Curriculum Proposal Cover Sheet - University-Wide Undergraduate Curriculum Committee

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| Proposing Department/Unit Computer Science | Phone 7-4478 |

Check all appropriate lines and complete all information. Use a separate cover sheet for each course proposal and/or program proposal.

1. Course Proposals (check all that apply)

☐ New Course   ☐ Course Prefix Change   ☐ Course Deletion

☐ Course Revision   ☐ Course Number and/or Title Change   ☐ Catalog Description Change

Current course prefix, number and full title: _____

Proposed course prefix, number and full title, if changing: _____

2. Liberal Studies Course Designations, as appropriate
This course is also proposed as a Liberal Studies Course (please mark the appropriate categories below)

☐ Learning Skills   ☐ Knowledge Area   ☐ Global and Multicultural Awareness   ☐ Writing Across the Curriculum (W Course)

☐ Liberal Studies Elective (please mark the designation(s) that applies – must meet at least one)

     ☐ Global Citizenship   ☐ Information Literacy   ☐ Oral Communication

     ☐ Quantitative Reasoning   ☐ Scientific Literacy   ☐ Technological Literacy

3. Other Designations, as appropriate

☐ Honors College Course   ☐ Other: (e.g. Women's Studies, Pan African)

4. Program Proposals

☐ Catalog Description Change   ☑ Program Revision   ☐ Program Title Change   ☐ New Track

☐ New Degree Program   ☐ New Minor Program   ☐ Liberal Studies Requirement Changes   ☑ Other

Current program name: Computer Science Minor - Information Assurance _____

Proposed program name, if changing: _____

5. Approvals

5. Approvals	Signature	Date
Department Curriculum Committee Chair(s)	*[signature]*	2/10/12
Department Chairperson(s)	Wm. Oblitz	2/10/2012
College Curriculum Committee Chair	Anne Kondo	3/7/12
College Dean	*[signature]*	3/12/12
Director of Liberal Studies (as needed)		
Director of Honors College (as needed)		
Provost (as needed)		
Additional signature (with title) as appropriate	Gerald W. Intemann (PROVOST)	5/12/12
UWUCC Co-Chairs	Gail Sechrist	4/3/12

Received

MAR 12 2012

Liberal Studies

Part-II Description of the Curriculum Change

1. Catalog Description for the Revised Minor – Information Assurance

Minor – Information Assurance   **18cr**

Required Courses:

COSC 108 Introduction to Programming via Alice (3) *or*	3cr
COSC 110 Problem Solving and Structured Programming	
COSC 316 Host Computer Security	3cr
COSC *345* Computer Networks	3cr
CRIM 101 Crime and Justice Systems (2) *or*	3cr
CRIM 102 Survey of Criminology (2)	
CRIM 321 Cybersecurity and Loss Prevention	3cr
CRIM 323 Cybersecurity and the Law	3cr

(1) Computer Science/Information Assurance Track majors are not eligible to take this minor; instead, they must take a Criminology minor.
(2) Criminology majors cannot count CRIM 101 or 102; instead, they must take one additional course from the following: COSC 341, 356, 362, 427, 432, 482, IFMG 382. Students must select COSC 356 to receive NIST 4011 Certification.
(3) Computer Science majors cannot count COSC 108 or 110; instead, they must take one additional course from the following: CRIM 300, 355, 400, 401, 481, 482.

2. Summary of Changes

a) Side-by-side comparison of Current and Proposed programs (the changes are shown in italics).

Current Program

Required Courses:

COSC 110 Problem Solving and Structured Programming	3cr (3)
COSC 316 Host Computer Security	3cr
COSC 352 LAN Design and Installation	3cr
CRIM 101 Crime and Justice Systems (2) *or*	3cr
CRIM 102 Survey of Criminology (2)	
CRIM 321 Cybersecurity and Loss Prevention	3cr
CRIM 323 Cybersecurity and the Law	3cr

(1) Computer Science/Information Assurance Track majors are not eligible to take this minor; instead, they must take a Criminology minor.
(2) Criminology majors cannot count CRIM 101 or 102; instead, they must take one additional course from the following: COSC 341, 356, 362, 427, 432, 482, IFMG 382.
(3) Computer Science majors cannot count COSC 110; instead, they must take one additional course from the following: CRIM 300, 355, 400, 401, 481, 482.

Proposed Program

Required Courses:

COSC 108 Introduction to Programming via Alice (3) or	3cr
COSC 110 Problem Solving and Structured Programming	
COSC 316 Host Computer Security	3cr
COSC 345 Computer Networks	3cr
CRIM 101 Crime and Justice Systems (2) *or*	3cr
CRIM 102 Survey of Criminology (2)	
CRIM 321 Cybersecurity and Loss Prevention	3cr
CRIM 323 Cybersecurity and the Law	3cr

(1) Computer Science/Information Assurance Track majors are not eligible to take this minor; instead, they must take a Criminology minor.
(2) Criminology majors cannot count CRIM 101 or 102; instead, they must take one additional course from the following: COSC 341, 356, 362, 427, 432, 482, IFMG 382. *Students must select COSC 356 to receive NIST 4011 Certification.*
(3) Computer Science majors cannot count COSC *108 or* 110; instead, they must take one additional course from the following: CRIM *344, 354,* 401.

b) List of associated course changes

The following course requirements have been revised:

COSC 352 Testing and Controlling LANs has been replaced with COSC 345.

The following courses have been added:

COSC 108 Introduction to Programming via Alice

3. Rationale

COSC 108 is an alternative to COSC 110 that uses the Alice teaching tool, developed by Carnegie Mellon University, to teach the basics of programming. Alice provides a new pedagogy for teaching introductory computer science course and has been adopted by many teaching institutions. This course achieves course outcomes similar to those of COSC 110, but using a different pedagogical approach. This course is recommended for Biochemistry, Criminology, Natural Science (pre Engineering), Applied Mathematics, Mathematics Education, Physics, and Communications Media majors in place of COSC 110.

An Information Assurance minor is one of the possible minors that a Computer Science major may select from to fulfill the program's minor requirement. The course COSC 345 contains the content on computer networking, which is the major vehicle of threats to information assurance. Therefore, it is of interest that students gain a comprehension of networking technology.

Since introducing COSC 352 to the curriculum, the technology and required depth in computer networks has changed. The content of 352 is no longer viewed as appropriate course for Information Assurance minors. COSC 354 Testing and Controlling LANs is a more in depth version of 352 that includes additional aspects of Information Assurance. COSC 354 can be taken as part of the electives towards and information assurance minor. Prerequisite for COSC 354 will be changed from COSC 352 to COSC 345 in a separate course proposal. COSC 345 Computer Networks is therefore selected as an appropriate required courses to replace 352

The statement "Students must select COSC 356 to receive NIST 4011 Certification" was added to clearly identify 356 as a required course for NIST 4011 certification.

The allowable options for Computer Science majors in note (3) have been modified at the request of the Criminology Department.

Part III. Implementation

1. Proposed Date of Change.

It is proposed that the changes be implemented for the academic year after the Senate approval.

2. Effects on Currently Enrolled Students.

All currently enrolled students may elect to take COSC 108 instead of COSC 110.

3. Effects on Faculty/Resources.

No additional faculty member is required to teach COSC 108. Being a lower level course, numerous faculty are able to teach this course. This course will initially be offered every other semester. It is anticipated that the initial population of students will be minors and other non-majors that would otherwise take COSC 110. This course will be counted as one preparation and three hours of equated workload.

4. Effects on the Number of Students.

It is expected that there will be no significant effects on the number of students in the program. The only change is to add a choice of introductory programming courses.

Part IV. Periodic Assessment

The assessment of the success of the proposed changes described in this proposal will be performed as part of the Computer Science Department's overall curriculum assessment policies. This change is minor and will not affect the way current assessment is done.

Part V. Course Proposals

The course proposals for:

COSC 108 Introduction to Programming via Alice

are attached.

Part VI. Letters of Support or Acknowledgement

A request for a letter of support or acknowledgement has been sent to the Criminology Department.