

## Undergraduate Curriculum Committee 2014 – 2015 Minutes

### **2015, February 13, Committee Meeting**

Present: Sudhir Aggarwal, David Gaitros, Randolph Langley, Bob Myers, Alfred Vasta, Melina Vastola, and Xin Yuan

Absent: Chris Lacher

The committee met to discuss several issues that have come up for the committee and need to be addressed:

1. Should the 2 course required Software Engineering (SE) Sequence be only 1 required course with the second being an elective and if so, how should the material be organized.
2. Should we also similarly look at the two course Computer Organization (CO) sequence.
3. The course CIS 4930 (Algorithms for Biology) seems to be rarely be taught and the students often need to take a substitute course. How do we address this problem.
4. Because of the increased use of Linear Algebra (LA) in many modern algorithms, should we consider reducing by 1 course the two course Discrete Math (DM) sequence and instead substitute LA.
5. The new Liberal Studies requirements have come out – how do they impact our program?

(1) The issue related to the 2 course SE sequence was discussed. One of the concerns noted was that the course is difficult to schedule each year as there are currently only two faculty who teach these courses: David Gaitros and Sonia Haiduc. Another reason was that some students really would like to take some elective (there is not much room in the program for electives currently) or language course (which require lots of programming) such as Python. The rationale for some of the material being in the course (and the reason to make it a two course sequence) seemed to be that Ethics for example was at one time required to be one of the components. However, we currently have a separate Ethics course. David indicated that a one course SE sequence would be fine. Sonia had also mentioned this to Sudhir.

It was decided that it made sense to only require the 1 SE course and have the second course become an elective. **David** and **Sonia** (in absentia) were tasked with deciding on how the material should be modified if needed, and how it should be split or reorganized as two courses. **Xin** agreed to explore any ramifications related to our ABET accreditation.

Since the issue of Ethics had come up, some discussion about the content of the Ethics course ensued. It was decided to explore this further, with **Melina** to look further at the content and perhaps at the students' interest and response to the course. **David** also said he would look into aspects of the course as he was to teach it in fall.

(2) The issue related to the 2 course CO sequence was also discussed. The material in both courses was considered as being necessarily required and also seemed clearly demarcated in the two courses. Essentially, the first course included Digital Logic and Assembly Language and the second course focused on Computer Architecture. There was some discussion about whether the course names could be changed to more accurately reflect their content. **Sudhir** agreed to explore this with some of the relevant faculty in the department.

(3) Algorithms for Biology was briefly discussed. It was noted that Ashok Srinivasan would be teaching this in 2015-16. Furthermore, this course was supposed to have been taught by the Computational Science Department. **Sudhir** was tasked with talking with Dave and Gary to determine the status of the agreements related to teaching this course.

(4) Issues related to the proposal by Chris Lacher to add LA to replace one of the DM courses were discussed. The proposal had suggested that the DM two course sequence could be consolidated into 1 course which could either be taught by Math or CS. The LA course title could be for example "Applied Linear Algebra." The general consensus seemed to be that LA although useful was quite specialized and there was a need for the 2 course DM sequence since the content required two courses. A previous 1 course only sequence was never effective. It was decided that **Sudhir** would report back about the content in the 2 course sequence so it could be explored whether it was feasible to reduce this to 1 course.

(5) Alfred discussed the new Liberal Studies requirements and how they might affect our students and offerings. It seemed that it would not be difficult for our students to take relevant courses in each of the component areas of the new requirements. It was decided to explore whether any of our courses could be used to satisfy the requirements (beyond the computer literacy requirement).