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KEVIN JEFFAY
Gillian Cell Distinguished Professor

Dr. Erika Lindemann
Associate Dean
Office of Undergraduate Curricula
College of Arts and Science
3010 Steele Bldg, CB 3054
Carolina Campus

Dear Dean Lindemann,

On behalf of the Department of Computer Science, I write to request the Administrative Board's consideration and approval of the following three (3) changes to the Bachelor of Science Degree in Computer Science.

1. Reduction in the foreign language requirement

At present, the computer science major requires foreign language through level 4. We propose to eliminate this requirement and revert to the requirements in the General Education curriculum (*i.e.*, foreign language through level 3).

This change was motivated by a grass roots effort by computer science majors that the faculty consider reducing the foreign language requirements to bring it in line with the requirement in the majority of other science departments. (Our understanding is that at present, only Biology requires foreign language through level 4.)

The original motivation for Computer Science requiring foreign language through level 4 was related more to general philosophy than to any principle of computer science education. The faculty considered the request and determined that the original motivating philosophy no longer prevailed. We thus are happy to grant the students' request.

Changes to the Undergraduate Bulletin: If approved, this change would require 1 sentence in the bulletin to be changed. In the "suggested plan of study" section the text for the sophomore year would be changed from:

- Foreign language 4 (if needed); PHYS 116, 117 (physical and life sciences Approaches course); MATH 233, 381 (or STOR 215); COMP 410, 411; three additional Approaches and Connections courses

to:

- PHYS 116, 117 (physical and life sciences Approaches course); MATH 233, 381 (or STOR 215); COMP 410, 411; four additional Approaches and Connections courses

2. Changes to the physical science requirement

At present, the computer science major requires PHYS 116 (Mechanics) and PHYS 117 (Electromagnetism and Optics). We propose to broaden the scope of the science requirement to read:

- PHYS 116
- One of PHYS 117, CHEM 101/101L or 102/102L, BIO 101/101L, 202, or 205

This change was motivated by the recognition that computing has become more integrated into research and practice in the life sciences. As more computer science majors are seeking careers, and pursuing advanced degrees in these areas, a broadening of the science requirement for the major is deemed appropriate.

(Note that CHEM 101 is a prerequisite for CHEM 102, and BIO 101 is a prerequisite for BIO 202 and 205. We nonetheless list the more advanced CHEM and BIO courses as part of our requirement to encourage students with AP credit for CHEM 101 and/or BIO 101 to pursue more advanced study in chemistry or biology.)

Changes to the Undergraduate Bulletin: If approved, the following changes to the bulletin would be required:

- In the list of required courses, the bullet item “PHYS 116 and 117” would be replaced by “PHYS 116 and one of PHYS 117, CHEM 101/101L, CHEM 102/102L, BIO 101/101L, BIO 202, or BIO 205.”
- In the “special note on grade-related graduation requirements” section, the text “PHYS 116 and 117” would be replaced by “PHYS 116 and the second science (PHYS/CHEM/BIO) course.”
- In the suggest plan of study, in the text for the sophomore year, the text “PHYS 116,117” would be replaced by “PHYS 116 and the second science (PHYS/CHEM/BIO) course.”

3. Addition of courses to the Distribution Requirement of the degree

The computer science major has a “Distribution Requirement” wherein students are required to take six (6) courses from a set of topic areas. We propose the following

additions and deletions to the Distribution requirement. These changes are motivated by revisions of existing courses and the recent creation of new courses.

The “Systems” group currently consists of COMP 431, 530, 541, and INLS 578. We propose to drop INLS 578 (Protocols and Network Management) and replace it with COMP 535 (Introduction to Computer Security).

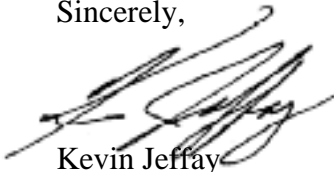
The “Applications” group currently consists of COMP 416, 426, 521, and 575. We propose to delete COMP 416 (Introduction to WWW Programming) and replace it with COMP 536 (Enterprise Computing).¹ (COMP 416 has been revised and will be offered as a service course on a technical introduction to the web.) In addition, COMP 580 (Enabling Technologies) and COMP 585 (Serious Games) will be added to the Applications group.

Changes to the Undergraduate Bulletin: If approved, the following text describing the courses used to satisfy the Distribution requirement would be changed.

- The text:
 Systems group (at least one course): COMP 431, 530, 541; INLS 578
 would become:
 Systems group (at least one course): COMP 431, 530, 535, 541
- The text:
 Applications group (at least one course): COMP 416, 426, 521, 575
 would become:
 Applications group (at least one course): COMP 426, 521, 536, 575,
 580

If I can provide any additional information about any of these proposed changes, please do not hesitate to contact me.

Sincerely,



Kevin Jeffay
 Gillian Cell Distinguished Professor
 Associate Chairman for Academic Affairs

Cc: Anselmo Lastra, Chair, Department of Computer Science

¹ Note the creation of COMP 536 is pending approval by the Administrative Board. As the proposal for this course was submitted in July 2009, we are operating under the assumption that the course will be in place by the time these curricular changes are considered.