# School of Computer Science Special Council Meeting Minutes Tuesday, March 28, 2017 1:00-2:30 p.m., MCKN 307

In Attendance – Faculty: Luiza Antonie, David Chiu, Rozita Dara, William Gardner (Facilitator), Dan Gillis, Gary Grewal, Andrew Hamilton-Wright, Stefan Kremer, Xining Li, Pascal Matsakis, Judi McCuaig, Blair Nonnecke, Charlie Obimbo, Joe Sawada, Stacey Scott, Fei Song, Fangju Wang, Mark Wineberg, Michael Wirth, Yang Xiang; Staff: Deb Byart, Monaliza Gill (Recording Secretary), Greg Klotz

<u>Regrets</u> – *Faculty:* David Calvert, Fatima Hussain, Deborah Stacey; *Staff:* Janice Ilic, Kyle Johnston, Dana Rea, Phyllis Reynen, Lauren Zweep; *Student Representatives:* Patrick Houlding, Samuel Opawale

W. Gardner, acting on behalf of D. Calvert (Chair of the Undergraduate Curriculum Committee), called the meeting to order.

### 1. Approval of the Agenda

Motion to approve the agenda moved by A. Hamilton-Wright, seconded by J. McCuaig.

#### - MOTION CARRIED UNANIMOUSLY

## 2. CIS\*3750 as prerequisite for CIS\*3760

Change the prerequisites for CIS\*3750 System Analysis and Design in Applications and CIS\*3760 Software Engineering so CIS\*3750 is a prerequisite for CIS\*3760. The prerequisites were changed to allow students to take these courses in any order. Normally CIS\*3750 is a prerequisite for CIS\*3760. Allowing them to be taken in the reverse order has created many problems for faculty offering the courses as CIS\*3750 contains material which prepares students for CIS\*3760. This will require an additional offering of both courses which is subject to budgetary approval.

The following motion was moved by D. Gillis and seconded by M. Wineberg:

# — Add CIS\*3750 as a prerequisite for CIS\*3760.

A discussion followed:

- S. Scott said that we need this prerequisite change. The midterm results for 3760 this semester show that students who have taken 3750 tend to do better in 3760.
- S. Kremer asked about the meaning of "budgetary approval." W. Gardner said that the principle is to approve now and enact when money appears.

- S. Kremer commented that once it is in the calendar, we are committed. W. Gardner answered that it won't go into the calendar until budget is nailed down. M. Wirth added that then it shouldn't go past the department without a budget.
- ➤ P. Matsakis said that we should ignore the "budgetary approval" formulation and go ahead with the motion. We have to worry about the educational aspect: if the existing doesn't work, we have to change it; if courses need to be split, we split them; and if we need more sessionals or faculty, we ask for more.
- ➤ J. McCuaig said that since 2750 is a prerequisite for 3750, and since we make 3750 a prerequisite for 3760, we should no longer specify that 2750 is a prerequisite for 3760. Moreover, the motion should specify that the prerequisite changes will require an additional offering of both courses.

Friendly amendment moved by J. McCuaig and seconded by G. Klotz; the amended motion is as follows:

- Add CIS\*3750 as a prerequisite for CIS\*3760, indicate Fall and Winter for both, and remove CIS\*2750 as a prerequisite for CIS\*3760.
- MOTION, AS AMENDED, CARRIED UNANIMOUSLY

## 3. STAT\*2040 as prerequisite for CIS\*2460

Make STAT\*2040 Statistics I the prerequisite for CIS\*2460 Modelling of Computer Systems. This involves requiring STAT\*2040 in both CS and SENG majors. It also involves removing the option to take CIS\*2460 instead of STAT\*2040. Consider also adding MATH\*1200 Calculus I as a prerequisite to CIS\*2460.

The following motion was moved by M. Wineberg and seconded by C. Obimbo:

 Add STAT\*2040 as a prerequisite for CIS\*2460, require both Computer Science and Software Engineering majors to take STAT\*2040, and make CIS\*2460 an elective.

#### - MOTION CARRIED UNANIMOUSLY

A discussion followed: should we make CIS\*2460 a third-year course?

- Y. Xiang said that students frequently take it in third year anyway.
- M. Wineberg commented that the course is probably taken 2/3 by third-year students. He said there is a huge discrepancy in ability to complete. He stated that the course was originally a third-year course but changed to a second-year course. He's not sure why this happened.
- ➤ J. McCuaig commented that currently it is in semester 5. She questioned the technicality on making it a third-year course as it is already in the students' third year. She mentioned that she would like to see the motion split. First, remove

the OR clause and CIS\*2460 in the programs, i.e., make STAT\*2040 required; this can be done now. Second, add STAT\*2040 as a prerequisite for CIS\*2460; this can be done later.

- ➤ M. Wirth commented that if the course is not moved to third year, it cannot be counted as a third-year elective.
- > S. Kremer's concern is that making it a third-year course will reduce the number of students taking it.
- M. Wineberg responded that there are currently 58 students in it.
- ➤ J. McCuaig remarked that we have very few third-year electives.
- ➤ B. Nonnecke mentioned that Psychology moved stats into their department because the stats being taught was not relevant. He questioned how relevant is this STAT\*2040 for our students.
- ➤ J. McCuaig commented that STAT\*2040 can be taken in any semester and remarked that this is a strength.
- C. Obimbo commented that how relevant STAT\*2040 is depends on how it is taught, i.e., proofs or applied.
- ➤ D. Gillis commented that this course is applied. Students use R to run linear regressions, there is lots of number crunching, introduction to linear regression, ANOVA, etc.
- ➤ J. McCuaig commented that we have a limited number of faculty to teach and we are short of third- and fourth-year electives. We need to use other people's courses where we can.
- ➤ D. Gillis suggested we should see if STAT\*2040 works, instead of adding a new course. We can create our own stats course if/when we have enough faculty to do so.

Another discussion followed: should we add MATH\*1200 Calculus I as a prerequisite to CIS\*2460?

- > D. Gillis asked what in simulation requires calculus.
- ➤ M. Wineberg mentioned that not everything in this course is discrete.

  There are difference distributions; and to get CDF, you have to integrate.
- ➤ W. Gardner asked how are the SEng students currently doing in 2460.
- M. Wineberg commented that he didn't know that they have calculus but agreed that calculus would really be nice.
- W. Gardner commented that if we add this as a prerequisite, SEng can't take it.

- P. Matsakis asked how many students would we have with only CS majors. It was suggested 1/3 less.
- ➤ Y. Xiang mentioned he used to give students a tutorial on calculus during lab time, but this is not the best way to handle the issue. He added that not only do they not have calculus, they also do not have stats. But he agreed that with this motion to add STAT\*2040 as a prerequisite, the situation will be better.

### 4. Replace CIS\*2030 with CIS\*1910 and CIS\*2500 as prerequisites for CIS\*3120

Remove CIS\*2030 Structure and Application of Microcomputers as a prerequisite for CIS\*3120 Digital Systems I. The material in CIS\*2030 is not needed to prepare students for CIS\*3120. It is hoped the change in prerequisites will encourage more students to take CIS\*3120. This change will leave CIS\*3120 with no prerequisites so it is recommended that CIS\*1910 and CIS\*2500 be added as a prerequisite for CIS\*3120.

The following motion was moved and seconded:

 Remove CIS\*2030 as a prerequisite to CIS\*3120 and replace it with CIS\*1910 and CIS\*2500.

A discussion followed:

- ➤ G. Grewal commented that students should be able to take 2030 and 3120 out of order. The ideal would be to make 3120 a core course.
- G. Klotz suggested to swap them.
- > W. Gardener stated that 2030 cannot be made an elective.
- ➤ G. Grewal quoted ACM guidelines where 3120 has more hours committed to it than anything else. He said students should take it in second semester.
- W. Gardner presented three options. The first option is no prerequisites; but BUGS will say no. The second option is 1910 and 2500 as prerequisites; BUGS will be happy and G. Grewal will not be unhappy. The third option is 1910 as prerequisite; G. Grewal will be happy but BUGS will be unhappy.
- ➤ J. McCuaig suggested a fourth option: 1910 and 1500 as prerequisites.

Friendly amendment moved by W. Gardner and seconded by C. Obimbo; the amended motion is as follows:

- Remove CIS\*2030 as a prerequisite to CIS\*3120, replace it with CIS\*1500 and CIS\*1910, and change CIS\*3120 to a second-year course.
- MOTION, AS AMENDED, CARRIED UNANIMOUSLY

#### 5. Deletion of CIS\*2130

Cancel low enrolment courses related to the Pathways program. CIS\*2130 Discrete Mathematics for Computer Science had 11 students registered in S16 and it was canceled in S17 due to low enrollments.

The following motion was moved by A. Hamilton-Wright and seconded by J. McCuaig:

— Delete CIS\*2130 from the calendar.

A discussion followed:

- > S. Kremer questioned if we are going to lose base budget on this, since we got money for it.
- M. Wirth commented that it was only a five-year commitment.

### - MOTION CARRIED UNANIMOUSLY

### 6. CIS\*3210 as prerequisite for CIS\*4410

The only prerequisite for CIS\*4110 Computer Security is CIS\*3110 Operating Systems. The committee recommends adding CIS\*3210 Computer Networks as a prerequisite as the material in that course is relevant to the study of computer security.

The following motion was moved by F. Wang and seconded by D. Chiu:

- Add CIS\*3210 as a prerequisite for CIS\*4410.

A discussion followed:

- ➤ M. Wirth questioned why are we doing this for a year, since CIS\*4410 will soon be split into two courses and deleted.
- > P. Matsakis said the two courses do not exist yet; let's proceed one step at a time.

#### - MOTION CARRIED UNANIMOUSLY

7. For information: The calendar description for CIS\*1910 Discrete Structures in Computing contains, "Boolean, Algebra". The comma can be removed. The calendar description of the prerequisites for CIS\*4820 reads (CIS\*3750 or@=77web77 CIS\*3760). Remove the control codes.

#### 8. CIS\*3260 moved to semester 7 and CIS\*4250 to semester 8

Move CIS\*3260 Software Design IV to semester seven so it is taken after CIS\*3760 Software Engineering. CIS\*3260 is a sequel to CIS\*3760 as it covers the advanced material that would follow a traditional Software Engineering course such as CIS\*3760. This reorganization allows the course material to be taken in the appropriate order and offers some other potential benefits such as sharing a textbook between the two courses. This will have the effect of moving CIS\*4250 Software Design V to semester eight. As CIS\*4250 is a capstone course for the Software Engineering majors, moving it to semester eight does not negatively affect their program.

The following motion was moved by S. Scott and seconded by D. Gillis:

- Move CIS\*3260 to semester seven, so it is taken after CIS\*3760, and move CIS\*4250 to semester eight.
- MOTION CARRIED UNANIMOUSLY
- 9. For information: Move CIS\*1910 and CIS\*2910 to semesters one and two respectively. The school voted to accept this change in 2015. It will be implemented this year. This will move CIS\*1910 to the Fall semester and CIS\*2910 to the Winter semester of first year. In both cases students will take the courses earlier in their undergraduate schedule.
- 10. Any other business

N/A

Meeting adjourned at 2:05pm