

TO: Faculty Senate

FROM: Robert Hanson, Secretary, Faculty Senate

SUBJECT: Minutes, 2 March 2016

Present: (Professors) Adams, Andrews, Barczak, Bickmore, Brooks, Caligiuri, Cokely, Crittenden, Daynard, Devlin, Gouldstone, Hajjar, Hanson, Howard, Kanouse, Kelly, Kruger, McOwen, Ocampo-Guzman, Portz, Sceppa, Suciu Vicino, Young (Administrators) Ambrose, Bean, Brodley, Courtney, Loeffelholz, Poiger, Reynolds, Tilly

Absent: (Professors) Hellweger, Lerner, Leslie, Nelson, Patterson, and Piret. Deans Aubry, Hudson,

I. **CONVENED.** Provost Bean convened the Senate at 11:45 AM

II. MINUTES

II.1. The 17 February minutes were approved as written.

III. SAC REPORT

- III.1 Professor Sceppa: The SAC met twice since the last Senate meeting and is scheduled to meet with the senior leadership team following this meeting and with the Provost tomorrow. SAC also met with representatives from the Graduate Student Group.
- III.2 The SAC is pleased to announce that the following faculty colleagues were elected to the 2016-2017 Faculty Senate:
 - From DMSB: Professor John Dencker, Management and Organizational Development and Professor Olubunmi Fayele, Finance
 - From CSSH: Professor Neal Learner, English, was reelected for another term; Professor Ellen Cushman, English and Professor James A. Fox, SCCJ
 - From CCIS: Professor Timothy Bickmore was elected for a one-year term.
- III.3 The following Senate resolutions were signed and returned as follows:

1516-04	Funds for promotions to be separate from the merit & equity pool: Approved by the Provost; Board of Trustees action not required
1516-07	Establishment by departments or units of detailed procedures for determining equity adjustments consistent with the Faculty Handbook. Approved by the Provost; Board of Trustees action not required
1516-09	Exploration by the University of a health insurance group for the benefit of retired employees. Approved by the Provost; Board of Trustees action not required

IV. PROVOST'S REPORT

- IV.1 Provost Bean: There are differing opinions on the merit raise process between faculty and deans but for the current cycle the Faculty Handbook will be followed. The promotion pool will be separate from the merit/equity pool this year and the Provost recommends 75% for merit and 25% for equity. Much of the equity pool was routed to promotions. A process to review procedures within units should begin soon. According to the Faculty Handbook, it is the purview of the department or unit to decide upon guidelines and it is hoped that fairness and original thinking will prevail. Conversations have been constructive and transparent.
- IV.2 Today's proposals from the Colleges on analytics have been under construction for a long time and, despite the use of the "analytics" buzzword, are, in fact, different programs using different mathematical functions that are unique to each area. CPS and DMSB will be making proposals in future.

V. NEW BUSINESS

A. Graduate Council Proposal: Name Change. Professor Bickmore read the following and it was seconded:

BE IT RESOLVED That the Senate approve the name change of the Masters of Science in Information Assurance to the Masters of Science in Information Assurance and Cyber Security in the College of Computer and Information Science, as approved by the Graduate Council on 3 February 2016.

VOTE: 32-0-0

B. Graduate Council proposal: Master of Science in Environmental Engineering. Professor Hajjar read the following and it was seconded:

BE IT RESOLVED That Northeastern University establish the Master of Science in Environmental Engineering in the College of Engineering as approved by the Graduate Council on 17 February 2016.

VOTE: 32-0-0

C. Graduate Council proposal: Master of Science in Engineering and Public Policy. Professor Hajjar read the following and it was seconded:

BE IT RESOLVED That Northeastern University establish the Master of Science in Engineering and Public Policy in the College of Engineering as approved by the Graduate Council on 17 February 2016.

Professor Kruger asked what the statement regarding a national need for this proposal was based upon. Professor Hajjar responded that building strengths with SPPU provides a sense of what is happening nationally. The statement was not based on a market study. Professor Kanouse wondered what involvement by the School of Architecture consisted of; Professor Hajjar responded that two courses are

offered but formal discussions with The School have not taken place. Professor Sceppa inquired whether there is expected to be a directional flow from interested public policy students. Professor Hajjar affirmed this and noted that some COE background courses would be needed. Dean Poiger noted that it would be unusual for a public policy student to be interested in engineering but students would be learning to collaborate and engage. Professor Cokely asked about the nature of the curriculum committee described in the proposal and how the CSSH will take part. Professor Hajjar explained that Professor Matthias Ruth is a jointly appointed faculty member and that a committee of made up of similar faculty is envisioned. Provost Bean inquired whether other engineering programs are looking at similar collaborations. Professor Hajjar affirmed that this was so. Professor Gouldstone confirmed that mechanical engineering would find the proposal attractive.

VOTE: 32-0-0

D. University Undergraduate Curriculum Committee proposal: BS in Data Science. Professor Bickmore read the motion and it was seconded. Professor Bickmore then motioned to amend by substitution on order to correct an error and this was seconded. The amended resolution reads:

BE IT RESOLVED That Northeastern University establish the BS in Data Science in the College of Computer and Information Science as approved by the UUCC on 11 February 2016.

VOTE in favor of amendment by substitution: 32-0-0

Professor Rasala was recognized and explained the course requirements including those courses from around the University.

VOTE: 31-0-1

E. Graduate Council proposal: Master of Science in Data Science. Professor Bickmore read the following and it was seconded:

BE IT RESOLVED That Northeastern University establish the Master of Science in Data Science in the College of Computer and Information Science and the College of Engineering as approved by the Graduate Council on 17 February 2016.

Dean Brodley provided an overview of proposals E., F., and G. as requested by the Senate Agenda Committee in order to clarify the differences between proposals E., F., and G.

There is currently a Data Analytics Certificate in offered in three colleges and two more proposed masters will be forthcoming for more technically savvy students.

Commonality – looking at data
Data mining with different foci
Data processing emphasis on large data
Data presentation and visualization from different perspectives
Statistics

The core idea behind all three proposals is to develop algorithms and implement them.

Professor Kanouse asked why separate degrees are proposed. Dean Brodley responded that there large differences in backgrounds required within each focus area. Professor Gouldstone added that similar programs in engineering will require different foci for employment. Dean Courtney agreed. He asked what the sense for outcomes are as there could be significant overlap. Professor Kruger asked why the process did not provide the clarification that Dean Brodley provided prior to coming to the floor of the Senate.

Discussion returned to the proposal on the table (E.)

The motivation for the proposal is the great demand for trained masters' graduates who are taught all aspects of data collecting and interpretation. Demand exceeds programs offered nation-wide. The proposal is open to any type of STEM background. Further explanation of the courses was offered.

VOTE: 32-0-0

F. Graduate Council Proposal: Master of Science in Health Data Analytics. Professor Howard read the following and it was seconded:

BE IT RESOLVED That Northeastern University establish the Master of Science in Health Data Analytics in the College of Computer and Information Science and the Bouvé College of Health Sciences as approved by the Graduate Council on 17 February 2016 (7:0:1)

Professor of the Practice Pavel was recognized and explained that market analyses indicated extraordinary need. He explained the courses offered. Professor Hanson inquired how much of the program is being compromised by not being able to develop the courses that Professor Pavel would like to offer. The Professor responded that, given complete freedom, he would redesign data science courses to focus on health care. Professor Hanson: Is it then premature to offer it now or develop it later? Professor Pavel responded that the offered courses will attempt to cover this to some extent but opined that it is time to move aggressively. Dean Brodley agreed and noted that this opportunity builds on current Certificate programs. Professor Patterson wondered about a focus on fraud detection or on delivery of health care. Professor of the Practice Jimison explained that stakeholder needs are the principle motivation. Professor Sceppa asked if there is value in offering this for students who may not be familiar with analytics and Dean Brodley noted that it was a good point to consider.

VOTE: 32-0-0

G. Graduate Council Proposal: Masters of Science in Data Analytics Engineering. Professor Gouldstone the following and it was seconded:

BE IT RESOLVED That Northeastern University establish the Master of Science in Data Analytics Engineering in the College of

Engineering as approved by the Graduate Council on 17 February 2016 (7:0:1)

Professor Bickmore noted that core courses are not listed in the proposal. Professor Kaeli was recognized and explained that it is the intention to include courses and the content is under construction.

VOTE: 29-0-3

VI. ADJOURNMENT

VII.1The Senate adjourned at 12:59 PM.

Respectfully submitted,

Robert Hanson, Secretary Faculty Senate