School of Computer Science
Council Meeting Minutes
Tuesday, February 11, 2020
1:00-2:30pm, REYN 1101

Present –
Faculty: L. Antonie, D. Calvert, R. Chaturvedi, R. Dara, A. Dehghantanha, D. Flatla, D. Gillis, M. Gong (Director), G. Grewal, A. Hamilton-Wright, H. Khan, S. Kremer, D. Nikitenko, C. Obimbo, S Scott, F. Song, D. Stacey, M. Wirth, Y. Xiang;
Staff: D. Byart, C. Hosker, K. Johnston, G. Klotz, J. Lange, K. Gardiner (recording secretary), A. Nejedly;
Student Representatives: S. Modi;

Regrets –
Faculty: X. Lin, J. McCuaig, P. Matsakis, J. Sawada, F. Wang, M. Wineberg;
Staff: D. Rea;
Student Representatives: J. Fraser;

1. Approval of Agenda for February 11, 2020

Motion: That the agenda for February 11, 2020 be approved, with items 4 removed.
(D. Calvert, A. Hamilton-Wright)
In Favour: All. Abstentions: None. **MOTION PASSED**

2. Dana McCauley – Director, New Venture Creation

- **Current programs provided by the New Venture Creation team at RIO**

See Appendix A.

3. Annoucements

M. Gong gave a reminder of the upcoming CEPS photoshoot on February 25th and 26th. If you haven't signed up on the google doc, please do so.

Another e-mail went out about the course evaluation questionnaire regarding upcoming changes. He noted there are concerns with them happening in the fall which is a busy semester. He said that if anyone wants to share further concerns, he can forward them to the administration. He also noted that if they don't happen this fall, then in two years T&P committee will need to evaluate 2 different types of evaluation results, so there isn't a perfect solution.

S. Kremer requested an update on the Recruitment and Outreach Officer position and hiring process. M. Gong explained that the Dean's office wants to move the reporting structure to the Dean's office (Associaet Dean), but that the position will remain embedded in our school.

He also shared that the job advertisement and fact sheet are being drafted and that the recruitment will start soon. He noted that they hope to have a person in place by March.

S Kremer asked if the job description was the same as as it was when L. Zweep had the position or if there had been any significant changes. M. Gong explained that the job description is now more generalized in order for the Dean's to have flexibility with the position across different departments.

D. Gillis wanted to comment from his role on the hiring committee. He noted that when the job fact sheet was distributed, he requested certain items (like Roboticon) to be added and was denied by the Dean's office due to "operational flexibility" and citing the expense of Roboticon. D. Gillis requested they provide information comparing Roboticon costs with other events. He also requested that a DOE be assigned to the position so we can be certain how much time the person will be spending on SoCS initiatives, which was also declined. He stated that he is worried we will lose the position but intends to keep fighting.

M. Gong acknowledged the cancelling of Roboticon, which he stated he does not agree with. He explained that while Roboticon was cancelled for this year due to the timing of L. Zweep's departure and the amount of work required to execute it, he does not believe we should be giving it up entirely. He said we will try and argue for this. He thanked D. Gillis for sitting on the hiring committee and explained his motivation is to have a strong voice from SoCS in the committee.

4. Approval of Minutes from November 12th and 26th, 2019

These minutes are complete but due to technical difficulties were not sent out in time for the meeting. They will be distributed today and voted on for approval at the next meeting.

5. Dave Calvert

- **Undergraduate cirrculum discussion (see Appendix B)**

D. Calvert explained that we currently offer two Discrete Structures courses in first year, CIS*1910 and CIS*2910. CS majors are required to take both courses while Software Engineering students are only required to take CIS*1910, which is also used as a prerequisite for other CS courses (while CIS*2910 is not). He explained that initially, we offered a single first year discerete structurs course, and when the second course was added, it suggested to make it a third year course. The School has previously considered the option of returning to a single, first year Discrete Structures course, which included the creation of a third or fourth year Discrete Math elective course, however this proposal was not approved.

He explained that the SOE (School of Engineering) is developing a plan for a summer academic semester but are having scheduling issues with CIS*2910. He noted that we already allow the CENG students to take an engineering course in place of CIS*1910. They requested that the SoCS Cirriculum Committee consider another engineering course as a substitute for CIS*2910, however the Committee felt that the proposed course was not a suitable replacement for 2910.

D. Calvert mentioned that the Associate Dean Academic has asked that we consider the idea of a single Discrete Strucutres course in first year, which while initiated by the Assoicate Dean, does provide an opportunity to the school.

The benefits he noted were that a single first year Discerete Structures course would mean that all B. Comp students would be required to take the same material and be equally prepared for later courses. Since SENG students do not currently take CIS*2910, it cannot be fairly used as a prerequisite for other later courses.

He also noted that the teaching task currently allocated to CIS*2910 could be used to create a new senior course. Since third and fourth year courses are currently very full, another senior course would alieve some pressure on existing courses and provide more options for students. He also noted that a new senior course could be used to engage students with the materials and encourage them to pursue graduate studies.

He also explained that it is not clear that students need more discrete mathematics in first year and that presenting it a more senior level may be more appropriate and relevant. He also acknowledged a problem with this idea being that students are already entering the program with weak mathematical preparation and removing CIS*2910 may make this worse.

He also shared the removal of CIS*2750 as a prerequisite to CIS*3750. Due to the high drop/fail rates of CIS*2750, this leaves students with very little to do the following year. The committee agreed to remove the prerequisite but add in others.

D. Calvert also discussed the possible introduction of a 3000 level special topics course, as a good way to introduce new course topics in an experimental way. They could be used as a way for faculty to “try things out”.

He also reminded of the general program changes, all of which have been previously discussed.

D. Calvert shared that the funding for a summer semester has not yet been approved however he thinks a summer semester would be beneficial for SoCS; it would be easier to find resources and classrooms during the quierter summer months, allowing larger classes to be split into smaller ones. He shared that the Associate Dean is working on funding (which ought to be relatively cheap), however due to time constraints, even if it is approved this year, it will not take appear until the 2022/2023 calendar.

He stated that he intends to be inflexible on the requirement to have a minimum of five *useful* CS courses offered in a summer semester if one were to run. He does not want to see CS students taking 1 or 2 CS courses and then filling the rest of the summer semester with “easy” electives. He said he has not received a lot of push back on this particular point, so he is hopeful it will go through.

D. Flatla asked about the difference in guidelines between 3000 and 4000 level special interested courses. D. Calvert noted that both can be used for special topics, but also as “group versions” of 4900. He explained that the guidelines for each are not yet finalized, but he will make a note to revisit this and confirm.

D. Flatla also asked about the structure of the summer semester; D. Calvert confirmed it would be a 13 week schedule and that second year would be shifted around (semester 4 would be moved to the summer)

F. Song asked about the Engineering students having their own programming courses so their students won't be taking ours and when this will take effect. D. Calvert replied that they are currently working on these calendar changes and that 2021 is a presumable start date.

S. Kremer wanted to confirm that CIS*2910 was not a perquisite for later courses and why it is important for students to take if not that was the case. D. Calvert that is helps Engineering studens "check a box" for their programs.

D. Calvert explained that K. Gordon had asked him if it was possible to merge CIS*1910 and CIS*2910 into one course, and that he would bring it to the council. He explained that this is the consultion step in the poropsal (whether or not have to a single descrete math course in first semester).

S. Scott wanted to clarify that both CIS*1910 and CIS*2910 are each 0.5 credits and yes, this is the case. She also asked about labs. D. Calvert explained that they are currently each 2 hous a week but will be moving to 1 hour a week. He also acknowledged a difference in instructor preferences regarding lab lengths; some faculty like longer labs and some do not. S. Scott expressed a desire to hear from faculty who teach upstream courses and how much knowledge is required (how far can students go and get ready with one course versus two).

D. Calvert acknowledged that is is impossible to fit all the course material from both courses into one. He also warned against faculty trying to be clever by spreading material out over various courses; he stated this does not work as the faculty teaching the course can change over time. He feels that the course work should be consistently anchored to each course.

S. Scott noted that taking a first year course and learning knowledge required in third year is problematic due to the time gap and students likelihood to forget. D. Stacey agreed and said she would like to see a discrete math course in third year. She feels that students will get more "bang for their buck" and are more receptive to understanding various concepts. She noted that first year students won't understand it as well as they don't think as abstractly as upper year students. She also expressed that there would third year takes for things like graph courses and courses with more in depth ideas. She reiterated that there should be a first year course to provide a foundation, but a third year course would really allow students to take advantage D. Gillis shared that he is in favour of an upper year math or theory course.

C. Obimbo noted, having taught both CIS*1910 and CIS*2910, that they were sperated because of the amount of material would be too overwhelming for students in one course. He noted that his current class (291) is very engaged with high attendance. He agreed with S. Scott that there is a gap between the time students learn the material and when they apply it, but that they do apply a lot of the knowledge in other courses.

C. Obimbo shared that Theory of Compution (a third year course) assumes the knowledge learned in CIS*2910, even though it is not an official prerequisite. D.

Calvert noted that for Theory of Compution, while having taken CIS*2910 is no doubt helpful, faculty can not expect students to have that course knowledge as it is not an official prerequisite for CIS*3490. C. Obimbo pointed out that students who had not taken CIS*2910 were dropping CIS*3490. He shared that what happens in CIS*3490 is that the faculty have to take time to review background material (which would have otherwise been known had students taken 2910), rather than moving forward on the course work. D. Calvert reititered that this responsibility falls on the faculty member teaching CIS*3490, as CIS*2910 is not an official prerequite and students can not be expected to have the knowledge.

7. Ali Dehghantanha

- **Projects for MCTI students**

A. Dehgantanha shared that we have received a total of seven (7) industry project proposals. The deadline for these are March 15th, 2020, with student application deadline being March 18th. Student interviews are to take place by March 25th and the project start date April 15th, with project marks in the system by August 15th. M. Gong asked if supervisors are supposed to fund their students for these; A. Dehghantanha confirmed no. S. Kremer noted a limitation on administrative resources. A. Dehghantanha confirmed that the hope is obtain another administrative staff position to support the MCTI position.

D. Gillis asked about the MITACS grant and which faculty member would be on it. A. Dehghantanha explained that some of these projects are secured through faculty members' connections and hence the corresponding faculty members are expected on them. Others are distributed among MCTI faculty members.

- **Update on applicants for next cohort**

A.Dehghantanha shared that we have 15 accepted offers, 7 pending offers, 4 undecided and 24 incomplete applications. He noted that they all have an average of 80% average or higher and that he expects an enrolment of 35-40 students for the program next year.

8. Minglun Gong

- **Award nominations**

M. Gong shared that there are four College level awards coming up. Undergrad research supervision award, Grad supervision award, Undergrad teaching award, and Assistant prof research excellence award. He also shared University level awards that are coming up: REA (Research excellence awards for those Assoc. Profs within 2 years from being granted tenure) and RLC (which is on hold until we get the new rules, this is for established researchers). He explained that nominiations are not out yet but wanted to give SoCS a heads up and encouraged the council to nominate our colleauges or self-nominate. He acknowledged the

amount of work required to put in a nomination but explained that he wants to see our faculty recognized at the college level. He said that he spoke with M. Wirth and they agreed that the T&P committee can aid in some of this work, as they have access to a lot of information regarding faculty performance. He acknowledged that this is nto feasible for this year since the T&P Committee did not evaluate all faculty members last Fall. Hence, he hope faculty members will step to take this on. He also asked faculty to let him know if they are able to do this and/or require help or support.

- **Data and comments for updating Self-study report**

M.Gong explained that an e-mail was sent about this, but he did not receive enough responses to change the graph that had been previously presented. If he receives no further input, then he will send out the latest version of the self-study report for voting.

- **Discussion on proposing PhD in CS program**

M. Gong shared that when he met with B. Bradshaw and J. Sawada, two options were presented. Option 1 is to create a single PhD in CS degree with two routes of completion through only major modifications; and option 2 is to propose a new PhD in CS degree, while keeping the current PhD in Computational Sciences degree unchanged. When he invited B. Bradshaw to School Council, Ben shared the 3rd option, which is to propose PhD in Computational Sciences as a new degree. M. Gong understood the concerns from the School about this 3rd approach. He and Joe met Ben again and Ben agreed not to pursuit the 3rd approach. M. Gong shared that he wants to hear from the council before putting together a proposal. He would like to call a vote online to allow all voices being heard.

S. Kremer noted that there is a position from the University's administration that we should be trying to do more work with less resources. He referred to adding the Cyber Security program, where we received more faculty but no additional staff, which is impacting our communication with MITACS. He went on to say that if we are going to be on board with the "new/old" CS PhD, we will require more staff support, as it is not feasible to ask the current graduate assistant to further split their time. He warned that we should be cauious moving forward and given that there seems to be interest from higher up (VP of Graduate studies and the Dean's office), we should state that we are interested but will require a full-time position to make it viable. He also noted that we would also require more faculty positions.

M. Gong stated that our current PhD program is too small to warrant asking for more faculty. He noted that regarding MCTI, the University wanted to see how the program ran before approving staff resources. Since the program is running well, we are getting the support.

D. Gillis agreed with S. Kremer and pointed out that the University is notorious for granting approval before giving us the required support. He stated that we should

get firm commitments in advance. He explained that is not opposed to the PhD in CS but when taking into consideration that along with MCTI, Data Science and a possible course based masters, this will introduce a significantly more amount of work for the graduate assistant. M. Gong confirmed that that the course based masters is not currently on the table, as it is more revenue-oriented pursuit. He also noted that a single graduate assistant position should be able to handle the regular masters program and both PhDS, but that extra staff may be required for MCTI.

M. Wirth asked if the "new/old" PhD progam would be course based. M. Gong stated no, there would be no course, therefore it is not truly like the "old" one. D. Calvert requested that M.Gong not disregard the option 1 that has two routes of completion within the same PhD degree, simply due to the fear that it would affect the current program. He noted that without discussing with faculty, it could be paletable and worth considering. M. Gong acknowledged that he is actually open it, but not sure if it is supported by the faculty. D. Calvert explained that it had been proposed and wasn't sure why it wasn't being considered as an option.

D. Calvert also pointed out the issue of not just approving the new stream but a whole new PhD prgram. He asked if the second stream be a whole new proposal versus major modification. M. Gong said when approached by B. Bradshaw, it was proposed that we could have two major modifications; first moving the current program back to the original name (one program), then adding the current program as a new route of completion (a possible detour for students). D. Calvert noted that if the primary concern merely the name of the program, then that is not overly serious issue.

D. Calvert also noted that if voting was going to be done online, then faculty needed to be able to make amendments; if the motions are lacking details, there need to be clear actions that the faculty can support or suppose. M. Gong shared that the motion he planned for online voting: "proceed with the development of the PhD in CS proposal under the condition the PhD computational sciences program is kept unchanged."

G. Grewal stated that he is not so worried about how a new Phd program will start out so much as he is worried what will happen when it gets going. He is worried about having two weak programs or having one program weigh the other down. He pointed out that we've already lost one PhD program, so it doesn't make sense to make a case for having two strong ones. He wanted the council to keep in mind that if we pursue this, then in 2-4 years we will have to provide accounting and will have to be accountable for the programs' numbers.

M. Gong shared that the feedback that has been given is that provincial government treats graduate programs differently now when compared to the time we lost our PhD program. It is are more self-governed now. G. Grewal pointed out that the fact that it's more internal is irrelevant.

M. Gong asked if we can motion to move forward with the proposal. G. Grewal requested that before we make a motion, we are given more information to know exactly what will go into the proposal. He said he would like to see some sort of protection around who is already in the program and who will be granted degrees in the coming years.

9. Any other business

No other business. Meeting adjourned 2:34pm.