Curriculum Committee
Minutes

November 30, 2006

Attendees: Tom Doeppner, Claire Kenyon, Franco Preparata, Steve Reiss, John Savage (Chair)
Absent: Chad Jenkins

1. Approval of Minutes

The minutes of October 19 and November 16 were approved.

2. Course Pairs

A discussion of the Engineering course pairs approved on October 19 was prompted by Tom’s observation that we shouldn’t allow all of these pairs to be used because this could result in a student not taking enough courses in computer science. After reflecting on this matter, we decided that the course pairs that we list as approved are just those that contain courses with computer science material. Students can appeal to pursue other course pairs that have non-computer science engineering content to the Director of Undergraduate Studies. Thus, the following are now the approved Engineering course pairs.

- Any two of Engin 160 (Design and Implementation of VLSI Systems), 163 (Digital Electronics Systems Design), and 164 (Design of Computing Systems).

3. The Capstone Course Requirement

David Laidlaw has noted that juniors are apparently not taking his course CS190 because it cannot be used automatically to meet our new ScB capstone requirement. David has asked that we allow the capstone requirement to be satisfied during a student’s junior year. We decided that the rule on capstone courses
would be that they should **normally** be taken during one’s senior year but that a student may petition the department for permission to take such a course earlier. We decided that it should be up to the Director of Undergraduate Studies (currently Tom) to decide such petitions. The basis for approval will be whether the student already has a sufficiently large body of CS course experience on which to base a capstone course in their junior year. If policy issues arise concerning the implementation of this rule, we decided that the matter should be brought back to the committee for discussion.

4. Migration from CS4 to Concentration in CS

Claire raised the issue of whether we can find a way for students who complete CS4 to enter one of our concentrations. Steve said that a CS19 course that he and others have proposed could serve this purpose. Steve showed us his earlier draft description of such a course. The concept of a such a migration course met with the unanimous approval of the committee for two reasons. First, it would create opportunities for students to concentrate in CS while at the same time increase our number of concentrators. Second, it would make CS more attractive to high school students who come to us with a lot of advanced preparation.

We decided to request that Eli identify a faculty member to teach CS19 next fall. We will also tell the faculty of our decision and invite colleagues to develop a draft outline for a CS19. We will circulate Steve’s draft material on this subject to the faculty.

When it comes time for the committee to consider a concrete proposal for CS19, we will invite John Hughes who has been teaching CS4 to attend our meeting so that we can compare the content of CS4 and CS19 with that of our two entry level course sequences.

We will also inform the full faculty of these discussions so that they can participate.

5. Special Topics Courses

Franco reminded us that we had agreed that all special topics courses should be approved by the Curriculum Committee. The Chair will circulate email to this effect to the CS faculty.

6. Applied Informatics

Franco circulated a list of topics that could serve as the basis for a concentration in Applied Informatics. This would be an alternative degree program for students who want to develop expertise in modeling and computation for the
purpose of designing, analyzing and simulating complex systems. Franco argues that this is an emerging area of broad application for which CS plays a key role. Steve asked if this concentration could be an AB. Franco said that it could. Tom asked if it could be taken as a version of our current ScB joint with Applied Mathematics. Franco said that the AM/CS ScB is richer than his proposed concentration. Steve noted that if depth in an application area were added to the Applied Informatics concentration it would be similar to the CX concentration that been under discussion. We decided that we should invite the faculty to attend the next meeting of the committee at which this matter is discussed.