Call to Order: Dr. Rebecca Robichaux-Davis, Chair

Welcome and Introductions

Approval of Minutes: February 22, 2019

Report from UCCC: Dr. Dana Franz

1. Addition of Graduate Certificate in General Biology
2. Modification of MSIS in Information Systems (Campus 1)
3. Modification of MSIS in Information Systems (Campus 5)

Report from the Graduate School: Dr. Peter Ryan

Report from the Graduate Student Association: Caroline Kelsoe

Old Business

New Business

1. Recommended Revision to the Graduate Catalog Policies and Procedures

Adjourn
February 22, 2019

PRESENT: Amy Adkerson, Kevin Armstrong, Russell Carr, Frances Coleman (Patricia Matthes), Joel Collier, Lara Dodds, Dana Franz, Don Grebner, Larry Hanson, Richard Harkess, W. Brien Henry, Priscilla Hill, Caroline Kelsoe (Moniba Shabbir), Laura Marler, Beth Miller, Rebecca Robichaux-Davis, Chien Yu

ABSENT: Henk Arnoldus, Linkan Bian, Judy Bonner, Ashli Brown Johnson, Timothy Chamblee, Julie Jordan, Peter Ryan, Susan Seal, David Shaw

REGULARE ATTENDERS: Alexis Davis, Meredith Nagel, Erica Waldman

GUEST: Kevin Rogers

I. The February 22, 2019 meeting of the Graduate Council of Mississippi State University was called to order by Chair Dr. Rebecca Robichaux-Davis at 1:32 PM in the Templeton Room of Mitchell Memorial Library.

II. Dr. Robichaux-Davis asked for approval of the minutes from the January 25, 2019 meeting. Russell Carr moved to approve and Don Grebner seconded. The motion passed unanimously.

III. Report from University Committee on Courses and Curricula (UCCC): Dana Franz

- Modification of the Master of Business Administration/Project Management – Kevin Rogers
  Franz brought forward the modification for discussion and asked for a second; Laura Marler seconded. The modification will remove EC 8103, BIS 8113, BL 8113, and BQA 8233 from the Master of Business Administration core and add a three-hour elective. Franz stated these changes would reduce the MBA Project Management concentration to thirty-three hours.

  Dr. Rogers stated the department bench-marked the proposed modifications with peer institutions across the country, keeping the program competitive and attractive to students.

  After a brief discussion, Robichaux-Davis moved to approve the modification; motion passed unanimously.

IV. Report from the Graduate School: Brien Henry

Dr. Henry announced the following:

- The position of Associate Dean of The Graduate School has been posted. Please encourage any qualified applicants to apply.

- Spring 2019 application numbers are up 13.2% compared to last year, admits are up by 7.6%, and enrollment is up by 7.6%. Summer 2019 applications are down by 3.6% compared to last year and admits are up by 17.8%. Fall 2019 applications are up by 8.2% compared to last year and admits are up by 17.4%. Faster application turnover has aided in the increase of applications, admits, and enrollment.

- Recruiting efforts are expanding to target current undergraduate MSU students. The Graduate School is working with other entities on campus to host a graduate fair for
current students to be held in the Fall of 2019. Also, departments are asked to provide names and contact information of current high performing juniors and seniors in order to initiate early communication regarding graduate school at MSU.

- The Graduate School is currently working with colleges/departments to encourage rapid review of graduate applications for expedited decisions. Dr. Henry reported forty-one Summer applications and 349 Fall applications remained at the department level for at least 2 weeks.

- Several members of the graduate school attended the Conference of Southern Graduate Schools Annual Meeting where “Graduate Student Mental Health” was the theme. Graduate school stressors range from finances, major professors, feelings of isolation, and identity crisis. The health of our students is important and the Graduate School is encouraging departments to communicate with students the support and resources that are available to them on campus.

- Graduate Student Appreciation Week begins Monday, April 8th through April 12th. Events are scheduled each day of the week including Graduate Flag Display, Chick-Fil-A breakfast, Resume Photo sessions, Ice Cream on the Drill Field, and the Graduate Students Hall of Fame Award Reception.

V. Report from the Graduate Student Association (GSA): No Report

VI. There being no further business, Robichaux-Davis asked for a motion to adjourn. Grebner moved to adjourn, second by Hanson. The meeting adjourned at 1:50 p.m.
APPROVAL FORM FOR

DEGREE PROGRAMS

MISSISSIPPI STATE UNIVERSITY

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

College: Arts & Sciences  Department: Biological Sciences
Contact Person: Donna M. Gordon  Mail Stop: 9536  E-mail: dg300@msstate.edu

Nature of Change: Add new certificate

Program will be offered at: Distance Learning (Campus 5)
Date Initiated: January 7, 2019  Effective Date: August 21, 2019

Current Degree Program Name:
Major: Concentration:

New Degree Program Name: Certificate

Major: General Biology  Concentration: N/A

Summary of Proposed Changes:
The graduate certificate in General Biology is targeted to high school teachers that need to complete 18 credit hours of graduate-level Biology coursework to meet accreditation standards for teaching dual-enrollment courses. This program supports the state’s initiative to increase student preparedness for college by providing an avenue for high school teachers to meet these professional requirements. The certificate program consists of 18 credit hours that can be met by completing existing online graduate level courses offered by the Department. As the certificate program will complement the existing Masters in General Biology degree it may also serve as a conduit for recruiting students into this program.

Approved:

Date:

02-14-19

Chair, University Committee on Courses and Curricula

3/5/19

Chair, Graduate Council (if applicable)

3/10/19

Chair, Deans Council
Appendix 16: Intent to Offer, Modify, or Delete Certificate Program
(Submit Appendix 16 in both PDF and Word Document Formats)

<table>
<thead>
<tr>
<th>Institution:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of Implementation: August 21, 2019</td>
</tr>
<tr>
<td>Six-Digit CIP Code (&amp; Four-Digit Sequence Code if modification/deletion): 260101</td>
</tr>
<tr>
<td>Total Credit Hours: 18 credit hours</td>
</tr>
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</table>

CIP & Sequence codes: H11 Active Program Inventory

Program Title as will appear on Academic Program Inventory:
Graduate Certificate in General Biology

<table>
<thead>
<tr>
<th>Responsible Academic Unit(s):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Biological Sciences</td>
</tr>
<tr>
<td>College of Arts &amp; Science</td>
</tr>
<tr>
<td>Institutional Contact: Donna M. Gordon</td>
</tr>
<tr>
<td>Phone: 662-325-9337</td>
</tr>
<tr>
<td>Email: <a href="mailto:gordon@biology.msstate.edu">gordon@biology.msstate.edu</a></td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Vocational Certificate:</th>
<th>Credit Bearing Program:</th>
<th>Title IV Financial Aid Eligible:</th>
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<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Which of the following best describes the certificate program:

<table>
<thead>
<tr>
<th>Pre-Baccalaureate (Less than 1 Year)</th>
<th>Undergraduate program with duration less than one academic year; designed for completion in less than 30 credit hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Baccalaureate (At Least 1 Year)</td>
<td>Undergraduate program with duration at least 1 year; designed for completion in at least 30 hours; does not meet requirements for Associate’s or Bachelor’s degrees</td>
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<tr>
<td>Post-Baccalaureate</td>
<td>Program designed beyond the baccalaureate degree but does not meet the requirements for a master’s degree</td>
</tr>
<tr>
<td>Post-Master’s</td>
<td>Program designed beyond the master’s degree but does not meet the requirements for a doctoral degree</td>
</tr>
<tr>
<td>Other</td>
<td>Other certificate program not meeting one of the four criteria above.</td>
</tr>
</tbody>
</table>

Program Summary:
The graduate certificate is targeted to high school science teachers that need to complete graduate credit hours within the field of Biology for the purpose of teaching dual-enrollment courses (see attachment). The graduate certificate may also be beneficial to community college faculty that need additional graduate credit hours in the field of Biology for instructional purposes. This is part of the MS in General Biology degree program but can serve as a stand-alone graduate certificate.

Donna Gordon
Institutional Contact Signature
Date: March 5, 2019

Chief Academic Officer Signature
Date

*Certificate programs added to the Academic Program Inventory must be credit-bearing and be vocational in nature with some professional benefit to program completers. Undergraduate certificates are eligible for Title IV financial aid programs. Certificate programs that are not credit-bearing or are lifelong learning in nature (i.e. photography, travel, etc.) with no professional component should not be included in the Academic Program Inventory.
General Biology Certificate

1. CATALOG DESCRIPTION and 2. CURRICULUM OUTLINE:

<table>
<thead>
<tr>
<th>PROPOSED NEW CERTIFICATE DESCRIPTION</th>
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<tbody>
<tr>
<td><strong>Certificate: General Biology</strong></td>
</tr>
<tr>
<td>The General Biology certificate was developed to enhance the educational opportunity of instructors at the high school and community college level. The program provides a path to meet the graduate subject credit hour requirement for those students that may have earned a Master’s degree outside of the STEM field. Certificate requirements are selected to expose students to course work across the breadth of biological sciences while providing a level of content area flexibility.</td>
</tr>
</tbody>
</table>

**Requirements:** Successful completion of 18 credit hours of graduate study in the Department of Biological Sciences. Certificate requirements can be met by completing online graduate level courses offered by the Department. A minimum cumulative GPA of 3.00 on all courses taken to acquire the certificate is required. A maximum of 6 graduate credit hours may be transferred into the certificate program with approval made on a case-by-case basis by the graduate coordinator and/or graduate committee. Only courses completed with a B grade or higher will qualify. Students interested in using the hours earned in acquiring a certificate towards the completion of the General Biology graduate degree will be advised that credit hours from other institutions cannot be used to fulfill the 33 credit hours of the related Master’s degree program. Graduate students in good academic standing that are enrolled in the General Biology degree program can apply completed program coursework towards the General Biology certificate at any time.

**Admission:** The certificate program will be open to students in good standing who are enrolled at the University as: a) an unclassified graduate student, or b) in any online graduate degree program.

<table>
<thead>
<tr>
<th>Proposed Curriculum Outline</th>
<th>Required Hours</th>
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<tbody>
<tr>
<td><strong>Required courses:</strong></td>
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</tr>
<tr>
<td>BIO 8053: Comprehensive Study of Animals</td>
<td>6</td>
</tr>
<tr>
<td>BIO 8063: Comprehensive Study of Plants</td>
<td></td>
</tr>
<tr>
<td><strong>Electives:</strong></td>
<td></td>
</tr>
<tr>
<td>Selected from the following with no more than 9 credit hours coming from 6000-level courses.</td>
<td>12</td>
</tr>
<tr>
<td>BIO6013: Genetics &amp; Molecular Biology</td>
<td></td>
</tr>
<tr>
<td>BIO6023: Principles of Evolutionary Biology</td>
<td></td>
</tr>
<tr>
<td>BIO6033: Fundamentals of Biotechnology</td>
<td></td>
</tr>
<tr>
<td>BIO6043: Developmental &amp; Reproductive Biology</td>
<td></td>
</tr>
<tr>
<td>BIO8023: Modern Microbiology</td>
<td></td>
</tr>
<tr>
<td>BIO8033: Advanced Cell Biology</td>
<td></td>
</tr>
<tr>
<td>BIO8043: Ecology &amp; the Environment</td>
<td></td>
</tr>
<tr>
<td>BIO8093: Experimental Biology &amp; Biostatistics</td>
<td></td>
</tr>
</tbody>
</table>
3. STUDENT LEARNING OUTCOMES AND ASSESSMENTS

The certificate program meets the needs of high school instructors that have a Master’s degree but require 18 credit hours of biology coursework to teach dual enrollment courses within this field. The program will also benefit community college instructors that may have a Master’s degree but require graduate level coursework to acquire 'a concentration within the teaching discipline'. As all coursework can be completed in an online format, the certificate program provides an avenue for practicing teachers to attain these subject specific, graduate-level credit hours while continuing to work. This certificate program supports a state-wide and regional effort aimed at graduating high school students that are college and career ready by preparing their teachers with the required graduate-level qualifications to teach advanced coursework. The certificate program may also function as a recruiting mechanism to attract students to the existing M.S. in General Biology degree program as courses are drawn from this program.

Expected Learning Outcomes

By the end of the program, the student will be able to:

- Demonstrate mastery of content knowledge across multiple disciplines of biology.
- Develop skills that transition into the establishment of an enhanced learning environment for high school students enrolled in AP-Biology and/or dual enrollment courses.
- Demonstrate an understanding of new scientific developments in the field and use these findings to augment their course curricula.

4. SUPPORT

Implementation of the General Biology certificate program will require no additional resources as the program utilizes established distance courses and will take advantage of the infrastructure already in place to administer the Master’s in General Biology degree program. A letter of support from the Department of Biological Sciences Graduate Committee is supplied.

COURSE DESCRIPTIONS FOR THE CERTIFICATE PROGRAM

**BIO 6013 Genetic & Molecular Biology:** (3) Three hours video and online. Analysis of the transmission of genetic information from molecular to organismal levels; examination of ways in which genotype determines phenotype. Delivery Method: Online, or Web-based

**BIO 6023 Principles of Evolutionary Biology:** (3) Three hours video and online. Current concepts in genetic variation, natural selection, and adaptation of populations; speciation, extinction, and phylogenetics; patterns of human evolution. Delivery Method: Online, Internet or Web-based

**BIO 6033 Fundamentals of Biotechnology:** (3) Three hours video and online. Fundamental principles of animal and plant biotechnology including recombinant DNA technology, gene-
based diagnostics, genetically modified organisms and transgenics. Delivery Method: Online, Internet or Web-based

**BIO 6043 Developmental & Reproductive Biology:** (3) Three hours video and online. Study of reproduction and development from gametes through birth in mammals; focusing on stages, anatomy, physiology, mechanisms, and genetics. Delivery Method: Online, Internet or Web-based

**BIO 8023 Modern Microbiology:** (3) Three hours video and online. Fundamental principles of microbiology, including microbial structure, replication, and diversity; role of microorganisms in human health and the environment. Delivery Method: Online, Internet or Web-based

**BIO 8033 Advanced Cell Biology:** (3) Three hours video and online. Study of eukaryotic cellular and sub-cellular structure and function; integration of cellular processes to understand the cell as a whole. Delivery Method: Online, Internet or Web-based

**BIO 8043 Ecology & the Environment:** (3) Three hours video and online. Investigation of biodiversity, ecological hierarchies, and interactions between biota and the environment. Includes an introduction to contemporary environmental science issues. Delivery Method: Online, Internet or Web-based

**BIO 8053 Comprehensive Study of Animals:** (3) Three hours video and online. Study of invertebrate and vertebrate animals, including reproduction, development, physiology, behavior, ecology, and evolution. Delivery Method: Online, Internet or Web-based

**BIO 8063 Comprehensive Study of Plants:** (3) Three hours video and online. Study of plants from bryophytes to angiosperms, including growth, photosynthesis, respiration, nutrition, reproduction, ecology, and evolution. Delivery Method: Online, Internet or Web-based

**BIO 8093 Experimental Biology & Biostatistics:** (3) Three hours video and online. Experimental design and methods for statistical analysis of biological data, with an emphasis on inquiry using the scientific method. Delivery Method: Online, Internet or Web-based
February 14, 2019

Dr. Dana Pomykal Franz, Chair
University Committee on Courses and Curricula
Mississippi State University
PO Box 5268
Mississippi State, MS 39762

Dear Dr. Franz and Committee,

I am writing to provide my support for Dr. Gordon’s proposed Certificate Program. As indicated by Dr. Gordon, this certificate program would create an opportunity for secondary school educators to attain documented competency for teaching biology, particularly advanced placement courses on the topic. While we have a non-thesis MS program, the Master of Science in General Biology (MSGB) Program, the certificate program would provide a training option that meets the expectations placed on secondary school educators. Further, all of the courses required for the proposed certification program are already being offered as part of the MSGB program. Hence, the establishment of this program might help reach optimal enrollment in courses offered for the MSGB.

Sincerely,

Mark Welch

Biological Sciences Graduate Coordinator and Graduate Committee

Signature: [Signature]
Email: ballinger@biology.msstate.edu

Signature: [Signature]
Email: gervin@biology.msstate.edu

Signature: [Signature]
Email: thornton@biology.msstate.edu
Support Letter

Final Audit Report

Created: 2019-02-14
By: Mark Welch (mw497@msstate.edu)
Status: Signed
Transaction ID: CBCHBBAABAABAAJHJH5C9XTIMWVmgS94rd5CVoxZeoo63a

"Support Letter" History

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DUAL ENROLLMENT

Policy Statement

For SACSCOC purposes, “dual enrollment” refers to courses taught to high school students for which the students receive both high school credit and college credit, regardless of location or mode of delivery. This would include such coursework offered at the high school, on the institution’s campus, or via distance education. This also includes programs and courses that may be offered under different names such as “early college,” “dual credit,” or “concurrent enrollment.” The academic rigor of such coursework matches the quality of other institutional coursework, regardless of location or mode of delivery.

Institutions must ensure that their dual enrollment courses and programs comply with the Principles of Accreditation. This applies to all such educational programs and services, wherever located or however delivered. In addition, institutions being reviewed should also be prepared to demonstrate clear institutional control over these dual enrollment courses and programs.

Applying the Principles of Accreditation to Dual Enrollment

With the underlying concept that the Principles of Accreditation apply to all programs of the institution, regardless of mode of delivery, institutions should consider the following statements in implementing and reporting on dual enrollment programs. Similarly, reviewers should consider these statements when approving or evaluating dual enrollment programs.

Substantive Change

An institution offering dual enrollment ensures appropriate notification and prior approval (if needed) of off-campus instructional sites where dual enrollment courses and programs are offered. Another aspect of dual enrollment that may require notification or approval could be the use of a cooperative academic arrangement to deliver courses. (Please refer to the SACSCOC policy “Substantive Change for SACSCOC Accredited Institutions.”)

Faculty

SACSCOC defines an “instructor of record” as the faculty member qualified to teach the course. This person has overall responsibility for the development and implementation of the syllabus and for issuing grades. The faculty member will provide direct instruction for the course.

The institution ensures appropriate faculty qualifications for those who provide instruction for dual enrollment courses; these faculty members possess the same academic credentials and/or documented professional experience required by the institution of all of its faculty. Graduate teaching assistants, if they are the instructor of record and providing direct instruction, should meet the same academic and/or professional criteria. In all cases, the institution bears responsibility for documenting and justifying the qualifications of its dual enrollment instructors, and they are included on the Faculty Roster when appropriate for review by a SACSCOC committee. (Please refer to the Resource Manual, Standard 6.2.b, for a broader discussion of faculty qualifications.)

An institution offering dual enrollment courses or programs ensures that a sufficient number of full-time faculty members teach and/or provide appropriate oversight for the courses/programs. Materials submitted for review by SACSCOC explain the nature of faculty oversight that ensures the quality and integrity of the courses offered. The institution has clear criteria for the evaluation of faculty teaching dual enrollment courses and demonstrates the use of these criteria.

Curriculum and Instruction
For all dual enrollment courses offered, the institution employs sound and acceptable practices for determining the amount and level of credit awarded. Course content and rigor of dual enrollment courses are comparable to that of the same courses taught to the institution’s other students. (Please see the SACSCOC policy “The Quality and Integrity of Educational Credentials.”)

The faculty assumes primary responsibility for dual enrollment courses. Such oversight ensures both the rigor of programs/courses and the quality of instruction.

Institutional Effectiveness

Dual enrollment students are included within the processes used to ensure the effectiveness of campus programs. If dual enrollment students can earn a credential, then that credential and those students should be part of the institutional effectiveness process of the institution. The institution regularly assesses the effectiveness of its provision of library/learning resources and student support services for dual enrollment.

Library and Learning Resources

Students have access to appropriate library resources, and the institution demonstrates that students are able to use such resources effectively. If the high school is the provider of these materials, the institution establishes the appropriateness of the collections for the courses and programs offered. The institution ensures that its students have access to regular and timely instruction in the use of library and other learning resources.

Academic and Student Support Services

Academic support services are appropriate for the courses and programs offered. Institutions ensure that dual enrollment students are appropriately advised regarding the collegiate curriculum. Student support services are appropriate for dual enrollment students.

Institutions have an adequate and published procedure for resolving written student complaints, and the institution follows its policies and procedures. The institution ensures that its dual enrolled students are appropriately oriented regarding their rights and responsibilities. Documented procedures assure that security of personal information is protected.

Admissions and Transparency

The institution implements appropriate eligibility and placement procedures to ensure that potential dual enrollment students are prepared for college-level courses. Dual enrollment students are usually admitted under exceptions to an institution’s published admissions policies, and the institution follows commonly accepted practices in making such exceptions. Advertising, recruiting, and admissions information adequately and accurately represents the programs, requirements, and services available to students.

Statements and other representations regarding the ability to transfer credit earned in dual enrollment programs and courses are accurate and complete. The institution ensures that its registration and transcripting practices for dual enrollment students are consistent with those in effect for all other students.

Facilities

Dual enrollment courses are offered in adequate physical facilities, whether under the control of the institution or under the control of the high school.

Document History
Approved: SACSCOC Board of Trustees, June 2018
Revised: SACSCOC Board of Trustees, December 2018
APPROVAL FORM FOR

DEGREE PROGRAMS

MISSISSIPPI STATE UNIVERSITY

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College: Business

Department: Management & Information Systems

Contact Person: Robert Otondo

Mail Stop: 9581

Nature of Change: Modification

E-mail: rotondo@business.msstate

Program will be offered at: Starkville (Campus 1)

Date: Spring 2019

Current Degree Program Name: Master of Science

Effective Date: Fall 2019

Major: Information Systems

Concentration:

New Degree Program Name: Select One

Major:

Concentration:

Summary of Proposed Changes:

1. Drop the requirement that no more than 6 hours of coursework may be below the 8000 level.
2. Waive the 3-hour programming requirement for applicants with 6 hours of programming.
3. Substitute BIS 8413 for BIS 8513 and BIS 8613 as required courses.
4. Substitute free electives for the required BIS Elective courses.
5. Update foundation course list and BIS 8213 course title to reflect course changes.

__________________________
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

☐ SACS Letter Sent

__________________________
3/4/19
To: University Committee on Courses and Curricula

From: BIS Faculty, Management & Information Systems Department
        Starkville Campus

Date: January 9, 2019

The BIS faculty have reviewed the proposed modifications to the Master of Science in Information Systems (MSIS) at our Starkville and Distance campuses. The proposed changes will update these programs to reflect changes in the information systems profession and improve the efficiency of course delivery.

We support this proposal, and appreciate your consideration of it. If you have any questions, or need any additional information, please contact Dr. Robert Otondo at rotondo@business.msstate.edu.

Thank you for your time in considering this request.

Dr. James J. Chrisman, Department Head

Dr. Robert Otondo

Dr. Kent Marett

Dr. Merrill Warkentin

Dr. Gary Templeton

Dr. David Sikolia

Mr. Steve Canfield
GRADUATE DEGREE MODIFICATION OUTLINE FORM

1. CATALOG DESCRIPTION

See Item 2 below.

2. CURRICULUM OUTLINE

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

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<thead>
<tr>
<th>CURRENT Degree Description</th>
<th>PROPOSED Degree Description</th>
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<td>Degree: MSIS</td>
<td>Degree: MSIS</td>
</tr>
<tr>
<td>Major:</td>
<td>Major:</td>
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<tr>
<td>Concentrations:</td>
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</tr>
<tr>
<td>&quot;[Click here and type old degree description]&quot;</td>
<td>&quot;[Click here and type new degree description]&quot;</td>
</tr>
<tr>
<td>The mission of the Master of Science in Information Systems program at MSU is to prepare students to become information systems professionals who can successfully develop, acquire, and integrate information technology across levels and functions of a firm in the continually changing global business environment. These goals will be accomplished by equipping students with critical technical skills, strengthening communication skills, enhancing the students’ understanding of business functions/operations, developing professional attitudes, and enhancing the students’ understanding of the link between an organization and information technology.</td>
<td>The mission of the Master of Science in Information Systems program at MSU is to prepare students to become information systems professionals who can successfully develop, acquire, and integrate information technology across levels and functions of a firm in the continually changing global business environment. These goals will be accomplished by equipping students with critical technical skills, strengthening communication skills, enhancing the students’ understanding of business functions/operations, developing professional attitudes, and enhancing the students’ understanding of the link between an organization and information technology.</td>
</tr>
<tr>
<td>&quot;[Click here and type old concentration description]&quot;</td>
<td>&quot;[Click here and type new concentration description]&quot;</td>
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</tbody>
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<th>Required Hours</th>
<th>PROPOSED CURRICULUM OUTLINE</th>
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<tr>
<td>Foundational Courses</td>
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</tbody>
</table>

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- BIS 8313 – Advanced Database Design Administration
- BIS 8513 – Business Telecommunications
- BIS 8613 – MIS Administration
- BIS 8753 – Information Systems Collaborative Project

**BIS Elective Courses**
Select two of the following:
- BIS 6113 – Business Information Systems Security Management
- BIS 6513 – Microcomputers and Networks
- BIS 6523 – Advanced Languages II
- BIS 6533 – Decision Support Systems

**Programming Courses**

**Free Electives**
- Twelve hours of free electives (6000-level or higher) for students who must take 3 hours of programming courses to meet Major Required Courses.
- Fifteen hours of free electives (6000-level or higher) for students with 6 or more hours of programming coursework.

**Concentration 1. Courses**
N/A

**Total Hours**
30

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**Total Hours**
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3. JUSTIFICATION AND LEARNING OUTCOMES

Justification and Rationale of Proposed Changes: The current MSIS program has had decreasing enrollments for several years. The BIS faculty believes that one way to increase the number of students is by increasing the flexibility of the MSIS curriculum. This can be done modifying the “free” and “required” elective requirements so that it is easier for students to pursue IS-related graduate minors and certificates (e.g., cyber security and data analytics) that are in demand by employers.

Proposed changes:

A. Drop the requirement that no more than 6 hours of coursework may be below the 8000 level.

Justification: This change will give students more flexibility when choosing electives and minors that complement the 15 hours of BIS Required Courses. This requirement was originally intended to restrict MSIS students to taking BIS courses. As time progressed, more computer-related electives were being offered by other departments. This change will help MSIS students tailor their program of study to meet their individual educational and professional needs.

This change should also make the degree more attractive to more students, especially those who are thinking of pursuing graduate work in related areas such as cyber security or data analytics. By bringing the MSIS program directly in line with the Graduate Catalog’s requirement that non-thesis master’s programs must contain “at least 15 hours of 8000 level or higher” (http://catalog.msstate.edu/graduate/academic-policies/masters-requirements/#programofstudytext), the change should also simplify advising of MSIS students and applicants.

B. Waive the 3-hour programming requirement for applicants with 6 hours of programming coursework.

Justification: This requirement places an undue burden on those students with strong programming backgrounds. The purpose of this requirement is to ensure that MSIS students graduate with sufficient programming skills. However, many students have 6 or more hours of programming before they are admitted to the MSIS program, thus making the requirement redundant and unnecessary in such cases. Indeed, this requirement – which places a penalty on those students with a strong undergraduate programming backgrounds – may actually deter these desirable students from applying for or accepting admission to our MSIS program.

The waiver of the 3-hour programming requirement will be offset by adding 3 hours of Free Electives for students granted this waiver (Item 3.E below).

C. Substitute BIS 8413 for BIS 8513 and BIS 8613 as required courses.

Justification: Knowledge of data analytics has become a critical requirement for today’s information systems professionals. BIS 8413 covers the important area of data analytics. Students with knowledge and skills in data analytics are in high demand by employers.

Justification: Much of BIS 8513’s (Business Telecommunications) and BIS 8613’s (MIS Administration) course content are duplicated in other BIS courses. The course content of BIS 8513 overlaps that of other BIS courses (e.g., BIS 6513, Microcomputers & Networks; BIS 8113, Management Information Technology and Systems). The course content of BIS 8613 overlaps that of other Management courses (e.g., MGT 8113, Leadership Skills).

Eliminating these courses allows the BIS area to make better use of its faculty resources and to add other courses that can enhance an MSIS student’s employability (e.g., BIS 8413, Data Analytics). The MGT courses that overlap BIS 8613 have sufficient room to accommodate MSIS students.

The reduction of required BIS courses by 3 hours will be offset by adding 3 hours of Free Electives (Item 3.E below).
D. Substitute free electives for the required BIS Elective courses.

Justification: Replacing required BIS Electives with “free electives” gives MSIS students greater flexibility in choosing an IS-related minor. The “BIS Elective Courses” requirement (i.e., two of BIS 6113, BIS 6513, BIS 6523, or BIS 6533) was originally intended to force MSIS students to take more BIS courses. While that requirement did increase enrollments in those BIS courses, it also prevented MSIS students from obtaining a minor in a complimentary area. We believe MSIS students will be better served by a broader graduate education that includes IS-related but non-BIS content such as cyber security and/or data analytics.

A second reason for reclassifying the four BIS electives as “free electives” rather than “required electives” is that only two of the latter electives (i.e., BIS 6113 and BIS 6523) are taught online due to faculty resource constraints. This lack of alternatives creates difficulties for distance students who have already taken the 4000-level version of those two classes. These difficulties are described in MSU AOP 11.04, Item #5 (revised March 2014):

“Students who have already taken a course for credit at the 4000 level are not allowed to enroll in the same course for credit at the 6000 level without explicit permission of the instructor and graduate coordinator of the department offering the course, and the dean of the Graduate School.”

The elimination of the 6 hours of required BIS Elective courses will be offset by adding 6 hours of Free Electives (Item 3.E below). This change also means that MSIS students can still take any of the four “required electives” if they wish even though they will not be required to do so.

E. Increase Free Electives to 9 or 12 hours (depending upon number of programming hours taken by the student before entering the MSIS program) to accommodate Items 3.B, 3.C, and 3.D above.

Justification: The addition of 9 or 12 hours of Free Elective courses offsets the 3-hour programming course waiver (if warranted) in Item 3.B, the elimination of 3 hours of BIS Required Courses in Item 3.C, and the elimination of 6 hours of BIS Elective course requirement in Item 3.D. Substituting BIS 8413 for BIS 8513 and BIS 8613 allows students to learn newer material required by today’s IS professionals. Moving 6 hours from “required electives” to “free electives” classification gives MSIS students greater flexibility in choosing an IS-related minor if they so desire. As with Item 3.D above, we believe MSIS students will be better served by a broader graduate education that includes non-BIS content.

F. Update BIS 8213 course title to reflect modification of that course.

Justification: This course title change is explained in the accompanying Course Modification Proposal for BIS 8213.

G. Questions to address:

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

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

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

No.
**Learning outcomes:** MSIS students will be able to meet the following learning outcomes:

- Demonstrate critical thinking when applying managerial principles and problem-solving/decision-making techniques in a variety of business functions.
- Demonstrate strong communication skills.
- Demonstrate effective inter-personal skills and professional attitudes in a team environment.
- Demonstrate an understanding of key concepts and knowledge in important Information Systems domains, including database and related system design and implementation; information security, privacy, and ethics in organizations; business process modeling, analysis and design; structured programming and problem solving, and information technology infrastructure.
- Demonstrate technical skills in important Information Systems domains, including database and related system design and implementation; information security, privacy, and ethics in organizations; business process modeling, analysis and design; and structured programming and problem solving.

4. **SUPPORT**

A letter of support signed by the BIS faculty and Head of the Management & Information Systems Dept. is included with this proposal.

5. **EFFECTIVE DATE**

Fall 2019
APPROVAL FORM FOR

DEGREE PROGRAMS

MISSISSIPPI STATE UNIVERSITY

NOTE: This form is a cover sheet that must accompany the degree program change proposal. The actual proposal should be prepared in accordance with format requirements provided in the Guide and Format for Curriculum Proposals published by the UCCC. Both cover sheet and proposal should be submitted, along with all required copies, to UCCC, Garner Hall, Room 279, Mail Stop 9702.

College: Business
Contact Person: Robert Otundo
Nature of Change: Modification
Program will be offered at: Distance Learning (Campus 5)

Department: Management & Information Systems
Mail Stop: 9581
E-mail: rotondo@business.msstate.edu
Date: Spring 2019

Current Degree Program Name: Master of Science
Major: Information Systems
Concentration:

New Degree Program Name: Select One
Major:
Concentration:

Effective Date: Fall 2019

Summary of Proposed Changes:
1. Drop the requirement that no more than 6 hours of coursework may be below the 8000 level.
2. Waive the 3-hour programming requirement for applicants with 6 hours of programming.
3. Substitute BIS 8413 for BIS 8513 and BIS 8613 as required courses.
4. Substitute free electives for the required BIS Elective courses.
5. Update foundation course list and BIS 8213 course title to reflect course changes.

__________________________
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

☐ SACS Letter Sent

3/4/19
To: University Committee on Courses and Curricula

From: BIS Faculty, Management & Information Systems Department
Starkville Campus

Date: January 9, 2019

The BIS faculty have reviewed the proposed modifications to the Master of Science in Information Systems (MSIS) at our Starkville and Distance campuses. The proposed changes will update these programs to reflect changes in the information systems profession and improve the efficiency of course delivery.

We support this proposal, and appreciate your consideration of it. If you have any questions, or need any additional information, please contact Dr. Robert Otondo at rotondo@business.msstate.edu.

Thank you for your time in considering this request.

Dr. James J. Chrisman, Department Head

Dr. Robert Otondo

Dr. Kent Maret

Dr. Merrill Warkentin

Dr. Gary Templeton

Dr. David Sikolia

Mr. Steve Canfield
### GRADUATE DEGREE MODIFICATION OUTLINE FORM

1. **CATALOG DESCRIPTION**

   See Item 2 below.

2. **CURRICULUM OUTLINE**

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

<table>
<thead>
<tr>
<th>CURRENT Degree Description</th>
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<tr>
<td>Major:</td>
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<td>Concentrations:</td>
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</tr>
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</table>

"[Click here and type old degree description]"

"[Click here and type new degree description]"

The mission of the Master of Science in Information Systems program at MSU is to prepare students to become information systems professionals who can successfully develop, acquire, and integrate information technology across levels and functions of a firm in the continually changing global business environment. These goals will be accomplished by equipping students with critical technical skills, strengthening communication skills, enhancing the students’ understanding of business functions/operations, developing professional attitudes, and enhancing the students’ understanding of the link between an organization and information technology.

"[Click here and type old concentration description]"

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<td>College Required Courses</td>
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<tr>
<td>Foundational Courses</td>
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Total Hours
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