School of Engineering Faculty Meeting
Wednesday, December 16, 12pm in Nelson Auditorium

In Attendance:

**BME**
Qiaobing Xu
Sergio Fantini
Lauren Black
James Van Deventer

**ChBE**
Kyongbum Lee
Ayse Asatekin

**CEE**
Daniele Lantagne
Dan Kuchma
David Gute
Laurie Baise
John Durant
Massoud Sanayei
Wayne Chudyk

**CS**
Alva Couch
Ben Hescott
Matthias Scheutz

**ECE**
Alekseandar Stankovic
Doug Preis
Eric Miller
Jeff Hopwood
Ron Lasser
Valencia Koomson

**ME**
Anil Saigal
Chris Rogers
Behrouz Abedian
William Messner
Iryna Zenyuk
Luisa Chiesa

**TGI**
Mark Ranalli
Sam Liggero

**Dean's Office**
Jianmin Qu
Darryl Williams
Scott Sahagian
Amy Maher
Zilia Munguia
Julia Keller
Kat Mor
Jason Rife

**Guests**
Karen Vagts
Ellen Schuette
Anne Moore
Jonelle Lonergan
James Adler
George McNinch

Chaired by: Jianmin Qu, Dean
Minutes by: Zilia Munguia

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SUMMARY

- Faculty & Student Achievements & other announcements
- Wayne Chudyk spoke about preparation for ABET Accreditation
- Associate Dean Jason Rife gave an update on SOE Curriculum
- Dean Qu updated faculty on

The meeting commenced at 12:08pm

Announcements

Achievements
Dean Qu started by announcing that at the beginning of every faculty meeting he will now give the chairs the opportunity to recognize faculty and student achievements in their departments. The following achievements were recognized:
Computer Science

- Alums Aubrey Girard (Carleton University) & Orit Shaer (Wellesley University) received tenure at their respective universities. Both were students of Rob Jacob.
- Beste Yuksel was nominated for the best paper award at the SIGCHI 2016 Conference.
- The cognitive science program graduated its first PHD, Gordon Briggs. Gordon received the national research council post-doctoral fellowship and is now a member of Navy Research. Click on the link to view Gordon’s work.
  https://www.facebook.com/quartznews/videos/1063365917030443/

Biomedical

- David Kaplan was named editor-in-chief of the new American Chemical Society Journal on Biomaterial Science in Engineering. He also coordinated the 4th TERMIS World Congress Conference (Tissue Engineering and Regenerative Medicine International Society) this past September.
- Lauren Black received the young investigator award at the 4th TERMIS World Congress Conference. This award is given to people who demonstrate outstanding achievement in tissue engineering and regenerative medicine.
- Irene Georgakoudi was inducted into the American Institute for Medical & Biological Engineering (AIMBE) and elected to its college fellow for outstanding contributions to the development of label-free optical methods for cancer diagnosis and tissue engineering applications.
- Sergio Fantini will also be inducted to AIMBE next year. Also, after 10 years Sergio’s textbook, *Quantitative Biomedical Optics*, will be published on January 7th by Cambridge University Press.

Mechanical

- Two new NSF grants were awarded this fall semester. Marc Hodes for low-cost, large-scale aerogels Nano manufacturing and Jeff Guasto for “transport and chemotaxis of swimming cells in porous media flows”.
- Whitney Crooks is working alongside Tom Vandervelde and Karen Panetta on an NSF grant “Creating Future Female Engineering Leaders”. Dean Qu was able to participate in a robotics course which was led by Whitney.

Chemical & Biological

- Ayse Asatekin was awarded an NSF grant this past November.
- Two recent alumni, Nan Yi (University of New Hampshire) and Haoran Zhang (Rutgers University), began tenure-track Assistant Professor positions.

Summer Scholars

Anne Moore from Undergraduate Education spoke to faculty about the Summer Scholars Program and recruitment of engineering applicants. Summer Scholars is a 10-week program where students are paired with a faculty mentor who will work closely with them to develop a project that will be presented 3 times during the school year. Presentations will be held at a 2-day conference at the end of the summer, a poster session in fall, and at the Undergraduate Research and Scholarship Symposium the following spring. Anne explained that this program will allow students the opportunity to do independent research and take creative risks that can help set them up for future awards like the Fulbright.

Students who participate in this program will earn a $3500 living stipend, $1000 research budget, and are eligible to receive free summer housing. Faculty mentors will receive $1000 into their research account. The application deadline is March 4, 2016. Anne ended by saying there has been a significant decrease in engineering applicants in the last year and that she would like to see the numbers go up. She asked that faculty members encourage their students to apply to the program.
Laurie Baise asked if faculty can sponsor more than one student. Anne clarified that faculty can only sponsor one student and that students can only apply one time with one faculty mentor. Valencia Joyner Koomson asked if there was preference given to rising juniors or seniors. Anne explained that they do have preference toward seniors since juniors can reapply the next year, and seniors have more of a robust research background. Jeff Hopwood asked if there was any discussion of raising the student stipends. Anne said they have had discussions to raise the stipend amount.

**Teaching At Tufts Website (T@T)**

Ben Hescott introduced Jonelle Lonergan, Education Tech Specialist from Tufts Technology Services, who spoke about the new website Teaching at Tufts. T@T was rolled out several month ago in collaboration with CELT. This site offer a selection of faculty resources like course planning, assessments and evaluations, learning spaces and classrooms, faculty bios, and other resources. For more information on T@T visit [https://teachingtufts.edu](https://teachingtufts.edu).

**Undergraduate Research Award**

Karen Vagts, Engineering Reference Librarian, spoke about the library initiating the 4th cycle of under graduate research award. This award recognizes undergraduate use of library resources and services for research projects. This year they have introduced a new category, independent research efforts. Karen confirmed with the committee that projects submitted do not have to be traditional research papers. Engineering projects such as programming or building of a robot are eligible as long as they are able to reference the library sources used for the project. Students must submit their application and faculty endorsement by noon, on Wednesday, February 10th.

Mark Ranalli asked Karen to clarify how student’s research work is measured (e.g., based on hours or how many volumes read). Karen stated that it's not based on a quantitative measurement, but rather on how students are able to describe how the sources shaped their project. Soha Hassoun asked if they are thinking of expanding the scope of this award to include data science and sources that students found on the web rather than through the library resources. Karen said she will look into this issue and address it later in the semester.

**Preparation for ABET Accreditation Visit – Wayne Chudyk, Associate Professor, Civil & Environmental Engineering**

Wayne Chudyk presented faculty with an ABET timeline. Wayne explained during this academic year just like past years, every program has the requirement of evaluating programs, making continuous improvements, and documenting them so the School has trail of program and course evaluations for ABET visitors. See timeline below.
SoE Curriculum Committee Update — Jason Rife, Associate Dean for Undergraduate Education

Before discussing the Curriculum Committee items Jason wanted to offer some advising advice to faculty. Jason asked that if faculty receive any communications from parents with concerns about their children’s grades, classes, etc. to refer them to him. Jason also updated faculty on the 5 year MS/BS program. He stated that their website is now up to date and has information on how students can complete the BS/MS program in 9 months. Jason also followed up on Anil Saigal’s question regarding financial aid at the last meeting. Jason explained that students must complete the final 2 semesters of the BS/MS program registered as a graduate student. Undergraduate financial aid does not apply for graduate studies and so does not extend to these final 2 semesters of the BS/MS program.

Ron Lasser stated that are still lingering issues between SIS and 5th year students in the program. Currently SIS has difficulty determining students in their 5th year which results in students being locked out of class registration. Also, SIS still has issues linking the correct advisors with 5th year students. Executive Associate Dean Scott Sahagian asked that more information be collected so it can be determined if this is a technical or policy issue. Jason will forward the feedback to Karen Panetta.

Jason then moved on to the OAC and SoECC updates. Jason stated that the committees are preparing a department course information spreadsheet that will be sent out to all department chairs and administrators. This spreadsheet holds the entire SIS catalog entries/course descriptions for each department. He would like each department to review the spreadsheet and answer the following questions

1. Should attributes should be updated for any courses?
2. Should any courses be deleted?
3. Will you be petitioning to change any courses’ default semester-hour unit (SHU) values, as assessed by the registrar?

The first question will be used by OAC in collecting ABET information and updating course information. The second question will be used by SoECC to clean the course catalog. The third question will be used by SoECC for planning purposes. In the longer term, an online petitioning system will be introduced to allow Departments to request SHU values as appropriate for any or all Department courses. Next Jason introduced James Adler and George McNinch from the Math
Department, who were present to help aid in the discussion of how Math 36 is offered. Math 36 is currently offered 3 times a week for 75 minutes per lecture. The mathematics department would like to reduce this to a standard 3 by 50 minute course. Jason gave a brief rundown on the decision made in 2012 to substitute Math 50 (currently Math 36) for Math 12 (currently Math 34) on all SOE degree sheets. Please refer to the SOE CC handout sent out at the last faculty meeting for more information on the history of Math 36. Jason stated that the Math 36 requirement has become problematic since there was never an official SOE faculty vote for this substitution, and the course causes significant scheduling problems for the Math Department. Jason proposed faculty vote on the following resolution at the next faculty meeting on January 27th.

Undergraduate engineers will be allowed to take either Math 34 or Math 36 to fulfill their second-level introductory math requirement. Class of 2020 degree sheets will be updated to replace “Math 36” with “Math 34 or Math 36.” Starting with the 2017 degree sheet year (current juniors), a substitution of Math 34 for Math 36 will be allowed by pro forma petition.

Ron Lasser asked if Jason could send out descriptions for the math courses. Jason will provide this information. Ayse Asatekin asked if faculty should advise freshman to register for Math 34 instead of Math 36. Jason said that faculty should continue to advise students to take Math 36 till a final decision is made.

Dean’s Update – Jianmin Qu, Dean

Dean Qu updated faculty on the nationwide student movement regarding issues of diversity. Tufts students are requesting meetings with the upper administration to discuss issues of minority representation among the student body and faculty. Dean Qu reminded faculty that we should make every effort to recruit new faculty from underrepresented groups.

Dean Qu asked Executive Associate Dean Scott Sahagian to update faculty on the SMFA negotiations. Assoc. Dean Sahagian said that a general memo of understanding has been drafted confirming that the two school will be working together. This announcement is scheduled to be released to the media on the 21st. Dean Qu stated with the acquisition of the SMFA we will see an increase of undergraduate enrollment of approximately 150 students per year.

Faculty was updated on the searches for the Associate Dean of Advising and the Executive Associate Dean positions. Jason Rife is heading the Associate Dean of Advising search; finalists will be interviewed in the coming weeks. An external search firm is assisting with the EAD search. Once a pool of candidates has been selected, the Dean will form a search committee to review those candidates.

Dean Qu ended by giving some undergraduate admission numbers. Tufts enrolled 40% of the class of 2020 with early decision students. Some statistics: 38 states including Puerto Rico and Washington DC are represented; 8% of foreign citizens represented 24 countries; 9% are first generation college goers; 27% of US Citizens/Residents are students of color (11% Asian, 8% Hispanic, 4% Black, 4% 2 or more races); and 43% of SOE students admitted are women.

Other Notes
The meeting minutes from November 4, 2015 were approved.

Meeting adjourned at 1:28 pm