DOCUMENT N: COURSE AND PROGRAM DEVELOPMENT COVER SHEET
See Course and Program Development Policy and Procedures for Instructions

SCHOOL: LAW ☐ MSB ☒ YGCLA ☐ Contact Name: Danielle Fowler Phone: x6625

DEPARTMENT / DIVISION: Information Systems & Decision Science

SHORT DESCRIPTION OF PROPOSAL (State Document N action item from Box 3 below and program name OR course name, code, & number as applicable):

8: New Course INSS 422 Business Intelligence BS MIS

PROPOSED SEMESTER OF IMPLEMENTATION: Fall ☒ Spring ☐ Year: 2010

Box 1: TYPE OF ACTION ADD(NEW) ☒ DEACTIVATE ☐ MODIFY ☐ OTHER ☐
Box 2: LEVEL OF ACTION Non-Credit ☐ Undergraduate ☒ Graduate ☒ OTHER ☐

Box 3: ACTION ITEM (check appropriate boxes)

- 1. Experimental Course ¹
- 2. Course Title
- 3. Course Credits
- 4. Course Number
- 5. Course Level
- 6. Pre & Co-Requisite
- 7. Course Description
- 8. New Course ☒
- 9. Deactivate a Course
- 10. Program Requirements
- 11a. UG Specialization (24 credits or less)
- 11b. Masters Specialization (12 credits or less)
- 11c. Doctoral Specialization (18 credits or less)
- 12. Minor (add or delete)
- 13. Closed Site Program
- 14. Program Suspension
- 15. Program Reactivation
- 16a. Certificate Program (ug/g) exclusively within existing degree program
- 16b. Certificate Program (ug/g) where degree programs do not exist or where courses are selected across degree programs (12 or more credits)
- 17. Off-Campus Delivery of Existing Program
- 18a. UG Concentration (exceeds 24 credit hrs)
- 18b. Masters Concentration (exceeds 12 credit hrs)
- 18c. Doctoral Concentration (exceeds 18 credit hrs)
- 19. Program Title Change
- 20. Program Termination
- 21. New Degree Program
- 22. Other

DOCUMENTS REQUIRED

- 1. Experimental Course ¹
- 2. Course Title
- 3. Course Credits
- 4. Course Number
- 5. Course Level
- 6. Pre & Co-Requisite
- 7. Course Description
- 8. New Course
- 9. Deactivate a Course
- 10. Program Requirements
- 11a. UG Specialization (24 credits or less)
- 11b. Masters Specialization (12 credits or less)
- 11c. Doctoral Specialization (18 credits or less)
- 12. Minor (add or delete)
- 13. Closed Site Program
- 14. Program Suspension
- 15. Program Reactivation
- 16a. Certificate Program (ug/g) exclusively within existing degree program
- 16b. Certificate Program (ug/g) where degree programs do not exist or where courses are selected across degree programs (12 or more credits)
- 17. Off-Campus Delivery of Existing Program
- 18a. UG Concentration (exceeds 24 credit hrs)
- 18b. Masters Concentration (exceeds 12 credit hrs)
- 18c. Doctoral Concentration (exceeds 18 credit hrs)
- 19. Program Title Change
- 20. Program Termination
- 21. New Degree Program
- 22. Other

IMPACT REVIEWS

- 1. Experimental Course ¹
- 2. Course Title
- 3. Course Credits
- 4. Course Number
- 5. Course Level
- 6. Pre & Co-Requisite
- 7. Course Description
- 8. New Course
- 9. Deactivate a Course
- 10. Program Requirements
- 11a. UG Specialization (24 credits or less)
- 11b. Masters Specialization (12 credits or less)
- 11c. Doctoral Specialization (18 credits or less)
- 12. Minor (add or delete)
- 13. Closed Site Program
- 14. Program Suspension
- 15. Program Reactivation
- 16a. Certificate Program (ug/g) exclusively within existing degree program
- 16b. Certificate Program (ug/g) where degree programs do not exist or where courses are selected across degree programs (12 or more credits)
- 17. Off-Campus Delivery of Existing Program
- 18a. UG Concentration (exceeds 24 credit hrs)
- 18b. Masters Concentration (exceeds 12 credit hrs)
- 18c. Doctoral Concentration (exceeds 18 credit hrs)
- 19. Program Title Change
- 20. Program Termination
- 21. New Degree Program
- 22. Other

APPROVAL SEQUENCE

- 1. Experimental Course ¹
- 2. Course Title
- 3. Course Credits
- 4. Course Number
- 5. Course Level
- 6. Pre & Co-Requisite
- 7. Course Description
- 8. New Course
- 9. Deactivate a Course
- 10. Program Requirements
- 11a. UG Specialization (24 credits or less)
- 11b. Masters Specialization (12 credits or less)
- 11c. Doctoral Specialization (18 credits or less)
- 12. Minor (add or delete)
- 13. Closed Site Program
- 14. Program Suspension
- 15. Program Reactivation
- 16a. Certificate Program (ug/g) exclusively within existing degree program
- 16b. Certificate Program (ug/g) where degree programs do not exist or where courses are selected across degree programs (12 or more credits)
- 17. Off-Campus Delivery of Existing Program
- 18a. UG Concentration (exceeds 24 credit hrs)
- 18b. Masters Concentration (exceeds 12 credit hrs)
- 18c. Doctoral Concentration (exceeds 18 credit hrs)
- 19. Program Title Change
- 20. Program Termination
- 21. New Degree Program
- 22. Other

Box 4: DOCUMENTATION (check boxes of documents included)

- X ☒ N. This Cover Sheet
- X ☒ O. Summary Proposal
- X ☒ P. Course Definition Document
- Q. Full 5-page MHEC Proposal
- R. Financial Tables (MHEC)
- S. Other documents as may be required by MHEC/USM. See http://www.ubalt.edu/downloads/program_approval_Grid_B-3-09.docx

¹ Approval of experimental course automatically lapses after two offerings unless permanently approved as a new course.
² See USM Policy on the Review and Abolition of Academic Programs (http://www.usmd.edu/regents/bylaws/SectionIII/III702.html) for list of information that must be provided for this action.
³ Letter of Intent is required by USM at least 30 days before a full proposal can be submitted. Letter of Intent requires only the approval of the dean and the provost and is forwarded to USM by the Office of the Provost.
SCHOOL: LAW □ MSB □ YGCLA □  Contact Name: Danielle Fowler  Phone: x6625

DEPARTMENT / DIVISION: Information Systems & Decision Science

SHORT DESCRIPTION OF PROPOSAL (State Document N, Box 3, action item and program name OR course name, code, & number as applicable):

<table>
<thead>
<tr>
<th>#</th>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>New Course</td>
<td>INSS 422 Business Intelligence BS MIS</td>
</tr>
</tbody>
</table>

PROPOSED SEMESTER OF IMPLEMENTATION: Fall, 2010

O-1: Briefly describe what is being requested:

- Addition of required course for BS in Management Information Systems:
  
  INSS 422 Business Intelligence (3)  (Prereq: OPRE 201 and INSS 421, or permission of instructor)

- Addition of approved INSS elective to the BSBA Computer Information Systems specialization:
  
  INSS 422 Business Intelligence (3)  (Prereq: OPRE 201 and INSS 421, or permission of instructor)

For new courses or changes in existing courses (needed by Registrar)

<table>
<thead>
<tr>
<th>OLD Title:</th>
<th>Course # / HEGIS Code:</th>
<th>Credits:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NEW Title: Project Management  Course # / HEGIS Code: INSS 370  Credits: 3

O-2: Set forth the rationale for the proposal:

The MIS faculty in conjunction with the MIS advisory board have conducted a complete curriculum review of the B.S. in MIS program. This course is one of three required courses identified as needed in the revised program.
SCHOOL: LAW  MSB  YGCLA  Contact Name: Danielle Fowler  Phone: x6625

DEPARTMENT / DIVISION: Information Systems & Decision Science

SHORT DESCRIPTION OF PROPOSAL (State Document N action item from Box 3 and program name OR course name, code, & number as applicable):  
8: New Course INSS 422 Business Intelligence  BS MIS

PROPOSED SEMESTER OF IMPLEMENTATION: Fall  Spring  Year: 2010

<table>
<thead>
<tr>
<th>Box 5: IMPACT REVIEW</th>
<th>SIGNATURES (see procedures for authorized signers)</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Library</td>
<td>Director or designee:</td>
<td></td>
</tr>
<tr>
<td>☐ No impact</td>
<td>☐ Impact statement attached</td>
<td></td>
</tr>
<tr>
<td>b. OTS</td>
<td>CIO or designee:</td>
<td></td>
</tr>
<tr>
<td>☐ No impact</td>
<td>☐ Impact statement attached</td>
<td></td>
</tr>
<tr>
<td>c. University Relations</td>
<td>Director or designee:</td>
<td></td>
</tr>
<tr>
<td>☐ No impact</td>
<td>☐ Impact statement attached</td>
<td></td>
</tr>
<tr>
<td>d. Admissions</td>
<td>Director or designee:</td>
<td></td>
</tr>
<tr>
<td>☐ No impact</td>
<td>☐ Impact statement attached</td>
<td></td>
</tr>
<tr>
<td>e. Records</td>
<td>Registrar or designee:</td>
<td></td>
</tr>
<tr>
<td>☐ No impact</td>
<td>☐ Impact statement attached</td>
<td></td>
</tr>
</tbody>
</table>

Box 6: APPROVAL SEQUENCE

<table>
<thead>
<tr>
<th>APPROVAL SIGNATURES</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Department / Division Chair:</td>
<td>10/19/2010</td>
</tr>
<tr>
<td>B. General Education (as required for #7, #8) Chair:</td>
<td></td>
</tr>
<tr>
<td>C. Final faculty review body within each School Chair:</td>
<td>10/19/2010</td>
</tr>
<tr>
<td>D. College Dean Dean:</td>
<td></td>
</tr>
<tr>
<td>E. Provost and Senior Vice President for Academic Affairs Provost:</td>
<td></td>
</tr>
<tr>
<td>F. Curriculum Review Committee (UFS subcommittee) Chair:</td>
<td></td>
</tr>
<tr>
<td>G. University Faculty Senate (UFS option) Chair:</td>
<td></td>
</tr>
<tr>
<td>H. University Council Chair:</td>
<td></td>
</tr>
<tr>
<td>I. President President:</td>
<td></td>
</tr>
<tr>
<td>J. Board of Regents – notification only</td>
<td></td>
</tr>
<tr>
<td>K. Board of Regents – approval</td>
<td></td>
</tr>
<tr>
<td>L. MHEC – notification only</td>
<td></td>
</tr>
<tr>
<td>M. MHEC – approval</td>
<td></td>
</tr>
<tr>
<td>N. Middle States Association notification Required only if the mission of the University is changed by the action</td>
<td></td>
</tr>
</tbody>
</table>

---

* University Council review (for a recommendation to the President or back to the Provost) shall be limited to curricular or academic policy issues that may potentially affect the University's mission and strategic planning, or have a significant impact on the generation or allocation of its financial resources.
Include items one through 17 or 18 in your course definition using as much space as needed.

1. Date Prepared: January 2010
2. Prepared by: Anil Aggarwal, Danni Fowler
3. Department/Division: Information Systems & Decision Science
4. Course Number(s), including HEGIS code(s): INSS 422
5. Course Title: Business Intelligence
6. Credit Hours: 3
7. Catalog Description: Business Intelligence (BI) refers to the use of information technology to analyze complex information about an organization and its competitors for use in business planning and decision making. This course details the components of BI systems, important techniques as well as the critical variables needed to implement an effective BI program. The course takes a managerial approach to Business Intelligence, emphasizing BI applications and implementations. The course will involve use of industry standard software packages.
8. Prerequisites: OPRE 201 and INSS 421, or permission of instructor
9. Course Purpose: Required BS Management Information Systems; elective other programs
10. General Education area: NA
11. Course Type / Component: Lecture
12. Faculty qualified to teach the course: Aggarwal, Bento, Fowler, Mirani
13. Content Outline:

   This course will cover the following:

   1. BI and its strategic role in managerial decision making
   2. Business performance management
   3. Business analytics and data visualization
   4. Components of business intelligence solutions:
      a. Querying and data extraction tools
      b. Reporting
      c. OLAP
d. Data mining  
e. Dashboards and scorecards  
f. Text, predictive, and real-time analytics  

5. Data warehouses and data marts  
6. Mining unstructured data  

14. Learning Objectives  

Upon completion of this course a student will be able to  

- explain core BI concepts and frameworks  
- explain the business uses and value of BI  
- use key BI applications, including:  
  - building reports  
  - analyze and report against online analytical processing (OLAP) and dimensionally aware relational sources  
  - build scorecards to align teams and tactics with strategy  
  - build dashboards to communicate complex information quickly  
  - define the role of data warehouses and data marts in BI solutions  
  - identify future trends and directions for BI  

15. Assessment Strategies: Lab assignments, including use of software; cases; exams.  

16. Suggested Text(s) and Materials:  

Business Intelligence, 1/e by Turban, Sharda, Aronson & King, Prentice hall Pub., 2008  
Business Intelligence, by Carlo Vercellis, John Wiley publisher, 2009  

17. Suggested class size: 30  

18. Lab Fees (when applicable): NA  

Effective Date:  September 11, 2006, Revised 2/4/09  
Reviewed by:  University Faculty Senate