MINUTES Date 10/15/2015

Monthly Faculty Meeting Department of Electrical Engineering

Present: Roger Dougal, Chair

Mohammod Ali Krishna Mandal
Seongtae Bae David Matolak
Andrea Benigni Enrico Santi
Yinchao Chen Grigory Simin
Herbert Ginn Guoan Wang
Paul Huray Xiaofeng Wang
Asif Khan Bin Zhang

Absent: Charles Brice, MVS Chandrashekhar

Recorder: Nat Paterson

The meeting was called to order by Dr. Roger Dougal at 3:30 p.m. in EE Conference Room 3A75 on October 15, 2015.

Announcements –

- Minutes from last month were electronically approved
- o Homecoming BBQ October 17, 2015 at 1 PM in the Courtyard
- CEC Faculty Meeting Friday October 16 at 1:10 PM, Amoco Hall
- Big Friday October 16, 2015
- Fall IAB Meeting Friday November 13, 2015
- Fall 2015 Peer Evaluation of Teaching
- Classroom portion due November 6, 2015
- Material & Content due December 4, 2015
- Sabbatical Leave Request for AY 2016-2017 due January 15, 2016

2. Committee Reports -

I. Faculty Development Committee - Dr. Matolak

Plan to update the Unit Post Tenure Review Procedures

Dr. Matolak informed the faculty of the existing Post Tenure Review procedure. However it is outdated and in need of a revision.

Next actions:

o The committee will schedule a meeting to review and update the procedure.

II. Strategic Planning Committee - Dr. Dougal

Discussion #1: State of the Department in 2020

Dr. Dougal informed the faculty that the Strategic Planning Committee met on Monday October 12, 2015 to discuss the state of the department and develop preliminary objectives for the state 5 years hence, in 2020.

The initial list of objectives is.

- o Programs offered: BSE-EE, ME-EE, MS-EE, MS-System Design, PhD-EE
- Faculty Size: 20, based on critical mass and minimum effective size to teach the required subjects. Linear growth, considering likely attrition, will require to recruit 2 per year for next 5 years

MINUTES Date 10/15/2015

- o Enrollment:
- **BS Enrollment**: 350, following straight-line extrapolation of 6-yr growth trend line (optimistic?)
- ME Enrollment: 40-60MS Enrollment: 20-30
- PhD Enrollment: 60-80, averaging 3-4 per faculty member

A list of department metrics and potential targets were also mentioned for discussion.

- Faculty Recognition: National (3? IEEE Fellows, other societies? NAE?), State (public visibility), and Internal (USC awards)?
- **Faculty research funding:** sufficient to support 60-80 full-time PhD students and at least 20 full-time MS students. Roughly \$6-8M/year?
- Publications: 0.5 per PhD student per year, minimum?
- o BS admission quality: Median SAT above 1250, min SAT above 1100 (or 1150?)
- o PhD time-to-graduation from BS: 4.5 years, from MS: 3 years?
- Dept Average teaching FTE: 0.75 (~ consistent with CEC norms)
- Faculty teaching assignments: 1-1 for faculty supporting at least 5 PhD students, 2-1 or 2-2 for others, up to 3-3 for research in-active or low-active?

Further input on the metrics and on performance targets for each metric is sought.

Faculty Comments/Inputs:

o Enrollment -

- Many feel that the goal for Graduate enrollment might not be realistic due to lack of funding.
- Many are concerned about quality of students. New recruitment plan is needed. (OK, so state what the profile of PhD students SHOULD be in 2020.) Dr. Dougal reminded the faculty that no one has yet accepted his offer of travel funds for prospective PhD students.

Research Funding -

- \$8 million might be too high without understanding the causes of funding decrease. So it was suggested that we should investigate and figure out why proposals were not accepted and how to correct those mistakes. With the goal of 20 faculty and average of \$300,000 a person, this funding should not be too realistic.
- A grant/proposal committee is needed to help with identifying the right proposals that fit the faculty's expertise and coordinate a big proposal.
 Due to many other distractions, the faculty might not have time to go after big proposals themselves.
- Many agree that it is essential to receive support from Congress. This
 will require collective effort from the department, the college, and the
 Provest.
- Personal contact with various program managers is important. The faculty should work as a group and contact the funding agencies and propose ideas directly.
- Many agree that we need to identify resources needed to achieve the objectives and commit our time & effort on things we can do ourselves.

Next actions:

 The Strategic Planning Committee will develop a draft roadmap to collect inputs from the faculty. This is expected to be completed by the first week of November. MINUTES Date 10/15/2015

III. New Business -

Topic#1 -- Discussion on Teaching Assignment

Members of the faculty had requested discussion on issue on how to distribute the teaching assignment information to the faculty so that they are not surprised by assignments and so that their preferences are considered. The current process for developing teaching assignments does not adequately keep faculty involved and informed. Inputs from the faculty were collected.

Comments/Concerns:

- Class size -- due to increasing enrollment and lack of classroom space, a
 concern is whether or not we should split high enrollment courses into 2-3 small
 sections. Big classes make it hard for the students to learn and for instructors to
 pay attention to students. Students would benefit more from smaller sections.
 But this requires more faculty time to teach multiple sections.
- o Fairness A few faculty have been teaching higher load than others.
- Preference –teaching preferences developed by each research group must usually be modified because of other considerations such as sabbaticals, course cancellations due to low enrollment, buyouts, etc.
- FTE It's suggested that the department needed to develop a policy on how to balance teaching and research and identify how we could receive additional help to hire non-tenure-track teaching staff. Teaching assignments need to consider effort as well as student credit hours produced – it takes more work to teach two different courses of 30 students each than one class of 60 students.

Next actions:

- A process for communicating and iterating teaching assignments will be documented and provided to the faculty for review. It should include some amount of personal discussions.
- \circ $\;$ Three-semester teaching assignments will be emailed to the faculty for review and comments prior to the next faculty meeting.

Topic#2 - Textbook Adoption

Dr. Dougal asked the faculty if they would like an administrative staff person to handle submitting textbook information to the USC bookstore. This would help take a load off of the faculty each semester.

Comments/Concerned:

- New edition of a textbook -Concern: an administrative staff might not be aware of new edition of the textbook and might request an older one. Dr. Simin said that's not an issue. The bookstore always has the latest edition on file. The Administrative staff can tell the textbook manager that the department is ok with it. The faculty agreed that an administrative staff should handle this task.
- Proposing a new textbook The faculty asked what to do if they wanted to use a new textbook. Dr. Dougal mentioned a new textbook for low-level classes has to be approved by the Undergraduate Committee. For an instructor to request a new textbook, he or she should make the request to the undergraduate program committee chair.

Next actions:

 A revision of the EE textbook adoption procedure and policy will be updated and reviewed by the Undergraduate Committee. Once approved, the document will be posted on the EE website.