

COLLEGE OF ENGINEERING FACULTY EXECUTIVE COMMITTEE  
ANNUAL REPORT: 2014-15

To the Faculty Legislature, Santa Barbara Division:

The following summarizes the business of the College of Engineering Faculty Executive Committee (FEC) for 2014-15.

Summary of Actions:

**Position of Associate Vice Chancellor for the Office of Undergraduate Education and Dean of Undergraduate Education in the College of Letters and Science**

On September 5, 2014, Interim Executive Vice Chancellor Joel Michaelsen issued a memo stating that the proposed new administrative position of Associate Vice Chancellor of Undergraduate Education (AVC) had been approved despite concerns raised by a number of campus entities including the College of Engineering (CoE) Faculty Executive Committee (FEC).

The CoE FEC requests that this approval be reviewed and that there be additional consultation with the relevant groups before further action is taken. We strongly believe that there are an array of important concerns that need to be addressed before the two responsibilities of the position can be fulfilled.

The specific concerns identified by the CoE FEC were described in the CoE FEC's response to Interim Executive Vice Chancellor Joel Michaelsen, dated June 11, 2014 and attached herein.

**Speed bumps in Lot 10**

I write on behalf of the Faculty Executive Committee in the College of Engineering. As you undoubtedly are aware, approximately 16 speed bumps were installed in parking structure 10 over the July 4 weekend this past summer. This is the one structure on campus that predominantly serves faculty and staff in the College of Engineering. In response to a number of concerns that were sent to Parking Services immediately following the appearance of the speed bumps, Acting Director Robert Silsbee sent a memo to the campus community on July 25 indicating those speed bumps would be removed.

My colleague, Associate Dean Glenn Beltz, reached out to Mr. Silsbee several weeks ago to inquire about the status of the speed bump removal. He was informed that, in fact, what was really meant by "removal" was that the speed bumps on the lower levels would be replaced with a "lower impact", shaved-down alternative (which does appear to have taken place). The CoE Faculty Executive Committee understands the need to

address the issues with excessive speed of some vehicles in that lot, as well as drivers who create the risk of head-on collision at the corners, but the “solution,” even when the shaved version are in use, seems to be ineffective, and one that will only make matters worse and less safe by inducing driver frustration.

The type of speed bump installed is the worst kind in use. They are sharply sloped and deliver 2 sharp jolts to the vehicle, regardless of how slowly the vehicle is moving. They are spaced along the center of the straightaway sections of the lot in such a way that vehicles can (and do) resume normal speed by the time they get to the curves at the ends of each floor. There are 2 of these on each straightaway, resulting in a vehicle that has to travel to the upper deck having to undergo 32 sharp jolts (64 if you want to count round trip). One FEC member who drives a vehicle with a particularly small wheel size has reported the need to get his front end aligned.

It would be helpful to understand what problem Parking Services is attempting to solve with these speed bumps. Is it the corner turns? The tight space on the corners is caused by allowing cars to park too close to the corners and this can only be resolved by removing the last parking space in each row at the corner turn. If pedestrian safety is a concern - and it should be - it seems to the members of this committee that removing those end-spaces would create a buffer zone for pedestrians to safely cross from the southeast stairwell to any car that is parked in the rows of spaces along the interior of the structure. The loss of 16 spaces would be a small price to pay for this gain in convenience and safety.

Another unintended consequence is vehicles are now weaving around the speed bumps on floors that don't have as many parked cars. Similarly, motorcycles have been observed weaving around the bumps even when cars are parked in the adjacent spots, coming dangerously close. One faculty member, when walking through the lot, reported being nearly hit recently as a result of cars weaving around the bumps. Another faculty member reported being in a near collision with a vehicle that suddenly weaved all the way to the left of the bumps on the first floor (i.e., cars were parked in stalls that prevented a weave to the right).

We believe the speed bumps, even the ones that have been shaved, are the wrong solution to the issues in Lot 10. They punish even the most slowest and safety conscious of drivers. More disconcertingly, we believe that the erratic driving that occurs from drivers avoiding the bumps creates an unsafe situation. We therefore prevail upon you to re-evaluate the situation in Lot 10 and to consider replacing these speed bumps with more effective and less frustration-inducing measures.

### **Campus Five-Year Planning Perspectives**

The College of Engineering FEC carefully reviewed the materials and has no further comment.

### **Chemical Engineering curriculum change – Chemistry 109C**

The College of Engineering FEC met on October 28, 2014 and approved the proposed Chemical Engineering curriculum change.

### **Academic Personnel Manual (APM) 133-17-g-j; 210-1-c & -d; 220-18-b; and 760-30-a Diversity, Tenure Clock**

The College of Engineering FEC carefully reviewed the materials and has no further comment.

### **Global Engagement at UCSB**

As requested, we have reviewed the proposal for centralizing the process of establishing, reviewing, and tracking international agreements. The CoE FEC is in support of such an initiative. We offer the following comments.

As part of its mission, it would be very useful if the Task Force would publish more information about how it expects to operate and the guidelines it expects to use in its decisions. For example, it is not clear how the Task Force will weigh the value of reciprocity; how the Task Force will deal with Intellectual Property issues or Non-Disclosure Agreements should they come up; or how decisions will consider the various, sometimes, competing interests of those affected by the agreements. It was also not clear what the current composition of the Task Force is, who the members are, and the degree to which faculty are represented.

Further, while maybe not central to the objectives of the initiative, there is a serious need that needs to be addressed of how this information will be communicated to departments and faculty. Both with specific recent initiatives and as the number of existing initiatives increases, it will be important for departments and faculty to understand what processes are to be used for course administration like admissions, registration, and the ability of faculty to deny access to their courses.

### **Systemwide Review of Proposed Revised Academic Personnel Manual (APM) Section 080, Medical Separation (APM – 080) and Section 330, Specialist Series (APM – 330)**

The College of Engineering FEC carefully reviewed the materials and has no further comment.

### **Changes in the Electrical Engineering Curriculum effective Fall 2015**

The College of Engineering FEC met on November 18, 2014 and approved the proposed changes in the Electrical Engineering curriculum effective Fall 2015.

## **Updated Student Outcomes for the Department of Mechanical Engineering**

The College of Engineering FEC met on November 18, 2014 and approved the revised Student Outcomes in the Department of Mechanical Engineering.

## **Doctoral Student Support Proposals and Recommendations**

The College of Engineering Faculty Executive Committee was asked to comment on the proposals and recommendations from the Steering Committee in preparation for a Regents meeting in January.

As a general comment, each of the proposals has its merits and we can see the benefits of each of them. Our most significant concern is that each requires funding, in some cases, quite a bit of funding. It is not clear from where this funding will come. Several of the proposals include the discussion of costs, but ultimately, each plan leaves many of the critical details unspecified. Given that funding any of these proposals is likely to impact other aspects of our academic mission, the analysis of any of these new proposals is incomplete without consideration for the impacts and tradeoffs that likely will need to be made.

On the Non-Resident Supplemental Tuition (NRST) proposal, given the number of non-resident graduate students the College of Engineering has, we would see this as a significant benefit to our departments. Often the NRST is the bottleneck for accepting more graduate students since some departments pay NRST as part of an admissions offer. Reducing the NRST requirement to one year would partially offset this bottleneck. We anticipate a wide variety of secondary impacts (*e.g.*, less incentive to recruit in-state graduate students but an overall increase in the quality of admitted students), but it is unclear the significance of any impact without more details. We request that as this proposal moves forward, the COE be included in further planning.

On the Net Stipend Competitiveness, Multi-Year Funding, and Transparent Offer Letters proposal, largely the departments in the COE already implement many of the aspects of this proposal largely because of the high levels of competition with sister departments at peer institutions. For example, it is not uncommon to offer multi-year GSR support as part of admission. Although, in some cases, admissions letters provide support through TAs. In these instances we recognize that TA salaries are not competitive with our peer institutions and need to be raised. With regard to transparency offer letters, we agree with the goal of the proposal but also recognize that transparency is a balance between making a strong and competitive offer, but also requiring milestones to be achieved for continued support. There is also the uncertainty of some grants, which are reviewed and renewed annually. We believe departments in the COE have significant experience in achieving the proper balance between transparency and competitiveness. We are aware of few complaints from our graduate students.

On the Professional Development proposal, the objectives of the proposal are worthwhile, but this proposal strikes us as the kind of thing that could be ineffective if not implemented properly. Further, there are a number of existing resources on which students can rely. It would be a shame to spend significant resources recreating the wheel when an alternative would be a more modest and focused effort.

On the Diversity proposals, we fully agree that diversity is a critical challenge. In particular, in Engineering, the challenge of diversity is not limited to ethnicity, but also includes gender. These additional challenges should be incorporated into the overall plan. Beyond the laudable goals of these proposals, the critical question is again one of funding.

### **Use of Registration Blocks to Enforce Mandatory Requirements**

As requested, we have reviewed the updates in regards to the use of registration blocks to enforce mandatory requirements. The CoE FEC is in support of such an initiative. We offer the following comments.

Since the mandatory on-line education is for incoming freshman and transfer students, we would like to suggest enforcing the mandatory on-line education during Winter quarter instead and only using a soft block. This should give ample warning time for our new students before their registration is impacted and is less abrupt.

### **Name Change of the CCS Degree Program in Computer Science**

The College of Engineering FEC reviewed and approved the proposed name change Of CCS BS degree in Computer Science be renamed as BS in Computing, effective Fall 2015.

### **Updated Learning Outcomes for the Department of Chemical Engineering**

The College of Engineering FEC met on January 6, 2015 and approved the revised Learning Outcomes in the Department of Chemical Engineering.

### **Systemwide Review: Proposed New UC Policy on Open Access**

The College of Engineering FEC carefully reviewed the materials, supports the proposal and has no additional comment.

### **Partial Fee Reduction Proposal for Graduating Seniors**

The College of Engineering FEC carefully reviewed the materials, supports the proposal and has no additional comment.

### **Senate Regulation 682 (under “Residence and Length of Study)**

The College of Engineering FEC carefully reviewed the materials, supports the proposal and has no additional comment.

### **CS 56 as pre-requisite for CS 189A**

The College of Engineering FEC reviewed Computer Engineering’s memo supporting Computer Science making CS56 a pre-requisite for CS189A and approved the request with an understanding the new pre-requisite will be effective for students who enter in Fall 2015 and beyond and all current Engineering students will be grandfathered in their curriculum plan.

### **Removal of ECE 152A as a Computer Science required course**

The College of Engineering FEC reviewed the proposal and approved Computer Science’s proposal to remove ECE 152A as a Computer Science required course.

### **PRP Nominations**

The College of Engineering FEC recommends the following faculty members to serve on the Program Review Panel.

John Shynk – Electrical & Computer Engineering  
Cyrus Safinya - Materials

### **Sexual Harassment and Sexual Violence-Proposed Revised Presidential Policy-Systemwide Review**

The College of Engineering FEC carefully reviewed the materials and does not wish to opine.

### **UC Policy on Copyright and Fair Use-Final Review**

The College of Engineering FEC carefully reviewed the materials and does not wish to opine.

### **University Committee on International Education-Proposed amendments to Senate Bylaw 182**

The College of Engineering FEC carefully reviewed the materials and does not wish to opine.

## **APM - 210-1-d, Review and Appraisal Committees, Final Review**

The College of Engineering FEC carefully reviewed the materials and does not wish to opine.

### **Draft guidelines for pilot program to accept equity for access to university facilities or services**

The College of Engineering Faculty Executive Committee was asked to review and comment on the draft guidelines on accepting and managing equity in return for access to university facilities and services. The document containing the draft policy was circulated widely among engineering faculty and affiliated facilities, and comments/questions/concerns were solicited. Comments were universally supportive of working towards a formalized equity-for-access policy that can help to spur further campus innovation. Questions were raised however regarding how the new policy would be executed. Specifically, the key questions raised by multiple faculty members concerned the following:

- [a] How would any income derived from equity received be distributed upon collection? For instance, if equity is given to the university in return for access to campus facilities, would the facilities themselves recoup their costs directly? A concrete plan for this distribution should be in place.
- [b] In a related point: How would campus facilities, which forgo recharge expenses in return for equity, be supported in the short-term in managing their day-to-day expenses? There is an inherent time delay (as well as implicit risk) in collecting any income from this arrangement.
- [c] Many of the proposed policies would be most germane to a start-up incubator on campus. Is there a plan to place one here at UCSB? Adding clarity on this point will help better motivate the policy discussion.
- [d] How would any potential future devaluation of equity received by the university be accounted for?

Thank you for circulating the newly proposed policy, we look forward to working to refine future iterations.

### **Review of Course Waitlist System Policy and Procedures**

The College of Engineering Faculty Executive Committee was asked to review the proposed changes to the campus waitlist policy recently approved by the Undergraduate Council. After conferring with colleagues, the consensus among departments is that the proposed revisions are fair, and, equally importantly, allow for flexibility in assigning priority criteria when the department and instructor deem it appropriate.

Thank you for your hard work in crafting the new policy.

**2014-2015 Committee Members**

Stephen Wilson (Chair – Spring 2015), Materials

Kevin Almeroth (Chair – Fall 2014 and Winter 2015), Computer Science

John Gilbert (Winter 2015 – Spring 2015), Computer Science

Jianwen Su (Fall 2014), Computer Science

Mike Doherty, Chemical Engineering

Carl Meinhart, Mechanical Engineering

Yasamin Mostofi, Electrical & Computer Engineering

Scott Shell, Chemical Engineering

Luke Theogarajan, Electrical & Computer Engineering

Megan Valentine, Mechanical Engineering

Anton Van Der Ven, Materials

Rod Alferness, Dean of College of Engineering

Glenn Beltz, Associate Dean for Undergraduate Studies, College of Engineering

Alex Kermani, Undergraduate Representative

Matthew Idso, Graduate Representative

Tiffany Sabado, Staff Coordinator