

**College of Sciences (COS)  
Meeting of Dean's Executive Council  
16 March 2009**

***Present:***

**Dean** - George Perry

**Department Chairs** - Edwin Barea-Rodriguez, Waldek Gorski, Miguel Jose-Yacaman, Sandy Norman, Kleanthis Psarris

**Associate Deans** - Raymond Baird, Craig Jordan, George Negrete

**Center/Institute/Program Directors** - Aaron Cassill, Weldon Hammond, Joe Lazor

**Assistant Dean** - Garry Castellanos

**COS Undergraduate Advising Director** - Patti Gonzalez

**COS Retention and Graduation Analyst** - Diane Elizondo

**Representative for Dr. Dutton** - Stuart Birnbaum

**Summary Notes**

**ExxonMobil Texas Science and Engineering Fair**

Dr. Birnbaum informed administrators that the Science and Engineering fair was fast approaching. As of 16 March there were 96 judges which is half of what is needed. He provided a handout with the names of judges. He requested that efforts be made to try and find judges at the university, in our laboratories and in the community. Qualifications of judges are shown below:

<b>Middle School Division</b>	<b>Senior Division</b>
<ul style="list-style-type: none"><li>➤ Graduate students</li><li>➤ Individuals working in discipline with a bachelor's degree</li><li>➤ Retired teachers</li></ul>	<ul style="list-style-type: none"><li>➤ Ph.D. degree</li><li>➤ Postdoctoral students</li><li>➤ Ph.D. students who have advanced to candidacy</li><li>➤ Significant work experience</li></ul>

Dr. Birnbaum also mentioned that volunteers are needed on 28 March. Department chairs and faculty can contact student organizations and make them aware of the opportunity to do service work. Volunteers do not have to be science students. Kai Kamaka can be contacted for information on volunteers. Set up at the convention center is Saturday, 28 March and judging will be Sunday, 29 March. Parking and food will be provided for volunteers.

Dr. Birnbaum mentioned that at the recent Alamo Regional Science and Engineering Fair held at St. Mary's University, scholarships were given from UTSA. Much of the selection rested on his shoulders as there was a small selection committee. More faculty participation is needed at the Science and Engineering fair for this effort.

Dr. Perry asked if faculty participation factored in for community service and the merit process. Dr. Psarris responded that faculty can include this information in their annual reports and it will be reviewed.

Information on the fair can be accessed at:

[www.emtsef.org](http://www.emtsef.org)

### **Report on “Designing Texas Undergraduate Education in the 21<sup>st</sup> Century”**

Dr. Perry referenced the copy of the memorandum from the Coordinating Board. The Commissioner of Higher Education authorized the creation of a standing advisory committee to study and make recommendations for improving the quality of undergraduate education in Texas. The recommendations were listed in the memorandum. Dr. Perry mentioned that this reflected continued scrutiny of how we are graduating students.

There followed an extended discussion revolving around teaching. Summary comments by attendees are provided below:

**Dr. Barea-Rodriguez:** When assistant professors are recruited, an emphasis is placed on research. Message is that if you focus on teaching and not research, you will not get promoted. This gets passed on and shows up in attitudes of tenured faculty. Faculty need to receive the message that teaching is important here. (Parenthetically, he ventured that the proposed teaching track is unrealistic; number of courses one would have to teach is not doable.) Great research universities have great teachers; but classes are small, student-to-teacher ratio is small. We need to learn how to let the teachers teach and the researchers do research - both help the university.

**Dr. Norman:** Observed that he sees people going into teaching who will not be good teachers.

**Dr. Psarris:** Expressed the opinion that teaching and research are not mutually exclusive. The best scholars can also be the best teachers. (Others questioned whether that was universally true.) With the focus on UTSA becoming a top-tier university there is the misconception that teaching is not important. Top-tier universities also value teaching as much as they value research.

**Dr. Cassill:** He has heard that the Provost wants faculty to be better teachers. However, the faculty are not participating in the discussions. The University needs to ask faculty “what is it you need to motivate you and what will make you participate?” He also mentioned the fact that since superior teaching figures little in promotion decisions, good teachers are denied the large raises associated with promotion.

**Dr. Baird:** Mentioned the handout prepared by the associate deans addressing the issue of measuring teaching in a valid fashion. When and if those options are adopted, department chairs will have means to distribute merit raises so as to reflect superior teaching as well as superior research - those financial resources are already available.

**Dr. Lazor:** Recalled that he had met Sandy Norman 17 years ago, when the first standardized mathematics achievement tests were being imposed on the public schools. In the early results, only 7% of students passed. We are at a similar place now at the university. He noted that the measures, external or internal, had to be objective and rigorous, and there had to be a standard. When these were in place, the public school teachers responded with innovation and improvement and now generally meet the standards. He said the expectation had to be that failure is not acceptable.

**Dr. Birnbaum:** Noted that the American Chemical Society (ACS) has standards and tests which are used in several chemistry courses. He inquired if any departments had evaluations/standards like the Accreditation Board for Engineering and Technology, Inc. (ABET)?

**Patti Gonzalez:** Observed that from the discussion it sounds like there are good teachers in every department. Perhaps together they could make up a college teaching effectiveness task force which could help develop standards and best practices. She noted that even if we did not get extra financial resources, if we agreed on some measures of success then department chairs could allocate the merit monies in ways that would reward superior teaching.

**Dr. Gorski:** Noted that we faculty know how to do research because we have been trained to do so. We do not know how to teach. He suggested that we conduct classes for faculty - several classes a semester, demonstrating what a good teacher should do. He noted that in Chemistry, when they do recruiting they are talking research expertise, can candidate bring grant money. They ask candidate to submit one page of teaching philosophy and this is reviewed by the recruitment committee.

**Dr. Psarris:** Was of the opinion that departments cannot evaluate teaching on a recruitment visit.

**Dr. Baird:** Suggested that young faculty should be mentored by master teachers when they arrive. Frequently, under present procedures, there is little teaching in the first few years. New faculty should be doing some teaching under supervision so they gradually develop some teaching skills before they have to face a full-time teaching load.

**Dr. Lazor:** Suggested teaching partnerships - have faculty pair themselves. If they sat in on each others classes, it would help in both ways. But there has to be an agreement.

**Dr. Gorski:** Said he had tried to do formal mentoring. The major issue encountered is that some young faculty members said they already knew what was necessary for career development. Dr. Baird suggested that this "arrangement" be discussed with prospective hires at time of recruitment.

**Garry Castellanos:** Suggested that the importance of teaching could be reflected in a strategic plan or workload policy or handbook.

**Dr. Perry:** Reiterated that the message from Provost and President is unambiguous - that teaching is an important part of the faculty role. He also emphasized that departments can reward top teachers by using merit process.

**Dr. Birnbaum:** Discussion has come back to a point made earlier: we have no effective means of identifying who are superior teachers.

**Dr. Perry:** Discussion will continue at next meeting.

### **Faculty Promotion Guidelines**

A draft document from the Provost's Office was provided. Dr. Barea-Rodriguez noted that a change in procedure will provide for department chairs to attend DFRAC meetings. Comments on the document can be sent either to Dr. Frederick or Dr. Perry. [Since the meeting the final document has been distributed.]

Dr. Yacaman indicated his concern that a past mentor could not serve as an external reviewer. Dr. Baird responded that this was a conflict of interest.

### **Dissemination of Information from Dean's Executive Council Meetings**

Dr. Perry asked if information from meetings of the Dean's Executive Council meetings was being passed to faculty. Some department chairs responded only if the information was applicable. After a discussion, it was agreed that the notes would be posted to the college's homepage.

### **Doctoral Faculty**

With the exception of the Department of Geological Sciences, the department chairs have indicated they now have a policy.

### **I-Clickers - George Perry**

Dr. Perry reminded department chairs that they were requested to obtain information on this topic from the last meeting. He asked if the college should adopt a standard clicker. Dr. Norman mentioned that a representative for the I-Clicker system will be providing a demonstration and training session on how these can be used in classes at 1:00 p.m. on Friday, 27 March 2009 in Room 2.03.10 MS. Dr. Barea-Rodriguez indicated that he had e-mailed Larry Williams about adopting a common clicker. Dr. Birnbaum stated that there seems to be a trend toward using Turning Point. Dr. Perry encouraged department chairs to continue to obtain more information on clickers.

### **2008-2010 Prerequisites**

Patti distributed a handout of the 2008-2010 prerequisites that will be entered and enforced for fall (registration starts April 6). Any changes the department chairs wish to make (to avoid

excessive Prereq Override Requests) should be sent via email to Barbara Smith with a copy to Patti Gonzalez.

### **Jump Start Program**

Diane Elizondo provided a handout on the “Jump Start 2009 Update.” As of 3 March 2009, 1,527 students have been admitted to the COS as freshman (FR) for fall 2009. Their mathematics readiness skills are shown below:

- 506 of these students are eligible for college algebra.
- 720 are considered college ready (CR) in mathematics, but not eligible for college algebra without the mathematics placement examination.
- 301 are considered not college ready (NCR) in mathematics.

Invitations were sent to students to participate in Jump Start, an intensive, one-day mathematics refresher course. This new program helps incoming freshmen in the Colleges of Engineering and Sciences prepare for the calculus placement examination and is offered the day before freshman orientation sessions.

### **Other Business**

### **Class Schedules**

Departments will be requested to post course schedules for future semesters on web sites. It is expected that schedules would be subject to change.