TO: Andrew Marcus, Office of Academic Affairs  
    Mike Jefferis, Office of the Registrar  
CC: Lexy Wellman, College of Arts and Sciences  
    Hal Sadofsky, Head, Mathematics  
FROM: Eugene M. Luks, Head, Computer and Information Science  
DATE: April 10, 2013  
RE: B.S. math/computing status for CIS 115 Multimedia Web Programming  

ATTACHMENT: Syllabus for CIS 115 Multimedia Web Programming

The Computer and Information Science Department proposes that CIS 115 Multimedia Web Programming become a “>4” course, i.e., count in the science group and toward the B.S. math/computing requirement.  

A course that counts toward the B.S. math/computing requirement “should engage students in the design of algorithms and computer programs that solve problems.”

CIS 115 Multimedia Web Programming is a second course in computer-based problem solving, algorithm design, and programming, with a focus on interactive, multimedia web programming. The class includes topics in computational thinking, including techniques for algorithm and program design, implementation, and testing. The focus of the course is algorithm design and programming in the context of multimedia web applications.

CIS 111 Introduction to Web Programming, the prerequisite for CIS 115, is in the science group and may be used in partial fulfillment of the B.S. math/computing requirement.

CIS 115 was taught in Winter 2013 and is being taught in Spring 2013. The schedule for the Spring 2013 class is attached. Links to the syllabus, schedule, and projects can be found at:

http://www.cs.uoregon.edu/Classes/13W/cis115/  and  
http://www.cs.uoregon.edu/Classes/13S/cis115/.

Expected implementation date: Fall 2013
BS Math/Computing Requirement last updated 3/25/2013 in consultation with Math (Hal, Arkady) See email to CASCC.

(1) What should the criteria be for (a) mathematics courses or (b) CIS courses to satisfy the B.S. requirement?

Discussion: For (b), when consulted by CASCC, Math has been using a default guideline, that "devising and programming algorithms is a significant part of the course". We suggest formalizing this as a guideline. Generally, guidelines for which courses satisfy the BS requirement should be subject to regular review.

Proposal for criteria for a CIS course that meets the B.S. Math/Computing requirement:

A general education course in Computer Science should engage students in the design of algorithms and computer programs that solve problems." ------ JBAC p. 24
http://ous.edu/sites/default/files/state_board/meeting/dockets/ddoc100107---GenEd.pdf

Rationale: Aligns with current practice and OUS guideline.

(2) Who should be deciding whether courses satisfy the criteria proposed above?

Mathematics and Computer Science suggests that the UOCC consult these departments as appropriate when formulating recommendations to the Senate regarding whether a given course should satisfy the BS requirement.

(3) Is the recent change, that B.S. requirements can be satisfied with only CIS courses, desirable?

Discussion: The catalog is clear that this is currently the case, but both math and CIS have reservations. Discussion about what combination of math and computer science courses should be required to meet the B.S. math/computing requirement is needed. In the meanwhile, the general education section of the catalog will be updated so that example groupings of classes that meet the requirement include at least one math class. Note that this will not prevent students from satisfying the BS requirement with three CIS courses. The UOCC should consider reviewing the desirability of this.