COVER SHEET for CURRICULUM CHANGE

30 Jan 2012

Provost:

Please find attached a FACULTY CURRICULUM COMMITTEE MINOR FORM for a change to the Discovery Informatics Minor.

This form has been signed by Christopher Starr, Chair, and Michael Auerbach, Dean.

Thank you,

Jim Bowring
Computer Science Curriculum Committee Chair
FACULTY CURRICULUM COMMITTEE MINOR FORM

Contact Name: Jim Bowring        Email: bowringj@cofc.edu        Phone: 953.0805
Department or Program Name: Discovery Informatics        Name and Acronym of Minor: DISC
Date (Semester/Year) new minor first available to students or change will take effect: FALL 2012

I. CATEGORY OF REVIEW (Check all that apply)

New (attach details)  Total # of hours:

Terminate Minor (if checked, skip sections III, IV, and VIII below)

Change Request (attach details; if checked, skip sections below that do not apply)

- Add existing course or courses to requirements or electives
- Add new course(s) to requirements or electives (complete and attach COURSE FORM for each)
- Delete courses from requirements or electives

Interdisciplinary (attach evidence of compliance with guidelines and acknowledgement from relevant departments. Guidelines can be found: http://currcomm.cofc.edu/guidelines-interdisc/index.php)

II. DESCRIPTION OF MINOR: If change of minor, please list the specific changes here.

Delete Math 355 Bayesian Statistical Inference as a required course.

Add Math 350 Statistical Methods II as a required course.

III. RATIONALE or JUSTIFICATION: For changes or termination, please provide a detailed justification. For a new minor, briefly address the goals/objectives for the new minor, provide evidence of student interest (i.e., has the program offered special topics courses in this area? has the program interviewed student focus groups as part of an internal assessment? etc.), and explain how the minor supports the liberal arts tradition and the mission of the institution.

Math 350 replaces Math 355 because Math 355 is no longer offered.

IV. CURRICULUM

A. Provide the COMPLETE curriculum for the proposed minor, distinguishing between required and elective courses, and listed EXACTLY as it should appear in the catalog, including the catalog description to be included in the new minor. Note pre-requisite courses where appropriate. Note any sequencing of courses or requirements in the program. Attach the completed COURSE FORM and a sample syllabus for each NEW course.

Minor Hours: 18-19 hours
Minor Requirements:

The Discovery Informatics minor provides students an introduction to the field by developing their quantitative abilities in statistics and in data mining, and by giving students a broad overview of the field with some practical applications of data mining, programming and
The primary goal of the Discovery Informatics minor is to increase the quantitative and analytical learning skills of students in all degree programs at the College of Charleston who complete this minor. The curriculum exposes students to the nature of discovery informatics and builds a small skill set in data mining.

**Discovery Informatics (6 credit hours)**

- **DISC 101 Introduction to Discovery Informatics (3)**
- **DISC 210 Dataset Organization and Management (3)**

**Computer Science (4 credit hours)**

- **CSCI 220**  
  Computer Programming I (3)
- **CSCI 220L**  
  Computer Programming I Laboratory (1)

**Mathematics (10 credit hours)**

- **MATH 111**  
  Pre-Calculus Mathematics (4)
- **MATH 250**  
  Statistical Methods I (3)
- **MATH 350**  
  Statistical Methods II (3)

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**V. STUDENT LEARNING OUTCOMES and ASSESSMENT**

**Program-Level Student Learning Outcomes**  
What will students know and be able to do when they complete the minor? Attach Curriculum Map.

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<tr>
<th>Program-Level Student Learning Outcomes</th>
<th>Assessment Method and Performance Expected</th>
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| 1. An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution | **Method**: Programming Assignments.  
**Who**: All students will be assessed multiple times in programming courses.  
**How well**: Passing grade on assignment. |
| 2. An ability to design, implement and evaluate a computer-based system, process, component, or program to meet desired needs | **Method**: Programming Assignments.  
**Who**: All students will be assessed multiple times in programming courses.  
**How well**: Passing grade on assignment. |
| 3. An ability to use current techniques, skills, and tools necessary for computing practices | **Method**: Programming Assignments.  
**Who**: All students will be assessed multiple times in programming courses.  
**How well**: Passing grade on assignment. |

4. Additional Outcomes or Comments:
VI. IMPACT ON EXISTING PROGRAMS and COURSES: Please briefly document the impact of this new/changed/deleted minor on other programs and courses; if deleting a minor—list all programs that will be impacted (and how); if adding or changing a minor—explain any overlap with existing programs in the same or different departments.

The overlap with other programs in computer science and math remain unchanged. This change represents a move from one statistics course to another, similar statistics course.

VII. COSTS ASSOCIATED WITH THE ACTION REQUESTED: List all of the new costs or cost savings, (including new faculty/staff requests, library or equipment, etc.) associated with the action requested.

None.

VIII. APPROVAL and SIGNATURES

1. Signature of Department Chair or Program Director:
   [Signature]
   Date: Oct 13, 2011

2. Signature of Academic Dean:
   [Signature]
   Date: 2 November 2011

3. Signature of Provost:
   [Signature]
   Date: 2/15/12

4. Signature of Curriculum Committee Chair:
   [Signature]
   Date:

5. Signature of Budget Committee Chair:
   [Signature]
   Date:

6. Signature of Academic Planning Committee Chair:
   [Signature]
   Date:

7. Signature of Faculty Senate Secretary:
Following Senate approval, the Faculty Senate Secretary will forward the entire packet to the Registrar.