Engineering Faculty Council

December, 13 2016

101F Hammond Building (large conference room in Dean's Suite)

Meeting Minutes

- 1. Approval of minutes for the meeting of November 22, 2016 Unanimously approved.
- 2. Dean's Report (Amr Elnashai)
 - Research expenditure Almost identical to last year. It is expected to increase next year, and continuously increase in the next 5 10 years. Pure research expenditure was 102 million this year and 101 million last year. If contracts and internal funding are counted, the research expenditure was 149 million this year and 137 million last year.
 - VRP and rehiring request lost 8 tenure-system faculty, 1 non tenure-system faculty and 15 staff due to VRP. A request has been submitted and the Provost verbally agreed to provide 13 faculty lines and increase the number of staff by one.
 - Current searches currently searching for 40 faculty, the largest in engineering. ME hired 3.
 - Undergraduate program numbers The freshman class is 2180 (UP admission only). Amr had a meeting with Vice Provost and Dean of Undergraduate Education, and the necessity to control the enrollment was agreed.
 - Research thrusts Four thrusts are progressing. Poised to submit center proposals.
 Subjects are cyber-environment, advanced manufacturing, integrated infrastructure system, as well as intersection between energy, food and water.
 - UP-commonwealth campuses collaborative research –We have established the link with campuses in terms of undergraduate studies through the multi-campus REU program, which has been running very successfully (34 students the 1st year, 51 the 2nd year and will continuously increase next summer). A longer term plan is to have research collaboration, and make proposals to industries around campuses. The first step is that COE will put \$50K and Vice President for Commonwealth Campuses will put \$50K to fund 4 grants (\$25K each). Proposals require one professor from campuses and one professor from UP. Will be a call for proposals in Spring 2017.
 - Climate study Three-page report from our group.
 - Review of department Four subjects. Spring 2016, meetings were held with each department between COE leadership and departmental leadership to review Personnel and Finance. Next semester the review will be Education and Research. It will help prepare for the external review of IE, ESM and Civil Engineering next fall.
- 3. Updates from Undergraduate Studies Committee (Chris Giebink).
 - Added:
 - o ME 103 Hybrid Electric Vehicles
 - o ME 453 Powertrain System Modeling, Simulation, and Control
 - Change
 - o ME 440 Mechanical Systems Design Project: Prerequisite change
 - o ME 442 Advanced Vehicle Design: Prerequisite change

Unanimously approved.

- 4. Updates from Graduate Studies Committees (Howard Salis).
 - Program Proposal:
 - Approved (pending revisions):
 - New graduate program in Additive Manufacturing and Design: offering Resident Master's of Science and Online Master's of Engineering Degrees

Unanimously approved.

Course Proposals:

- Approved
 - EDSGN 562 Design for Additive Manufacturing
 - E MCH 544 Multiscale Modeling of Materials
 - ME 552 Optimal Control of Energy Systems

Unanimously approved.

- 5. Updates from Engineering Technology Committee No items to report.
- 6. Updates from Faculty Senate (Doug Wolfe)
 - Faculty Senate meeting on Dec 6.
 - Fund raising shorter duration, but no total goal of funding listed.
 - Approved the Senate calendar.
 - Global Programs committee led a Forensic Discussion/Presentation on the challenges, needs, and opportunities faculty encounter arranging, marketing and executing a short term embedded study abroad course. The discussion featured a faculty member, experienced in embedded abroad course offerings, leading a discussion on the opportunities such courses represent, as well as the challenges faced by faculty including funding, marketing, registration and documentation, associated paper work, and risk management.
 - Lion path resolution The faculty senate approved the Lion Path Resolution. Nick Jones and the administration are well aware of the Lion Path issues/challenges and they are working hard to resolve them.
 - Revisions to Senate Policy 48-40 (Deferred grades) and 48-50 (No grade) were passed. The policies are being cleaned up to clarify language for grade reporting.
 - Revisions to Senate Standing Rules.
 - Follow-up Report and Recommendations for Improving Governance and Communications and Furthering the Academic Mission at Penn State The Special Committee on University Governance is a panel of faculty, administrators, staff, students, and alumni appointed by the Senate Chair in the aftermath of the events of November 2011 to study the structure and practices of the Board of Trustees and to make recommendations for improving governance and communications at Penn State. Its report was presented to and unanimously approved by the Senate in March 2013. The Senate Chair recently reconvened the Special Committee with following charge:
 - Review the changes since the initial report in governance structures and practices and lines of communications among the Faculty, Administration, and the Board of Trustees.
 - o Report on the disposition of the Senate's recommendations for reform.

- With the benefit of hindsight, assess whether any of its initial recommendations should be clarified, modified, or dropped and whether any additional recommendations are warranted.
- Articulation Agreement Review the Committee on Admissions, Records, Scheduling, and Student Aid (ARSSA), initiated a five-year review of all articulation agreements. The fiveyear review is referenced in Senate Policy 06-20, but it had never been executed. All agreements dated prior to 2010 were reviewed.
- Faculty Senate scholarships awarded to Undergraduates ~\$254K.
- Submission of Curricular Proposals. The purpose of this brief report is to inform the
 university community of the undergraduate curricular pathway, to highlight curricular
 resources, and to suggest best practices to enhance efficient, successful navigation of
 curricular review in this time of wide-spread curricular change including, but not limited
 to:
 - a. general education course recertification
 - b. new general education course submission (including courses seeking single domain and integrative studies designations)
 - c. substantial prerequisite updates in anticipation of LionPath enforcement of prerequisites
 - d. implementation of recent US/IL requirement change
 - e. routine course and program reviews
- Millennium Scholars Program Report on the progress of The Pennsylvania State
 University Millennium Scholars Program (MSP) which is a very selective merit-based
 program designed to increase the number of U.S. research scientists and engineers with
 STEM (Science, Technology, Engineering, and Mathematics) Ph.Ds.
- Third Party Administrative Services for Penn State's Medical and Prescription Drug Plan.
 The current third party administration (TPA) contract for Penn State's medical and prescription drug plan offered to eligible employees and dependents is ending December 31, 2017.
- Penn State Employee Health and Wellness Center Paula Milone-Nuzzo, Dean of the School of Nursing, Kevin Black, Vice Dean for Penn State College of Medicine, Susan Basso, Vice President for Human Resources, and Greg Stoner, Senior Director of Compensation and Benefits, will present a report Penn State Employee Health and Wellness Center.
- Report on Childcare at PSU This report is a summary of child care services (availability, cost, University contributions) and related research, education, and service activities associated with child care centers at Penn State University campuses.
- Drug Testing Program for Penn State's Defense Related Research Units (ARL) and Electro-Optics center – This currently does not apply to any of the research faculty in the college of engineering, but this might be foreshadowing of what might occur in the future for all PSU faculty receiving federal funds. The program became effective July 1, 2016 and instituted to ensure the laboratory's compliance with Federal Regulations for receiving federal funding.

7. Other Business.