Engineering Faculty Council
Meeting Agenda
January 12, 2016
11:00 a.m.
202 Hammond Building

1. Approval of minutes for the meeting of December 15, 2015

2. Updates from Undergraduate Studies Committee (Chris Giebink)

3. Updates from Graduate Studies Committees (Esther Gomez) – NO ITEMS TO REPORT

4. Updates from Engineering Technology Committee (Ron Land)

5. Updates from Faculty Senate (Doug Wolfe)

6. Dean’s Report (Anthony Atchley)

7. Other Business
Meeting Minutes
December 15, 2015 11:00 a.m.
228 Hammond
Present: Amr Elnashai, Chris Giebink, Christine Masters, Conrad Tucker, Doug Wolfe, Esther Gomez, Jose Palacios, Nanyin Zhang, Peter Butler, Ronald Land, Sven Schimtz, Terry Speicher, Zoubeida Ounaies

Meeting Agenda
1. Approval of minutes for the meeting of November 10, 2015
   Unanimously approved.

2. Updates from Graduate Studies Committees (Peter Butler)
   A total of 10 proposals were reviewed:
   - 5 Course Proposals
     - BME 594 – Approved
     - AE 535 – Approved
     - ESC 520 – Approved
     - ESC 522 – Approved
     - ESC 523 – Approved
     Unanimously approved by EFC.
   - 2 Program Proposals
     - Engineering One-Year MS Program Change (reduced number of credit hours) – Approved
     Unanimously approved by EFC.
     - Engineering Science and Mechanics One-Year MS Program (enable completion of MS in 1 year instead of 2 years)
   - 2 Graduate Faculty Nominations
     - Teresa Lang – Approved
     - Frank Koe - Approved
     Unanimously approved by EFC.
   - 1 Policy
     - MEng Policy Change – committee is supportive of the policy change
     Unanimously approved by EFC.

3. Updates from Undergraduate Studies Committee (Chris Giebink)
   One proposal was reviewed:
   - creation of honors course EDSGN 100H (Introduction to Engineering Design-Honors) – Approved
     Unanimously approved by EFC.

4. Updates from Engineering Technology Committee (Ron Land)
   No changes.
5. Updates from Faculty Senate (Doug Wolfe)

- The President and the Provost gave updates with regard to the strategic plan. Received a lot of positive feedback both via email and online. Next draft will be distributed next month.
- The President and the Provost also talked about classroom space on campus. Some departments set aside certain rooms for meetings and interview, etc. They asked department to share some of their classrooms for classes because shortage of space has caused scheduling issues. They won’t take over these classrooms.
- Information report on full time equivalents and fixed-term faculty. Significant downward trend in hiring tenure-track faculty. They are looking into this issue: how can they stop this, and how to convert some fix-term into tenure-track positions.
- How to reduce, if not eliminate, the degree of arbitrariness and ad hoc decision making in full-time appointments in renewals and non-renewals while acknowledging the need to be proactive to keep finer faculty here. How to standardize fixed-term faculty across departments.
- Update on the number of applications so far: 27,000 applications received, 5,500 offers sent out.
- Problem with the roll-out of LionPath and trying to resolve the issues.
- StarFish, the advising system, will come alive soon. Transition from Angel to Canvas has begun. Has problem with one feature Angels has. Working on separate solutions.
- Global Entrepreneur Week: ~7,000 students participated.
- Update on a few dean’s positions that are still being interviewed for.
- Courses to be closed and will no longer be offered on branch campuses. Will replace with other courses.
- Voted on rule changes, including
  - Passing a new policy to allow the Provost to speak in front of the Senate—in the past, only the President could do so.
  - Change of committee rules, including
    - Faculty athletic mentor to have one year mentor overlap;
    - Ombudsperson to serve 5 years, the fifth year being the overlapping year;
  - Policy revisions:
    - Policy 42-82 (acquisition of credits): some 800-level credits no longer being used—clean up policy for LionPath;
    - Policy 54-90 (academic renewal): when students can renew and whether a student is considered an active student or not.
- Informational report on faculty benefits, intercollegiate gaps, athletics, and the Council on the Engaged Scholarship.

6. Dean’s Report (Amr Elnashai)

- Meeting with Provost on the blueprint on 11/12, including Amr, 3 associate deans, and 11 out of the 12 chairs. The document includes the following sections:
  - Benchmarking against other colleges at UP—we are at the top of everything in terms of output but very low in input from the Old Main.
  - Benchmarking against the top 12 external colleges—we are not doing that well when compared externally.
Add 33 faculty members and 34 administration positions over the next five years. Proposed the increase (from 2017 to 2022) # of undergraduate students by 800, # of MS students to 600. We asked for salary and fringe for the new hires.

- M.Eng and MS students ($350,000 distributed to the department based on 99 students instead of the 42 counted by Old Main).
- Theresa left, an interim will be appointed. Internal and external search might be launched.
- Faculty hiring—29 lines + 2 frontier lines in search.
- Received the confirmation from the director of OPP: University has made our project the highest priority. They have asked the state for $160 million over 4 years, Penn State will contribute $40 million, and they want us to raise $30 million, for a total of $230 million. Any shortage will be shared 50/50 between COE and the Provost.

7. Other Business
- Igor will leave PSU. Chris will take the position of chair of EFC.
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<th>Type and Description of Change</th>
<th>Description or Rationale for Curricular Actions</th>
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| E SC 412 - Nanotechnology: Materials, Infrastructure, and Safety | ADD: New Course  
The nanotechnology consumer products market currently has more than 1,000 nanomaterial-containing products varying from makeup, sunscreen, food storage products, appliances, clothing, electronics, computers, sporting goods, and coatings to drug delivery systems. These products exist in the market place and are expanding in number because nano-scale materials and structures can have properties that are very different from larger size-scale versions of the same materials and structures. These property differences at the nano-scale can make nanotechnology products unique and desirable for specific applications. However, the uniqueness of the nano-scale can also affect toxicity and environmental repercussions due to differences in physicochemical properties arising from size but also from shape, chemistry, surface properties, agglomeration, bio-persistence, solubility, and charge, as well as from differences caused by attached functional groups, as outlined in this course. The greater surface-area-to-mass ratio of nanoparticles makes them generally more reactive than their macro-sized counterparts. These properties that make nanomaterials unique and valuable in manufacturing many products also make manufacturing at this scale an endeavor which must be studied and appreciated for its potential safety, health, and environmental impact. Practicing engineering at the nano-scale requires awareness of the nanotechnology safety, health concerns, and environmental issues laid out in E SC 412.  
Submitted by:  
Wook Jun Nam |