Date: December 2, 2012

From: James Houpis, Provost and Vice President, Academic Affairs
Susan Opp, AVP, Academic Programs and Graduate Studies

To: Michael Leung, Dean, COS
Derek Kimball, Chair, Department of Physics
Chris Chamberlain, Chair, CAPR

Subject: MOU Meeting – Department of Physics

On November 13, 2012, Michael Leung (Dean, College of Science), Derek Kimball (Chair, Department of Physics), Chris Chamberlain (Chair, CAPR), Susan Opp (AVP, Academic Programs), and James Houpis (Provost and VP, Academic Affairs) met to discuss the 5-Year Program Review for the Department of Physics and to develop an MOU as required by CAPR.

The Department of Physics has been undergoing modest growth in majors with 34 BS and 2 BA majors in Fall 2012, up from 28 majors in Fall 2009. The department credits their emphasis on hands-on learning, student involvement in faculty research, and one-on-one advising for their majors as contributing to this growth. The report provides clear evidence of a department that prepares its majors well for graduate study and careers in K-12 education. In addition, to provide a pathway for Physics students who are interested in a career in industry, the department is interested in planning a BS in Engineering Physics degree. Such a degree would require close work with the Department of Engineering due to the need for ABET accreditation. If it pursues this objective, the Physics Department is encouraged to consider developing the program with semesters in mind, rather than quarters, as the conversion of CSUEB to semesters seems likely.

The Department is currently searching for a new tenure track faculty member with an emphasis on STEM education, already an area of emphasis and great activity for the Department.

While the Department of Physics has shown strong enrollment growth in GE and service as well as majors courses, their plan for assessment of student learning is in need of improvement, as indicated by CAPR and the outside reviewer. In particular, the program learning objectives need to be restated so that a clear assessment plan can be developed to document the learning that occurs and provide data that can be used to “close the loop” on assessment. In addition, a curriculum map needs to be developed so that the department can clearly indicate where students are expected to learn the content and then determine if appropriate learning is actually occurring. The Department Chair indicated that assessments of learning are occurring (and subsequent to the meeting provided examples of assessments and their results), but admitted that the process has been informal. The Chair indicated that the
Department will work to develop assessment procedures and plans for data collection, including for any new planned degree programs. We look forward to seeing the results of those assessments in the next 5-Year Review.

The results of the MOU meeting are as follows:

1. The Department will revise their program learning outcomes for inclusion in the 2013-14 catalog.
2. The Department will develop ongoing plans to assess student learning outcomes for the degree program, as well as for GE and service courses, and will report on those efforts in their Annual Report to CAPR.
3. The Department will consider semesters rather than quarters when/if plans are developed to offer a BS in Engineering Physics in the future and will keep the AVP of Academic Programs informed of these plans as they develop.

The Department of Physics is commended for the work of its faculty in support of engaged student learning and success, and for its new tenure-track search. CAPR is also thanked for the informative report.

cc: Mitch Watnik
Sophie Rollins