

# Minutes of the Faculty Council Meeting of April 17, 2015 at 12:10 p.m. Michael E. Charles Council Chamber (GB 202)

**Present:** 

Tony Sinclair (Speaker) Tarek S. Abdelrahman

Edgar Acosta Grant Allen

Cristina Amon (Dean) Philip Anderson Giselle Azimi Joe Baptista

J. Christopher Beck

Sharon Brown Markus Bussmann

Hai-Ling Margaret Cheng Alan Chong Tom Coyle Kevin Dancy Iim Davis

Levente Diosady Khuong Doan Edem Dovlo Stark Draper

Natalie Enright Jerger

Carolyn Farrell

Mohammadreza Fazeli Genevieve Foley Jason Foster Krisztina Harmath Christina Heidorn R. Douglas Hooton

Oghosa Igbinakenzua M. Reza Iravani Abdinoor Jelle Penny Kinnear Don W. Kirk

Frank R. Kschischang Raymond Kwong Elias Kyriacou Ofer Levi David Lie

Antonio Liscidini

Camila Londono Ferroni

Brenda McCabe
Susan McCahan
Paul Milgram
Hani Naguib
Farid Najm
Tom Nault
Wai Tung Ng
Jun Nogami
Graeme Norval
Elodie Passeport
Nelly Pietropaolo

Luz Puentes Jacome Li Qian Lisa Romkey Kevin Rupasinghe Katie Sampson Costas Sarris

Chandra Veer Singh Gillian Sneddon Micah Stickel Pierre Sullivan Joshua Taylor Deborah Tihanyi

Zeb Tate

Olev Trass Piero Triverio Shahrohk Valaee Sorin P. Voinigescu

Peter Weiss Lydia Wilkinson Chris Yip

Paul Yoo Wei Yu

**Regrets:** 

Ken Tallman Molly Shoichet Brent Sleep

**Guests:** 

Sonia De Buglio Michelle Deeton Leslie Grife Jan Haugan Cori Hanson Dan Pettigrew Catherine Riddell Cristina Sewerin

Siyu Liu

Geoff Wichert Caroline Ziegler

# 1. Speaker's Welcome and Adoption of Agenda

Council Speaker Tony Sinclair thanked members joining the final Council meeting of the 2014-2015 academic year and welcomed all present. He noted that the agenda and majority of documents were distributed on April 7, Report 3463 was distributed on April 9 and the minutes from the February 10 Council meeting were distributed on April 16.

On a regular motion duly moved, seconded and carried, it was resolved -

THAT the agenda be adopted.

#### 2. Adoption of Minutes of Previous Meeting

No errors or omissions were noted on the minutes of the previous meeting. On a regular motion duly moved, seconded and carried, it was resolved –

THAT the minutes of the meeting of February 10, 2015 be approved.

#### 3. Report of the Dean

Dean Cristina Amon welcomed members to Council, her first after taking a brief administrative leave. She acknowledged and thanked Brenda McCabe for her outstanding service as Acting Dean during this absence, and welcomed Tom Coyle, who started as our new Vice-Dean, Undergraduate on April 1, 2015.

# a) Engineering Society

Dean Amon thanked Teresa Nguyen and her executive team for their leadership of the Engineering Society and representation of student interests at Faculty Council this past year. She congratulated the new executive, who took office on April 11, and looks forward to working with them.

#### b) Dean's Strategic Fund

Sixteen proposals for the Dean's Strategic Fund have been submitted, representing a range of multi-departmental and collaborative initiatives. Funded proposals will have a broad impact within the Faculty, further our academic plan goals, and have the potential of becoming self-sufficient within three years. The proposals are being evaluated by two Advisory Committees and letters will be sent out when final decisions are made.

#### c) CEIE Update

We continue to make progress on the new building, the Centre for Engineering Innovation & Entrepreneurship (CEIE). Our rezoning request was approved by City Council on March 31 and the maximum 35-day appeals period is underway. The building will feature space for many of our multidisciplinary research institutes and centres created or launched in the last few years, such as the Centre for Global Engineering, Institute for Sustainable Energy, Institute for Robotics & Mechatronics, Institute for Water Innovation, and Institute for Leadership Education in Engineering, and will provide a home for student activities such as clubs, Technology Enhanced Active Learning (TEAL) rooms, and design, fabrication and prototype facilities. The Faculty is to be commended for its dedication: we had five years to get to this point and the CEIE construction, otherwise the space would have returned to the University to be used for other initiatives.

A celebratory groundbreaking event is being organized for June 24.

#### d) Convocation

Our Faculty's convocation is on June 15 and all are encouraged to attend. Programs graduating in the morning include BME, ChemE, ECE and EngSci, and in the afternoon include UTIAS, CIV, MIN, MIE and MSE. The morning speaker is Dr. Alfred Aho, Lawrence Gussman Professor in the Department of Computer Science at Columbia University and U of T alumnus with a BASc in Engineering Physics. The afternoon speaker is to be determined, and members are invited to submit nominations from amongst our Faculty.

Graduands and their families will celebrate convocation within each department/program, resulting in a more personalized experience. This will be evaluated for future convocations.

# e) Celebrating Engineering Excellence

Our eighth annual Celebrating Engineering Excellence Reception will be held on April 21 from 4:00-6:00 pm in GB202. The Dean invited faculty and staff to attend.

#### 4. Master of Engineering in Biomedical Engineering

Chris Yip, Director of the Institute of Biomaterials & Biomedical Engineering, presented Report 3463, a proposal to create a Master of Engineering in Biomedical Engineering.

The MEng program, a three-session, non-thesis professional degree with an internship focusing on medical devices, will complement the Institute's MASc, PhD and MHSc, Clinical Engineering programs. After increasing enrolment of ten students a year for four years, the MEng is projected to reach a steady state of 50 students by 2020-2021, a cohort similar in size to the Clinical Engineering MHSc program. The MEng program was appraised by an external team in the winter and received significant praise. After Council approval, it will proceed through University and provincial governance, with an anticipated launch in September 2016.

At the conclusion of the presentation, the following regular motion was moved and seconded –

THAT a Master of Engineering in Biomedical Engineering be established with a projected launch date of September 2016.

Professor Yip is confident there will be sufficient internship opportunities once program enrolment has reached steady state, because of the significant overlap with the existing clinical engineering internships and strong interest from industry in medical devices.

The motion was carried.

#### 5. Graduation with High Honours - Addendum to Report 3450 Revised

Pierre Sullivan of the Examinations Committee presented an addendum to Report 3450 Revised, which was approved at the November 25, 2014 Council meeting by the following

motion: "That the new degree citation of 'Graduation with High Honours' be created for undergraduates who graduate with minimum year 2-4 cumulative average of at least 87.50 percent. Accordingly, the citation of 'Graduation with Honours' would be capped to an average below 87.50 (i.e. 79.50 to 87.49 range)."

The addendum states that students graduating with the high honours designation must also achieve a weighted sessional fourth-year average of 82.50 percent or higher, excluding any required first-year courses, repeated courses or courses marked as "Extra". This will ensure that students achieving this designation demonstrate excellent performance in the most advanced engineering courses typically experienced in their final year of study.

At the conclusion of the presentation, the following regular motion was moved and seconded –

THAT the new degree citation of "Graduation with High Honours" further requires students to meet a weighted sessional fourth year average of 82.50 percent or higher.

Professor Sullivan confirmed that the amendment will be communicated to students on the Engineering website and will be published in the upcoming calendar.

The motion was carried.

# 6. Major Curriculum Changes for the 2015-2016 Academic Year

Graeme Norval, chair of the Undergraduate Curriculum Committee, presented Report 3466, which includes a revision to the course description for BME225, the addition of four laboratories to BME395, and the addition of ECE469 as an allowable elective for Engineering Science's Physics Option. In addition, APS1XX: Interdisciplinary Introduction to Sustainability has been created as a complementary studies elective available to students in the summer International Foundation Program. This elective will be taught in English to allow students to practice their language skills, and can be applied toward engineering degree programs.

At the conclusion of the presentation, the following regular motion was moved and seconded –

THAT the proposed curriculum changes for the 2015-2016 academic year set out in Report 3466 be approved.

There were no questions and the motion was carried.

#### 7. Undergraduate Academic Certificate in Communication

Graeme Norval, Chair of the Undergraduate Curriculum Committee, presented Report 3467, a proposal to create a certificate in communication. As is policy in our Faculty,

students must take three one-semester courses to achieve the certificate, which will be noted on their transcript. The creation of the certificate is supported by the Engineering Communication Program as a means of rewarding students for making a commitment to developing communication beyond the required foundation.

At the conclusion of the presentation, the following regular motion was moved and seconded –

THAT the undergraduate academic Certificate in Communication be approved and introduced in the 2015-2016 academic year.

Members expressed concerns about the certificate, saying that it is outside Engineering's core mission and will be a distraction, and that having too many certificates will dilute their meaning. Instead, students who wish to pursue communication skills in depth can do so through the Department of English. A member said that communication is taught in elementary and high school, and there is little room for additional communication courses in the current engineering student curriculum.

It was also said that a stand-alone communication certificate is unnecessary, since the subject is embedded in other certificates such as leadership. Furthermore, the certificate may cause bias in a student's choice of electives, and courses should instead be just listed on the transcript. Concerns were also raised that the certificate may give employers a false impression of a student's communication skills, and imply that students without it do not have the same skills.

Other members, including student and alumni representatives, supported the certificate, pointing out that the proposed certificate is based on courses that are offered through the Engineering Communication Program, one of the unique and differentiating strengths in our Faculty, for several years. Certificates, like minors, exist to highlight students' skills, areas of expertise and core strengths. They are worth three courses or half a minor, and undertaking them will not add to a student's course load or take away space from their curriculum.

It was noted that achievement of the communication certificate will act as recognition of a student's interest and mastery of skills in a particular area, similar to the business and leadership certificates. Not having the certificate will not imply that a student is a poor communicator, any more than the absence of the leadership certificate would suggest a student is a poor leader.

An alumnus member of Council said the certificate will allow students much needed practice through discussions, presentations and writing assignments, and will be welcomed by employers and industry.

Another member said the certificate would be unnecessary if students had adequate communication skills coming into our programs, but they do not. With its focus on literature, the Department of English does not offer comparable communications courses to

professional programs and cannot provide the skills required by engineers who need to be both technically competent and able to communicate well.

The motion was carried.

#### 8. Reports and Recommendations of Standing Committees

The following reports were approved at the March 25, 2015 Executive Committee meeting and are for Council's information.

#### a) Engineering Graduate Education Update

Markus Bussmann, Chair of the Engineering Graduate Education Committee, presented Report 3464, which lists six new graduate courses in MIE, MSE, ECE and APS, minor modifications to two ECE courses, and the deactivation of 66 courses previously offered to ECE students.

An ECE faculty member noted that some of the listed de-activated courses are currently being taught. Professor Bussmann suggested they were removed in error and offered to rectify this after the meeting.

The item was received for information.

# b) Teaching Award Cycle Dates

Lisa Romkey, Chair of the Teaching Methods & Resources Committee, presented Report 3468, which moves the annual deadline for departments to submit teaching award nomination packages from early March to the end of June in order to avoid the busy midsemester period. The TMRC will make its selections in early fall, and the awards will continue to be presented at the annual awards reception in April.

In response to a member's question about how this change will be managed, Ms Romkey said there will be a one-year gap, then the process will resume under the new timeline.

Another member cautioned against moving too many activities into the so-called quiet months, because May and June can be quite busy. Ms Romkey said that another motivation for the change was to extend the nomination period to the end of the year, thereby giving instructors more time to reflect on a year of teaching.

The item was received for information.

#### c) Community Affairs & Gender Issues Update

Edgar Acosta, Chair of the Community Affairs & Gender Issues Committee, presented Report 3469, an update on the committee's goals of increasing gender diversity in the Faculty. These include conducting a student survey that will allow the Faculty to establish a baseline of the current climate and identify any potential trouble spots; better connecting the research done by our faculty, alumni and students to the broader community by

producing quality video demos of our research efforts and coordinating with the Toronto District School Board to introduce them into elementary and high school classrooms; and working with Engineering Outreach to ensure that any outreach mandated by funding agencies aligns with the Faculty's priorities. Finally, the committee will support the Engineering Diversity Initiative led by the First Year Office and the Engineering Positive Space Committee.

There was no discussion and the item was received for information.

### 9. Faculty Council Meeting Dates, 2015-2016

The Speaker presented Report 3462, the Council meeting dates for the next academic year: October 28 and December 8, 2015 and February 29 and April 12, 2016.

There was no discussion and the item was received for information.

#### 10. Standing Committees and Academic Appeals Board Appointments, 2015-2016

The Speaker presented Report 3461, appointments to the Academic Appeals Board and standing committees of Council for 2015-2016. Alumni and student members will be appointed in the next few months, and an updated report will be presented to Council at its fall meeting.

There was no discussion and the item was received for information.

# 11. Report of the Engineering Alumni Honours & Awards Committee

Doug Reeve, Chair of the Engineering Alumni Honours & Awards Committee, presented Report 3460, which will be posted on the Faculty's website after the meeting. After thanking the committee members for their work, Professor Reeve listed the candidates for induction into the 2015 Engineering Alumni Hall of Distinction, and recipients of the Engineering Alumni Medal, 2T5 Mid-Career Award, 7T6 Early Career Award, Malcolm McGrath Award, L.E. (Ted) Jones Award, and Honourary Member – Engineering Alumni Association Award.

Professor Reeve invited members to attend the annual Alumni Awards Dinner, which will be held on November 5, 2015 at the Great Hall, Hart House. He also encouraged members to submit nominations for next year's awards and noted the deadline of February 2016.

#### 12. Recognition of Service

#### a) Retiring Faculty Member

Grant Allen, chair of the Department of Chemical Engineering & Applied Chemistry, recognized the contributions made by Professor Masahiro Kawaji, who retired in January 2015. Professor Kawaji was regrettably unable to attend the meeting.

#### b) Outgoing Academic Administrators

Dean Amon acknowledged Susan McCahan, who served as Vice-Dean, Undergraduate from 2011-2015, and presented her with a gift of an engraved jade plaque.

#### 13. Teaching Assistant Award

Established by Faculty Council in May 2010, the Teaching Assistant Award recognizes teaching assistants who demonstrate outstanding performance in classroom instruction, consultation with students outside class, the use of effective teaching methods, and the development of course material.

Dean Amon presented Siyu Liu, a PhD candidate in Electrical & Computer Engineering, with the award of an engraved jade plaque and thanked him for his outstanding contributions to engineering education in the Faculty.

# 14. Academic Technology: Update on the Academic Toolbox Renewal and Online Course Evaluations

Lisa Romkey, Chair of the Teaching Methods & Resources Committee, updated Council on the Academic Toolbox Renewal Project, the University's process to review academic technology with a goal of moving away from a one-size-fits-all solution to a variety of teaching tools that have at its core a learning management system (LMS). The timeline to roll out the LMS is twelve months.

Ms Romkey described the stakeholders, process and timelines, and invited members to provide input through a series of one-hour focus groups in May.

In response to a member's question about whether Coursera is being considered, Ms Romkey said that it will be looked at as a potential source from which to draw practices, but it may not offer the core functionality that the University requires in an LMS. Another member cautioned against overlooking basic functionality such as integrated management of tutorial sessions and the ability to template sites, which are failings within Blackboard, the current LMS.

#### **15. Other Business**

Dean Amon recognized the contributions of Tony Sinclair, who has served as Council Speaker from 2012-2015 and is not seeking re-election. She presented him with the gift of an engraved gavel.

There was no other business.

# 16. Date of Next Meeting

The next meeting of Faculty Council is on Wednesday, October 28, 2015.

The meeting was adjourned at 1:40 p.m.

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