College of Engineering

North Dakota State University Faculty Council Meeting

Tuesday, January 19, 12:30 - 1:30 on Zoom

Attending:

CoE: Michael Kessler, Scott Pryor, Joel Hanson, Steve Jeffery

ABEN: Zhulu Lin, Ewumbua Monono, Shafiqur Rahman, Dean D. Steele

CEE: David R. Steward, Beena Ajmera, Achintya N. Bezbaruah , Xuefeng (Micheal) Chu, Ying

Huang, Dinesh R. Katti, Wei Lin, Kelly A. Rusch, Mijia Yang, Ravi K. Yellavajjala

CS: Anne Denton, Simone Ludwig, Jeremy Straub

CME: Zhili 'Jerry' Gao, Youjin Jang

ECE: Benjamin Braaten, Farhad Carami, Jacob Glower, Ivan T. Lima, Michael Maassel,

Danling Wang, Di Wu, Qifeng Zhang

IME: Kambiz Farahmand

ME: Alan Kallmeyer, Inbae Jeong, Ghodrat Karami, G.H. Nazari, Robert Pieri, Majura Selekwa,

Chad Ulven, Yan Zhang

1. Call to Order (Lin)

The meeting was called to order at 12:33 pm

2. Approval of Minutes from Last Meeting

Motion to approve minutes from our last meeting (Karami / Gao): Motion passed

3. Announcements

Kessler: There will be a workshop to develop collaboration between The College of Science and the College of Engineering on Friday, January 29th

- The topic is funding opportunities through the Construction and Research Lab (CERL). CERL is the Army Corps of Engineers research lab. The goal of the workshop is to develop three large programmatic requests that will be submitted to Senator Hoeven's office (who sits on the Senate Appropriations Committee). These requests will be submitted around a topic (less than a page each, but could be on the order of millions of dollars).
- The workshop will start with CERL scientists talking about what CERL does. In the afternoon, it will break into three workshops dealing with

- Resilient Systems: Sustainable energy, water/energy nexus, rapid response to emerging threats
- Autonomous Systems: additive construction, robotics, AI, building visualization
- Advanced Materials: 3d printing, corrosion prevention, nano-materials
- Faculty will be give one minute to talk about their research. It will then break into the workshops.

Enrollment Numbers (Kessler): NDSU is down 382 students relative to Spring 2020. Fall 2020 we were down 327, so we've had an additional drop of 1/2% since last fall. The Governor's proposed budget includes a 7.5% reduction in the higher-education funding. This will be in addition to a loss in revenue due to declining enrollment. However, the Governor's proposed budget is often changed by the State Legislature.

New Hires (Kessler): CoE has one new faculty member joining us this semester: Lan Hu is a lecturer in Computer Science and comes to NDSU with 13 years of industrial experience, mostly through Micosoft. We have had interviews with Cyber Security candidates and have approval to make offers to our top candidates. Other searches are on-going.

Changes in the 3-Attempts Policy (Pryor): There is a change in the 3-attempts policy. This policy only allows a student three attempts to complete a course (a withdrawal does not count as one of the attempts). Students can appeal and in the past these appeals were almost always approved. This is changing. The registrar is now only allowing a 4th attempt for exceptional and extraordinary circumstances outside of the students control. This means that faculty and advisors need to pay attention to students who are on their third attempt for a given course.

Several concerns were raised with both the policy and having the registrar make this decision rather than the student's department and college.

CoE Enrollment Plan (Pryor): From the years 2013 to 2017, CoE enrollment went up from about 10,800 to 12,200 - which helped NDSU maintain its total enrollment. Since 2017, both CoE and NDSU's enrollment has dropped at the undergraduate level as well as at the graduate level. The number of seniors in CoE has remained fairly constant, but the number of incoming freshmen has been dropping since 2017 - which is concerning.

At present, more than 40% of our incoming students are leaving the college within their first two years. The enrollment plan to address this includes

- Outreach: running summer camps, robotics competitions
- Recruitment:
- Yield: Group and individual visits. CoE has one of the highest yields (students who take a tour choose to come to NDSU)
- Retention: Seeing that students succeed and are able to remain in and graduate

Yield and Retention are the main things that faculty can focus on. When meeting with students, make sure the students have a good experience.

Undergraduate Research (Huang): We do have opportunities for undergraduate research at NDSU this summer. This will be a 6-week program, starting in mid June to the end of July. If interested, the due date is Tuesday, January 26th at 5pm. A one-page proposal and abstract should be written at the laymen level. For more information, please contact Dr. Ying Huang.

Dr. Bezbaruah added that four undergraduate research students are graduating this semester. 44 students are enrolled in this course this semester. If you have interest, please contact. Dr. Bezbaruah.

5. Committee Announcements/Reports

Academic Affairs: (Lin) Six course proposals were reviewed along with program changes.

- New course proposals include
 - CE 739 Computational Methods for Engineers
 - IME 465 Introduction to Machine Learning
- Course Changes:
 - CE 478 Water Quality Management
 - CE 479 Advanced Water and Wastewater Treatment
- Program Changes
 - BS: Computer Science & Mathematics Program
 - BSENVE: Environmental Engineering

The deadline to submit course proposals on CourseLeaf is Friday March 19, 2021.

Announcements for teaching awards will be coming shortly. These include Excellence in Teaching (tenured faculty), Early Career Teaching Excellence (non-tenured faculty), and Graduate Teaching Assistant of the Year.

University Senate (Selekwa): The State Legislature is meeting on Wednesday, January 20th. Everyone can listen in. This includes a proposal for a 2% salary for NDSU faculty.

Discussions relating to hate speech is taking place in the Faculty Senate. Some concern about how to create a friendly environment without violating student's freedom of speech rights.

6. Old Business

none

7. New Business

Academic Honesty & Remote Learning (Pryor): The Academic Misconduct form. Last semester, 15 Academic Misconduct Forms were filed - which is considerably more than usual.

Faculty are encouraged to fill in this form: if it isn't filed there is no record. Without a record, students who are repeat offenders cannot be flagged. There is no other impact from this form.

8. Adjournment

Motion to adjourn at 1:42pm

Respectfully submitted,
Jacob Glower
January 19, 2021