School of Computer Science
Council Meeting Minutes
Tuesday, March 6, 2018
1:00 – 2:30PM, MCKN 310

Present – *Faculty*: L. Antonie, D. Calvert, D. Chiu, D. Flatla, A. Hamilton-Wright, S. Kremer, P. Matsakis (Interim Director), D. Nikitenko, C. Obimbo, J. Sawada, S. Scott, M. Wineberg, M. Wirth, Y. Xiang; *Staff:* C. Hosker, J. Ilic, K. Johnston, G. Klotz, S. Mousseau (Recording Secretary), D. Rea; *Student Representatives:* P. Houlding

Regrets – *Faculty*: R. Chaturvedi, R. Dara, D. Gillis, G. Grewal, X. Li, J. McCuaig, B. Nonnecke, F. Song, D. Stacey, F. Wang; *Staff:* D. Byart, L. Zweep; *Student Representatives:* J. Fraser

Preceding the meeting, there was a presentation by Dan Penfold and Melissa Woo from Alumni Affairs. They discussed their need for contacts in order to build relationships that could eventually lead to funding for the School. They encouraged faculty to consider fundraising as a viable alternative to traditional resources. They would like to start engaging with alumni and corporate partners. They suggested we increase engagement by holding events. Support comes in various ways including student awards, chairs, research support, and naming opportunities.

1. **Approval of Agenda**
    Motion: That the agenda be approved (A. Hamilton-Wright/C. Obimbo).
    In Favour: All. **MOTION PASSED**

2. **Approval of Minutes from Jan 23, 2018**
    Motion: That the minutes from Jan 23, 2018 be approved (A. Hamilton-Wright/S. Kremer). In Favour: All. **MOTION PASSED**

3. **Approval of Minutes from Feb 6, 2018**
    Motion: That the minutes from Feb 6, 2018 be approved (A. Hamilton-Wright/D. Calvert). In Favour: All. **MOTION PASSED**

4. **Interim Director's Remarks – Pascal**

CL Position

P. Matsakis shared that Hassan Khan, the Search Committee's top candidate, has accepted the CL cybersecurity position with the School. He will begin on September 1st as he has two

courses he is teaching this summer at Waterloo. Last year, the Provost had specified that this CL position would disappear after 2 years and that a tenure-track position would be created instead if the MSc program was approved; this implied that a new search would be conducted. The Provost has agreed to remove this condition for a new search, i.e., the CL position may be converted to a tenure-track after two years, once the program is approved, without the need to re-open the search.

Meeting with the Dean

Normally the SoCS Director meets with the Dean once every month for an hour, but unfortunately most meetings have been rescheduled or shortened. The next meeting is on March 7 for half an hour.

5. Undergraduate Curriculum Committee – Dave

First Motion

Motion: Delete the following courses:
- CIS*3000 Social Implications of Computing
- CIS*4410 Trends in Distributed Systems
- CIS*4430 Information Organization and Retrieval

and create the proposed courses in Mobile Computing, Cloud Computing, Data Science, and Systems Programming (D. Calvert/C. Obimbo).
In Favour: All. **MOTION PASSED**

D. Calvert added that CIS*4780 (Computational Intelligence) will be cross-listed with CIS*6420 (Soft Computing) and offered only when CIS*6420 is offered (usually every other year).

The motion above was first discussed a year ago and was brought up again in January, but as there were concerns from S. Kremer about cross-listed courses, the Council delayed the vote until those concerns could be discussed directly.

The courses to be deleted are those with low enrollment numbers. The courses to be added are expected to be much more attractive. The idea is to keep the same amount of teaching tasks within the School; considering our resources, we cannot add new courses without deleting other courses. Descriptions of the new courses will be polished before they are formally submitted; if anyone has suggestions, please email D. Calvert.

As discussed in January, there were concerns from students about the ethics component that will be lost with CIS*3000. However, there are other courses with ethics components; the UCC will discuss the issue this summer and ensure that ethics is still part of the curriculum.

D. Chiu asked if it would not be easier to modify the existing course descriptions rather than submitting new courses; he expressed a concern about the amount of work involved in submitting new courses. D. Calvert responded that the Board of Undergraduate Studies would likely not accept the amount of modification that would be required to update the descriptions. Likely, they would suggest that these are new courses and should be submitted as such. He added that if we change a course title, we need to change the course number.

S. Kremer asked if the Council should consider removing the old courses without replacing them; this would provide some relief as we would not have to design new courses. D. Calvert responded that this wasn't for the UCC to decide. S. Kremer responded that now is a good time to consider the matter since the Council is about to vote; he asked if the Council wouldn't be smarter to delete the courses without adding new ones until the School has the resources it needs. D. Calvert noted that then some class sizes would be larger since the total number of courses offered would decrease. M. Wirth added that the School is currently breaking even and if we removed any fourth-year classes without replacing them, there would likely be a lot of push back. Building a course is a lot of work, but these older courses have not been updated in close to twelve years. The curriculums are outdated. If the School were to remove the courses and not add new courses to replace them, the School could end up with disgruntled alumni who will not be interested in donating back to the School. P. Matsakis said that School resources are indeed a big concern, and we certainly don't want to add teaching tasks. However, it would be self-destructive to eliminate the old courses without replacing them. What we need to do is try and push for the resources we need.

D. Chiu expressed concern about the reason for deleting the courses; will we have higher enrollment in the new courses? D. Calvert said this was the expectation. He added that Data Science may be a hard sell for students despite how important the topic is for faculty members; it is a risk, but it's a reasonable risk. The School can review the new courses in three to four years to assess how well they are doing and change them if they are not doing well. M. Wirth added that a couple of the old courses have particularly low numbers with about 10 students a semester.

J. Sawada asked why Data Science is being offered every other year and Cloud Computing every year. D. Calvert responded that the School has hired someone to teach Mobile Computing and there are a few options for teaching Data Science; however, we will need a new faculty member to teach Cloud Computing, and we will need to offer the course more often to make the opportunity worthwhile. S. Scott asked if Data Science should be offered every year as well. D. Calvert responded that it would be an easy adjustment to make once we know the interest in the course. M. Wineberg asked why two out of four are only offered in the winter. D. Calvert responded that the UCC matched the course schedule based on the current balance; if we want to shift any of the new courses, we'll need to shift something else in the calendar to make sure it's all balanced out.

D. Chiu asked if Data Science should be offered earlier in the calendar. D. Calvert responded that he felt it could make a good third-year course. Y. Xiang suggested that it is good as a fourth-year course; he also suggested we cross-check with the other courses being offered. D. Calvert agreed that the UCC will need to make sure nothing overlaps.

Second Motion

Motion: Introduce a new first year programming course for students who are likely to pursue further CIS courses (D. Calvert/M. Wirth). In Favour: All. **MOTION PASSED**

D. Calvert explained that a few years ago, the School had two different CIS introduction courses; but after a while they became quite similar and the Director/Chair then decided to combine them into one course. However, it doesn't seem that CIS*1500 is doing the job it was meant to do for either the CIS majors or the other students who are taking the course as a requirement: it's either too easy or too hard for the students. The UCC is suggesting we turn the current CIS*1500 into a more service-based course and develop another course, CIS*15zz, as a separate course for CIS majors.

The new CIS*1500 course will be taught in Python with an introduction to C. Python is easy to learn and it is transferable knowledge. The new CIS*15zz will be taught in C and will be a good bridge for CIS*2500. There are currently four sections for CIS*1500 every year so they will be split between the two new courses. If a student takes CIS*1500 and finds they want to get into computing, they can take CIS*2500 but will need to put effort into covering any information that was taught in CIS*15zz and not in CIS*1500. There is a meeting scheduled for Thursday with Engineering and they seem favorable to the plan. We will not need a calendar change for CIS*1500.

S. Kremer responded by saying he thinks it's a great idea. CIS*1500 to CIS*2500 is a big step right now for Engineering students so this will be a positive change for those students. S. Scott asked if we will be able to enforce which course an Engineering student takes. D. Calvert responded that we will advise B.Eng. students in the Engineering Systems and Computing and Computer Engineering majors to take CIS*15zz.

D. Flatla asked if the School could create a transition course for those who have taken CIS*1500 and wish to go into CIS*2500. M. Wirth responded that the School has tried that in the past and it didn't work. D. Calvert followed up by saying the students will need to bridge the gap themselves, as the University isn't set up for transition courses. D. Flatla asked if we require Undergraduate students to have taken high school computer science. D. Calvert responded that we do not as it's not consistently taught everywhere.

P. Houlding was concerned about students that might take CIS*15zz and then go into CIS*2500 thinking they've learned all of the material before. D. Calvert said that they may think so at first, but this is not the case. P. Matsakis contributed that the current gap between CIS*1500 and CIS*2500 is too big, and the issue will be fixed with CIS*15zz. He added that Engineering students will be happy with that.

Motion: Introduce a new first year Web Design and Development course (D. Calvert/A. Hamilton-Wright). In Favour: All but one. Abstentions: One. **MOTION PASSED**

The UCC has been looking for a new first year DE course that is attractive to a wide audience and makes money. There has been a number of requests for a web design and development course. The humanities and sciences students will like it. As a DE course, it will pay for itself if we have the numbers. Our students will also want to take the course. It will be a first-year course and will not include advanced teaching; we can add a more in-depth course if we find it's a success.

S. Kremer asked if it would be better as a second-year course as there is a cap on first-year courses a student can take. D. Calvert responded that we don't want to scare people away; we want BA to consider it and put it on the list. D. Chiu asked if we should run a sample session first to see how it does. D. Calvert responded that if we run a sample session, we won't get anyone but our own students.

J. Sawada asked if the course was only being offered as a DE course. D. Calvert said yes, as it's the only way to pay for the course without using a teaching task. M. Wirth added that we would require a lab space for a non-DE course.

Meeting adjourned at 2:23PM