level courses subject to approval of graduate advisor.

Concluding Options (3-6 hours)
Option 1: KI 8006 Thesis
Option 2: KI 8713 Internship
## Appendix 9a: Modifications to Existing Degree Program Proposal
### (Renaming)

**Institution:** Mississippi State University

<table>
<thead>
<tr>
<th>Date of Implementation:</th>
<th>Present Six Digit CIP Code(s):</th>
<th>New Six Digit CIP Code:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2010</td>
<td>13.1314</td>
<td>None requested</td>
</tr>
</tbody>
</table>

**Present Program Title(s) as Appear(s) on Academic Program Inventory, Diploma, and Transcript:**
- Physical Education

**New Program Title as will Appear on Academic Program Inventory, Diploma, and Transcript:**
- Kinesiology

**Degree(s) to be Awarded:**
- M.S.

**Credit Hour Requirements:**
- 33 (each concentration)

**List any institutions within the state offering similar programs:**
- M.S., Sport Science, JSU / M.S.E.S., Exercise Science, UM / M.S., Physical Education, MUW
- M.S., Human Performance, USM / M.S., Sports Management, USM

**Responsible Academic Unit(s):**
- Department of Kinesiology

**Institutional Contact:**
- Stanley P. Brown

**Number of Students Enrolled in Last Six Years:**

<table>
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<tr>
<th>Year</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>Total</th>
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<tbody>
<tr>
<td>Year One</td>
<td>85 students</td>
<td>69 students</td>
<td>59 students</td>
<td>47 students</td>
<td>49 students</td>
<td>47 students</td>
<td>356</td>
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**Number of Graduates Expected in Next Six Years:**

<table>
<thead>
<tr>
<th>Year</th>
<th>2009/10</th>
<th>2010/11</th>
<th>2011/12</th>
<th>2012/13</th>
<th>2013/14</th>
<th>2014/15</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year One</td>
<td>23</td>
<td>28</td>
<td>28</td>
<td>32</td>
<td>32</td>
<td>34</td>
<td>177</td>
</tr>
</tbody>
</table>

**Program Summary:**
The M.S. in Kinesiology offers three concentrations: Sport Pedagogy, which prepares students for leadership careers in physical education, Sport Administration, which prepares students for leadership careers in the sport industry, and Exercise Physiology, which prepares students for careers in clinical exercise or strength and conditioning. In either of these concentrations students enter a 33 hour degree program consisting of a research core and a professional education core.

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**Institutional Executive Officer Signature**

**Date**
Institution: Mississippi State University

1. Describe how the proposed modification fits within the mission of the institution.
   The Department of Kinesiology participates in the teaching, research and service mission of Mississippi State University. The department's programs educate citizens to be productive members of society in job fields appropriate to their academic preparation.

2. Is this modification unnecessarily duplicative of other programs within the System?
   The programs in the Department of Kinesiology are long-standing, vibrant and growing. The name change is meant to make the major title more applicable to all its students and as kinesiology is used in only one other instance in the state, duplication is not an issue.

3. Describe the anticipated institutional impact including any research efforts associated with this program.
   It is anticipated that an enrollment increase will occur in the graduate programs as a direct consequence of the name change.

4. Are there any anticipated budget savings associated with the proposed modification?
   This change will have no negative impact on the budget.

5. Are there any changes to the educational objectives of the degree program associated with the proposed modification?
   There are some associated changes in the three graduate concentrations being proposed with the name change of the major, but the objectives of the programs remain the same.

6. Are there any changes to the curriculum of the degree program associated with the proposed modification?
   Yes, two of the graduate concentrations will undergo substantive changes and one will not.

7. Describe how the proposed modification will affect program faculty.
   Graduate faculty will be responsible for teaching the extra graduate courses being proposed. These will be worked into their regular course rotation.

8. Describe the evaluation process which led to the request for the proposed modification.
   The name change addresses the problem of wrong terminology for specific programs (THE TITLE OF THE CURRENT MAJOR IS INAPPROPRIATE FOR TWO OF THE GRADUATE CONCENTRATIONS).
MEMORANDUM

Date: April 14, 2009
To: Kinesiology Faculty
From: Dr. Ben R. Abadie, Division Coordinator of Applied Exercise Physiology
      Dr. Katherine J. Gilliland, Division Coordinator of Sports Studies

The Department of Kinesiology is in the process of making curricular changes as a result of faculty deliberations. The changes fall under the heading of courses added, courses deleted, courses modified, and concentration revisions. A summary of these changes are attached to this letter. This letter is designed to ensure that all department faculty are aware that these curricular changes being submitted to the BOX council. Below are the signatures of all the faculty indicating support of the proposed curricular changes.

Dr. Abadie
Dr. Brown
Mr. Drye
Ms. Funderburk
Dr. Gilliland
Ms. Grant
Dr. Hale
Dr. Honka
Dr. Hoyt
Ms. Jue
Dr. Knight
Dr. Lamberth
Dr. Love
Dr. Morse
Dr. Vickers
Dr. Wax
Dr. Webb
Dr. Wiley
Mr. Young
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, Butler-Williams Building, Suite B, 100 Walker Road, (Mail Stop 9699).

College or School: Engineering
Department: Industrial and Systems Engineering
Contact Person: Royce Bowden
Phone: 325-3865 E-mail: bowden@ise.msstate.edu
Nature of Change: ADD
Date Initiated: 10/16/09 Effective Date: January 2011
New or Current Degree Program Name: Doctor of Philosophy in Industrial and Systems Engineering

Summary of Proposed Changes:

The Doctor of Philosophy in Engineering (Industrial Engineering concentration) has been available since before 1968-69 per the MSU Bulletin. The Ph.D. in Engineering program is used by several other departments within the College of Engineering (e.g. Aerospace Engineering, Biological Engineering, Chemical Engineering, Civil and Environmental Engineering, and Mechanical Engineering). Each department independently defines and delivers its program leading to the Ph.D. in Engineering, subject to University requirements for all Ph.D. programs. Student enrollment in the Ph.D. in Engineering (Industrial Engineering concentration) has grown considerably in recent years (50 students enrolled fall 2009). The growth is in part due to increasing research, demand for our graduates, and to renaming the Department of Industrial Engineering to Industrial and Systems Engineering in 2006. The high demand justifies a stand alone degree program with a more descriptive name of the program that students are pursuing, namely a Ph.D. in Industrial and Systems Engineering. The proposed change in the degree program status will not require redefining the current program or an increase in budget.

Approved:

Date: 10/16/09

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: 10/24/09

Date: 10/30/09

Date: 1/3/09
PROPOSED New Degree

Degree: Doctor of Philosophy
Major: Industrial and Systems Engineering
Concentration: Not applicable

NEW DEGREE DESCRIPTION

Industrial and Systems Engineering is concerned with designing and improving systems to make products or provide services. Students learn and research how to design, improve, and control systems of people, materials, information, equipment, energy, and capital to increase quality, safety, and profitability. The Doctor of Philosophy in Industrial and Systems Engineering prepares scholars, teachers, and leaders for employment in academia, industry, and government. Specifically, graduates will have gained an understanding and appreciation of both the theoretical and experiential knowledge surrounding the field of industrial and systems engineering. They will have the necessary skills to identify, plan, and carry out highly relevant research, to direct research by others, and to communicate research findings through teaching and writing. These objectives are accomplished in several ways including course work, independent study and reading of journal articles, participation in government and industry sponsored research programs, and dissertation research.

NEW CONCENTRATION DESCRIPTION

Not Applicable

<table>
<thead>
<tr>
<th>Proposed Curriculum Outline</th>
<th>Required Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FOUNDATIONAL REQUIREMENTS</strong></td>
<td>0-28</td>
</tr>
<tr>
<td>It is the guiding philosophy of the Department of Industrial and Systems Engineering that a student who receives a doctorate through this department will be an industrial and systems engineer. This means that all students will satisfy at least the foundational/prerequisite undergraduate courses listed below. (NOTE: These requirements must be satisfied prior to completing the program, but do not have to be met prior to entering the program).</td>
<td></td>
</tr>
<tr>
<td>MA 1713: Calculus I</td>
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<tr>
<td>MA 1723: Calculus II</td>
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<tr>
<td>MA 2733: Calculus III</td>
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</tr>
<tr>
<td>MA 2743: Calculus IV</td>
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<tr>
<td>Computer programming proficiency</td>
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<tr>
<td>IE 3124: Industrial Ergonomics</td>
<td></td>
</tr>
<tr>
<td>IE 3913: Engineering Economy I</td>
<td></td>
</tr>
<tr>
<td>IE 4333: Production Control Systems I</td>
<td></td>
</tr>
<tr>
<td>IE 4613: Engineering Statistics I</td>
<td></td>
</tr>
</tbody>
</table>
CORE REQUIREMENTS
The doctoral program in Industrial and Systems Engineering requires, as a minimum, 48 hours of formal course work at the 6000-level or higher (beyond the bachelor's degree), and 20 hours of dissertation credit. At least 24 hours of course work should be at the full graduate level (8000-level, or IE 7000). As part of their program, all Ph.D. students will be required to take IE 6623 Engineering Statistics II and IE 6773 System Simulation I. The student's program should include:

1. Course work in Industrial and Systems Engineering (including courses from at least two different areas of Industrial and Systems Engineering), At least 30
2. Course work in a discipline other than Industrial and Systems Engineering as approved by the student's committee, At least 6
3. Other course work specified by the student's committee, At least 12
4. Dissertation credit (IE 9000), At least 20

CORE COURSES
IE 6113 Human Factors Engineering
IE 6123 Psychology of Human-Computer Interaction
IE 6173 Occupational Safety Engineering
IE 6193 Automotive Engineering
IE 6333 Production Control Systems I
IE 6353 Materials Handling
IE 6373 Automation
IE 6393 Concurrent Engineering
IE 6513 Engineering Administration
IE 6533 Project Management
IE 6543 Logistics Engineering
IE 6553 Engineering Law & Ethics
IE 6573 Process Improvement Engineering
IE 6613 Engineering Statistics I
IE 6623 Engineering Statistics II
IE 6653 Industrial Quality Control I
IE 6673 Reliability Engineering
IE 6713 Operations Research I
IE 6733 Linear Programming I
IE 6743 Engineering Design Optimization
IE 6753 Systems Engineering & Analysis
IE 6773 Systems Simulation I
IE 6923 Six Sigma Methods and Project
IE 6934 Information Systems for Industrial Engineering
STUDENT LEARNING OUTCOMES AND ASSESSMENT

All Ph.D. students in Industrial and Systems Engineering are expected to demonstrate a high level depth of knowledge and professional competence, particularly with regard to research skills. The assessment strategy for the Ph.D. program reflects this emphasis on research competence. Assessment methods include the following:

1. Monitoring admission rates,
2. Monitoring enrollment and numbers of degrees awarded,
3. Monitoring retention, including (a) average time spent in the program, and (b) program graduation rates,
4. Monitoring of placement of graduates in industrial, government, and academic institutions to gauge the job market’s needs,
5. Measurements of student participation in research activities, including (a) numbers of students participating in funded research projects, (b) numbers of students co-authoring journal articles, (c) numbers of students co-authoring conference presentations, and (d) numbers of students attending professional conferences,
6. Obtaining feedback directly from graduate students, both in informal interactions between faculty and students, and via formal assessment tools such as course evaluations, etc.

The Department’s Graduate Program Committee meets regularly to develop strategies for improving the graduate programs based on input from students, alumni, faculty members, the departmental industrial advisory council, and other stakeholder groups.

SUPPORT

The letter documenting the faculty’s support of this proposal to elevate the current program (Ph.D. in Engineering—Industrial Engineering concentration) to a stand alone program (Ph.D. in Industrial and Systems Engineering) is attached.
PROPOSED 4-LETTER ABBREVIATION

The abbreviation is IE.

EFFECTIVE DATE

The effective date is January 2011.
October 16, 2009

To Whom It May Concern

Dear Sir/Madam:

On August 22, 2008, the members of the Faculty of the Department of Industrial and Systems Engineering voted to pursue moving from the Ph.D. in Engineering (Industrial Engineering concentration) to a stand alone Ph.D. program. The current program has 50 students enrolled fall 2009. The high demand justifies the establishment of a stand alone doctoral degree program.

During the 2008/2009 academic year, as a part of planning the proposed change, the Department worked with the College of Engineering Dean’s office, the Chair of the University Committee on Courses and Curricula, and the Office of the Provost and Vice President for Academic Affairs.

On August 21, 2009, the members of the Faculty of the Department of Industrial and Systems Engineering voted to formally propose a stand alone degree program with a more descriptive name of the program that students are pursuing, namely a Ph.D. in Industrial and Systems Engineering. Subsequently, three proposals were finalized: MSU Degree Programs, IHL Authorization to Plan a New Degree Program, and IHL New Degree Program Proposal.

The establishment of a stand alone Ph.D. in Industrial and Systems Engineering will not require redefining the current program, a change in personnel, or an increase in budget.

On behalf of the Faculty, we thank you for your kind consideration of this matter. Please do not hesitate to contact us should you have questions.

Very truly yours,

John M. Usher, Ph.D.
Professor and Graduate Coordinator

Royce Bowden, Ph.D.
Professor and Head
PROTOCOL FOR GRADUATE STUDENT GRIEVANCE

The University recognizes the importance of ensuring the rights of its graduate students. When a situation arises whereby a graduate student or a group of graduate students believe that unfair, unprofessional, or inappropriate treatment/behavior has occurred relative to a major professor, other faculty, professional staff, a department head, a dean, etc. then efforts will be made to respond to the allegation(s) expeditiously and justly.

For all grievances concerning any form of harassment, an informal or formal procedure can be followed. The procedures used by both processes are different, but the intent is the same – to stop the harassment, resolve the complaint in a timely manner, and protect the individuals' rights. Both procedures begin with notification of the appropriate office within 30 calendar days of the incident. Complaints should be directed, either orally or in writing to the Office of Diversity and Equity Programs or one of the following: Human Resources Management (respondent is a member of the faculty or staff) or Office of Student Affairs (respondent is another student) The Office of Diversity and Equity Programs and the additional appropriate office will work in tandem.

For other grievances, the graduate coordinator should be contacted whenever problems cannot be suitably resolved between the parties and the grievance submitted in writing. The grievance should contain a statement that precisely describes the grievance and the remedy sought by the graduate student who is submitting the grievance. The graduate coordinator then schedules a meeting between the two parties in an attempt to establish resolution. If the grievance cannot be resolved, then the graduate coordinator informs the Department Head*. The Department Head* then petitions the Dean of the College in which the graduate student resides. The Dean of the College Office then establishes an advisory panel. The advisory panel will consist of five members, two individuals who have experience and expertise in the area in which the student is conducting research (appointed by the Dean of the College) one Giles Distinguished Professor (appointed by the Office of the Provost), one member of the Robert Holland Faculty Senate (appointed by the President of the Faculty Senate) and one graduate student (appointed by the Dean of the Graduate School). Copies of the student grievance are provided to each member of the panel and to the faculty member who has been accused.

The panel then convenes and the student is encouraged to appear in person to present the grievance or to be available at that time for purpose of questions of clarification. The faculty member is given due process with the opportunity to address the panel regarding the contents of the grievance, either in person, by telephone, or by written statement. In some cases, other individuals who are considered to have important information for purposes of clarification may be called by the panel to answer questions. Within 10 working days after receiving the grievance, the committee/panel must inform in writing the Department Head of the Department in which the faculty member resides of whether all or part of the grievance is deemed credible. If part or the entire grievance is deemed credible by the panel, then the Department Head determines the appropriate sanction imposed on the faculty member and also acts to provide what is needed to overcome the problems that led to the grievance. Within five days the Department Head determines the sanction and details the actions that will be taken to remedy the problem(s) that led to the grievance, requesting signed approval of the Dean of the College in which the student resides, the Dean of the Graduate School, and the Provost. Included will be a reasonable time frame for completion of the appropriate actions to achieve resolution of the grievance.
* In those cases where either a Department Head or a Dean is the subject of a grievance, then the Dean of the Graduate School will be responsible for establishing a panel and determining appropriate sanctions, if all or part of the grievance is deemed credible.