

Minutes of the CSS Committee  
November 9, 2012  
10:30am-12noon, CP 206C

Attendance: John Mayer (co-chair), Donald Chinn (co-chair), Matt Alden, Allison Elliot Tew, Alan Fowler, Bryan Goda, Beth Jeffrey, George Mobus, David Ross, Josh Tenenberg, Dan Zimmerman.

Guests: Ryan Card (IAS), Ruth Vanderpool (IAS).

The committee discussed the following items.

- Prerequisites for TCSS 321. Given the new information from the advisors about how CSS students were using the new prerequisites for TCSS 321 (approved in the October meeting, TCSS 143 or TMATH 124), the committee reconsidered the prerequisites. After a discussion about the logistics, it was generally felt that in order to best serve both the Institute majors and the mathematics minor students, the prerequisites for TCSS 321 should revert to the original TCSS 321.

The intention is that as long as the number of math minor students who wish to take TCSS 321 is small, then enrollment into the class can be handled administratively through the advisors and the instructor. When the number of math minors is large enough to warrant a whole section, then a different course (call it TMATH 321) with essentially the same content but possibly with different pedagogy should be created with a prerequisite of TMATH 124.

**A motion was made and seconded to make the prerequisite of TCSS 321 to be TCSS 143. The committee approved (unanimously) the motion.**

- Issues related to CSS curriculum reform.
  - There was a brief summary of the CTC meeting on Nov. 2. Institute faculty solicited feedback from CTC faculty regarding our ideas about changing the introductory programming sequence. In particular, in the CTC meeting, there was a discussion about languages (Java, C, Python) and the strengths and weaknesses of using different languages. CTC faculty pointed out that they serve many universities, and Java is still the predominant language used, and so if UWT changed to C, it would be unlikely that the CTCs would alter their programming sequence to C.
  - It was noted that even if CSS decides that Java will be the main programming language of the introductory sequence (because that's what the CTCs teach), we still have the possibility of redesigning TCSS 142, since it is an entry point for both transfer students and UW Tacoma "native" students. For example, TCSS 142 could be taught using Python.
  - Mobus briefly described the planned CES programming sequence TCES 201/202/203. They will be taught in C, with an emphasis towards the end of the sequence on Abstract Data Types. The intent is that a more machine-based approach using C is more appropriate for CES majors than the current TCSS 142/143/305 sequence. He said that any student who completes that sequence should be able to take TCSS 342 (Data Structures), even if 342 is taught in Java. There was also a

- discussion about student pathways through the introductory sequence. Mobus proposed that students who have taken TCES 201, for example, but decide to switch majors to CSS could then take TCSS 143 without needing to take TCSS 142. Mobus felt that the pathway in the other direction (taking TCSS 142 and then TCES 202) was infeasible.
- CES also plans to compress its systems sequence to two courses (TCES 372 and TCES 422) because of the redundancy in the course material in TCSS 371 and TCES 230. This led to a discussion of whether to compress the systems sequence in CSS to two courses, where perhaps the first course would be similar to the current TCSS 371 (machine organization, assembly language) and the second course would be an operating systems concepts course. Issues similar to the introductory sequence regarding course equivalencies and whether credit could be earned having taken one course or another were raised.
  - Mayer raised the possibility of a “Systems Programming in C” course that might augment the CSS systems sequence. He also brought information about the Computer Science Curricula 2013, Strawman Draft, as a way of framing the discussion about how many hours of instruction we should have in the CSS curriculum.
  - Chinn proposed an inner/outer core model to allow students to have more choices and flexibility in their degree. Generally speaking, inner core courses are courses that all CSS majors should take. Outer core courses are courses that represent fundamental computer science topics but are strictly speaking not required. Instead, students would be required to take some number of outer core courses.

Chinn’s specific proposal was:

inner core: 371, 305, 321, 342, 325

outer core (students must take 3 out of 5): 360, 422, 440, 445, 343

TCSS 322 would be eliminated and replaced in the outer core with TCSS 440 (Formal Models). The proposal assumes that the systems sequence would be compressed to TCSS 371 and 422.

There was discussion on inclusion of 440 (databases) and other details such as how often each of the outer core courses would be offered each year, but the general idea of inner/outer core was generally acceptable to the committee.

- Admission policies. Chinn raised the issues that arise due to our current admissions policy. It is currently difficult to predict how many sections of different classes we need for a number of reasons: students from different programs (CES, Masters) take CSS courses, we admit any student into the program who meets our admissions criteria, and we admit them right up to near the beginning of the academic quarter.

There are a number of possible ways to address these issues. They include: raising the standards of admission (e.g. GPA), setting a deadline for priority enrollment in classes (that is, after the deadline, a student could be admitted but there is no guarantee that s/he can get into the classes they want in their first quarter), and committee involvement in the admissions process.

Regarding committee involvement in admissions, the concern here is that it is a significant workload to evaluate all of the applications. Instead, Chinn suggested that advisors and the Program Coordinator divide applications into three piles: those definitely accepted, those definitely rejected, and those in the gray area. The applications of the gray area students could be the ones that the committee considers.

- Other items on the agenda. Both the approval of the TCSS 4xx model syllabi and the survey for students to better understand their motivations, their preparation, etc. were not pressing, and so they were deferred to a later meeting.