

**School of Computer Science
Council Meeting Minutes
Tuesday, February 26th, 2019
1:00-2:30pm, REYN 1101**

Present –

Faculty: L. Antonie, D. Calvert, R. Chaturvedi, D. Chiu, R. Dara, A. Dehghantanha, D. Flatla, G. Grewal, A. Hamilton-Wright, H. Khan, S. Kremer, J. McCuaig, D. Nikitenko, C. Obimbo, J. Sawada, S. Scott, F. Song, Y. Xiang (Interim Director);

Staff: O. Adesina, D. Byart, K. Gardiner (recording secretary), C. Hosker, K. Johnston, G. Klotz, D. Rea;

Student Representatives: F. Hassan

Regrets –

Faculty: , D. Gillis, X. Li, X. Lin, P. Matsakis, B. Nonnecke, D. Stacey, F. Wang, M. Wineberg, M. Wirth;

Staff: J. Hughes, L. Zweep

Student Representatives: J. Fraser

1. Approval of Agenda for February 26th, 2019

Motion: That the agenda for February 26th be approved

(A. Hamilton-Wright, S. Scott)

In Favour: All. Abstentions: None. **MOTION PASSED**

2. Approval of Minutes from January 15th, 2019

Motion: That the minutes from January 15th, 2019 be approved.

(D. Nikitenko, A. Hamilton-Wright)

In Favour: All. Abstentions: S. Kremer. **MOTION PASSED**

3. Interim Director's Remarks – Y. Xiang – See Appendix A

University/College change

- A) There is a co-op credit weight change which was approved by the Senate and will take effect in May. COOP*1000, 2000, 3000, 4000 and 5000 weight will be changed from 0 to 0.5. This is to recognize the value of academic activity and work-integrated learning that happen through the co-op program.
- B) The two SoCS applications for CRC tier-2 were not successful. None of the three positions for UofG were allocated to CEPS.

Faculty Hiring

A) AI Faculty Hiring Committee (made up of Stefan, Stacey, Mark, Luiza, Andrew Gadsden and Yang) have determined a job description for the posting. Once approved by Provost, it will be posted for 60 days. The end of this 60 days coincides with X. Yang's term as interim director. As per the collective agreement (see Appendix A, slide 2), the new director will take over the position of Chair of Search committee in May 2019.

B) Retirement replacement position has been approved; hiring will be led by new director (May 2019).

Cyber Lab Setup

A) With the approval of Master of Cybersecurity and Threat Intelligence (MCTI) program, the SoCS effort is now shifting to preparation for F19 enrolment. The conservative enrolment projection numbers at this time are: Year one: 20 students, Year two: 25 students, Year three: 30 students.

B) Major tasks outstanding include setting up the Cybersecurity Lab and Marketing/Outreach initiatives.

For Cyber lab setup, the next steps are as follows:

Step 1: Estimate funding need (server, in-lab equipment and tech support), which has been working on by Ali, Joe, Kyle, Dana, other cyber faculty and CCS staff

Step 2: Request funding

Step 3: Equipment purchasing and installation

Cyber Lab Funding Options

See Appendix A, slide 3

X. Yang noted that budget restraints may occur in the event of cuts.

Option 1 – full capacity - \$327K

Option 2 – reduce equipment for fewer students - \$308k

Option 3 - reduce equipment further - \$273K

8GB RAM requirement was also changed from per virtual machine to per student.

S. Scott requested info on tuition: what will be charged and how those funds will flow through the department. Y. Xiang expressed that while everyone is thinking about this, the information is not yet available. C. Obimbo questioned whether 8GB per student would impact quality of delivery of the program.

Y. Xiang mentioned that he has been pushing for discussion of lab setup within a team of people (from SoCS and CCS) that is larger enough to include all key stakeholders while small enough to facilitate meeting scheduling. A. Dehghantanha noted we want to give the

impression of wanting all of the servers here rather than an impression of not knowing exactly what we want.

D. Flatla addressed C. Ombimbo's point re. teaching capacity and student perspectives of us using a "cheap system" versus full blown program. He expressed that if students see that the department has invested and taken a risk, it will make the students feel more invested, and it is important to give them the most polished program possible.

S. Scott asked about a financial obligation of funding option 2 or 3. Y. Xiang replied that according to the Dean, the cyber program proposal did not include a clear business model.

Summary CEPS Teaching (2017-2018)

See chart on Appendix A, page 3.

Y. Xiang made note of a few specific pieces of the chart. For example, SoCS has the same number of faculty as Math and Stats but with fewer students. Additionally, we have the same number of students as Chemistry, but with more faculty. Therefore, the SoCS department appear to have no less resources.

C. Obimbo pointed out that the intensity of our program is much higher than the others mentioned (for example, labs), so the numbers in the chart do not necessarily reflect the complexity of the CS program. S. Scott agreed with this. S. Kremer noted that this is a "20 year old argument". He noted the difference between number of students majoring in a program versus number of students taught. SoCS is flipped in the sense that we have more students to faculty than other programs, but this is not reflected in the current statistics, since tuition goes to the department of the major, not courses taught.

D. Rea pointed out that in the case of Math or Calculus, these courses have not changed content in 30 years, whereas in computer science, the course content has changed a lot in the last 20 years. D. Calvert further noted that we are further limited by the number of students we can put in a lab (approximately 25, versus math labs that can accommodate 100s). He explained that if the University wants a computer science program, an associated cost is to have more lab space. J. McCuaig suggested that a more relevant statistic could be calculated based on number of teaching tasks for courses or majors, which would provide more information than the chart provided. D. Chiu also pointed the vast size of first year chemistry courses (which are very large) could be skewing the numbers in the chart.

Y. Xiang also calculated the number of TAs across departments. For example, SENG has 70 students per TA, which uses more TAs than SoCS, whereas Chemistry has 118 students per TA, which uses less TAs than us. A. Hamilton-Wright noted that this chart also includes all courses and not just courses that have TA's allocated. S. Scott also mentioned the existence of

lab instructors in Chemistry, which SoCS does not have, and how they need to be considered in the statistics as well.

F19 teaching schedule

- A) As per the collective agreement (see Appendix A, slide 4), a copy of teaching schedule is to be provided by the Dean to all members of the department 6 months in advance
- B) This schedule shall include, for each course, the instructor, estimated enrolment, teaching assistant support and current DOE of each member.
- C) Y. Xiang wanted to emphasize that the listed TA allocation is based on estimated enrolment and is subject to change over the summer when more accurate enrolment information becomes available.

S. Scott inquired about co-op weighting and how it would affect how many credits students need. D. Calvert explained that we can either take away some free electives (we have many), but the University prefers for first years in particular to have options. Alternatively, we can say that our program requires more credits for completion. D. Flatla confirmed that current co-op students are not affected as they will be considered under the old system. D. Calvert said he was not 100% sure on this as students may want to complete their program under the new calendar.

4. Associate Director, Graduate Program – Joe – See Appendix B

Grad Number Trends

See Appendix B, slide 2.

Cyber Security Update

J. Sawada elaborated on Cyber Security program. It has been approved by the University of Guelph, next step will be approval by Ontario Universities Council.

The Graduate Outreach and Cyber Security Committees are working on three major initiatives:

- 1) The Graduate Committee is updating the website. It still needs a splash page with sponsors etc – they are looking to get it up along with an information one-pager etc.
- 2) An information session similar to the one done for AI, possibly later in March
- 3) Discussions are going on separately from strategic planning related to comp-sci related grad programs (i.e. data science, a joint effort between SoCS and Math/Stats). Math offers certification on data science through open education which requires three courses (i.e. analytics). If this becomes a full-blown masters course, it will require more from SoCS. More details to come on this.

D. Flatla asked if we had received a business model from the Dean regarding distribution of funds etc. D. Calvert explained that although there are lots of rumors, the clear target audience is likely international students. It is possibly 50% going to unit teaching and 50% going to the University, but funds would also go to hiring two new faculty members.

J. Sawada expressed that a more urgent discussion is the MBA/Cybersecurity Management. Our contribution to this program would be three online courses to be covered by CS faculty. We are still not sure of the cost structure etc but they are trying to work on all the paperwork in the next month or so – again all preliminary discussions. Y. Xiang attended a meeting with the assistant director of CBE who proposed cost sharing. Y. Xiang's thought is that if we have CS faculty participating in this, we would have to replace them here with sessional which would lead to our program possibly suffering, therefore this model is not sustainable. X. Yang would like to argue for a better arrangement, whatever that may look like. He explained that the MBA program is eager to move forward but SoCS should be cautious before committing to the teaching tasks required.

C. Obimbo noted that as faculty grows, this could lead to specialized programs which wouldn't be equal. He agreed we should be cautious, as we are talking about charging students 40k with a plan to break even. A. Dehghantanha added that if we did pursue this plan, there wouldn't be much of an overlap with cybersecurity. Since we are putting cybersecurity online anyways, this could be an opportunity for us to put other programs online and get some money back. He also noted that this opportunity may help with profit sharing and we are in a good position to set a high base for our Masters program and control the dialogue; we can create a demand for a good deal in order to gain resources.

5. Associate Director, Undergrad Program – Dave Calvert

Motion on 1000DE/1200DE

D. Calvert explained that these are mostly computer application courses which are decreasing over time in enrolment numbers. These courses are starting to cost the department money rather than earn or break even. He proposed merging the two courses to cover computer applications and computer literacy. He explained that R. Chaturvedi is currently working on updating the course materials. Before merging these course, the School of Computer Science needs to approve the proposal. He reiterated that these courses as two separate classes are no longer financially viable; they used to earn the department a fair amount of money but this is no longer the case.

Motion: That CIS*1000DE and CIS*1200 be merged into one course.

(D. Calvert, J. McCuaig).

In Favour: All. Abstentions: None. **MOTION PASSED**

S. Scott asked if by combining and modernizing these courses we are hoping to make more money. D. Calvert explained that the requisites used to be one arts, one science. The merged course will now be geared towards arts students trying to complete their required science credit. S. Stacey asked if our enrolment numbers were perhaps lower because other programs were offering better/more desirable courses. D. Calvert explained that this is one reason we want to update the course material to make it more relevant, since the demand for computer application courses is low. He noted that P. Matsakis has wanted to remove both courses altogether, but Open Learning wanted to keep one for the purpose of the summer semester.

TA allocation

SoCS is funded for 1 TA for every 50 students (or ½ a TA for every 25 students). D. Calvert noted that the spreadsheet was getting momentum and attention, with people wanting to add features and modify but he disagreed. He said this should not affect how TAs are allocated as this is typically how it's done now. More lab centric courses tend to get more TA support. He is not expecting any changes.

Two announcements were made. First, many students like to put assignments on Github, but someone has been telling students when they do this, the University then owns their intellectual property, which is false. D. Calvert looked up the intellectual policy on the University's website. He explained that we cannot tell students they aren't allowed to post on Github (because they are), but the problem arises when they do it during the course, leading to possible ramifications of academic misconduct. It was also noted that students can get private Github account for free to show employers but otherwise keep private.

D. Calvert also discussed the in-house software used for testing assignments against one another, noted it is in house for privacy reasons and that we cannot send student assignments off campus or across borders. He explained we cannot use external services and D. Rea can assist faculty using the in-house software. S. Kremer inquired about the one uses for thesis' (TurnItIn), J. McCuaig clarified that these can go off campus but not across the border.

F. Song asked how enrolled students own their intellectual property but faculty do not own the rights to their assignments for which they took the time to produce. D. Calvert explained that faculty creating assignments does not count as intellectual property as it is done in the course of fulfilling their job duties. S. Scott noted that in that case, students can publish their work on Github, but not any of the faculty code. D. Chiu mentioned fair use clause, but S. Scott replied that was no longer true, and D. Calvert confirmed he did not see it in policy. A. Hamilton-Wright added that the new laws around this have changed drastically and are very complicated

6. Chair of Strategic Planning Committee – Stacey

Strategic Planning Update

The Strategic Planning Committee has been meeting regularly. S. Scott received clarification from the Dean on what is expected from the self-study report which had been very enlightening. One of the results of the December 2018 retreat was highlighting issues that many faculty struggle with and would like to see changed at the school. It was clarified that we don't need a strong focus on every one of the college level goals. Additionally, we are still missing a lot of required data, for example a good sense of who our students are and what they need. Obtaining this information could be part of the committee's strategic planning goals.

It was also noted that relative to other departments, SoCS is not far behind in our strategic planning progress, in fact we are in relative good shape and the committee should have a draft proposal for Y. Xiang to review in March.

7. Computing Infrastructure Committee – Andrew

Infrastructure Update

See Appendix C

C. Obimbo asked about the progress of the AV in Reynolds 1101. It was confirmed this is done so the screens now move up and down. C. Obimbo also asked about the control button on this; K. Johnston clarified for everyone how this works. A. Hamilton-Wright explained that at this time there is no further plans for whiteboard installation in 1101.

The issue of THRN 2418 usage between SoCS and Engineering students was addressed. A. Hamilton-Wright explained he was working on fighting this. D. Rea suggested contacting fire prevention services, as having unbolted furniture in the hallways is against fire code.

S. Scott asked about the screeching sound coming from the projector in 2420, explaining it had happened four times during today's lab which was extremely disruptive. D. Rea explained we received clarification on who can submit work orders for this and it will be done today. He also noted that these rooms are supposed to be taken care of by Classroom Technical Support.

D. Calvert mentioned educating students on No Machine and asked if we can make it so the students cannot run web browsers through it. A. Hamilton-Wright explained we need the metrics to confirm what the problem is but agreed we should encourage to use web browsers from the computers they are working from.

8. Chair of Academic Staff Hiring Committee – David Flatla

Head up on F19 TA hiring

D. Flatla explained that the committee is trying to save everyone a summer by recruiting TAs for fall as soon as possible. Information about qualifications (not numbers) will hopefully be available soon.

9. Dan Penfold, CEPS Senior Manager Development

SoCS Alumni Awards event – Thursday March 21, 2019

See Appendix D.

10. Any other business

No other business.

Meeting adjourned 2:31pm