

Engineering Consortium Meeting
April 10, 2012
9 – 2 p.m.
Campus Center 309-310

Meeting Summary

Present: Maria Bautista, Herve Collin, Aurora Kagawa, Louise Pagotto (KapCC), Gayle Cho, Joyce Hamasaki, Melanie Higa (HawCC), Erika Lacro (HonCC), Peter Crouch, Tep Dobry, Joshua Kaakua, Bruce Leibert, Tom Ramsey, Maureen Trevenen, Victor Lubecke (UHM), James Dire, Michael Hannawald (KauCC), Sevki Erdagon, Ken Morris, Kennith Simmons (UHH), Ron Flegal (LeeCC), Richard Fulton, Eric Matsuoka, Brian Richardson (WinCC), Mark Hoffman (UHMC), Joanne Itano (UH System).

UHM College of Engineering Update

Dean Peter Crouch shared that the UHM COE will be offering Engr 101, a project driven course with limited number of seats/section. The audience is freshman students (about 130-150/year) and the focus is to provide information on engineering as a course of study and a career. Separate sections for freshman and transfer students are planned. Community Colleges are asked to consider offering this course to avoid the need for sections for transfer students. UHMC is thinking of offering a similar course that includes projects related to robotics and optics and the use of math lab and/or solid works. STEM 101 is offered at Kap CC which may be very similar to the proposed Engr 101. The core content could be offered by distance with the project work based on each campus. Ron Flegal suggested that a 3 week module could be offered by distance

IKE Report

September 15, 2012 is the IKE symposium, a show and tell involving the community. Students from the three tiers of summer bridge programs will participate, incoming high school to first year students in college, first to second year in college students and second year to UHM students. There will be posters by students and faculty. It will focus on celebrating talent and encouraging students to become engineers. Attendance is open to any interested students. UHMC is able to provide travel support for interested students from Maui since they are participating in the IKE grant. Perkins funding may be requested to support student travel for Hawai'i and Kaua'i (due 4/13/12). Louise Pagotto requested a name from each campus to be part of the organizing committee.

Marketing brochure – draft reviewed. Please send names of contact for the marketing brochure to Joanne Itano. (Note: second draft sent out to contacts in May 2012).

MOU between UHM COE, Kap CC and Lee CC to provide admission directly to the UHM COE for students who complete the ASNS with a concentration in pre engineering/engineering will be drafted by Joanne Itano (note: draft is out for review to UHM COE, Lee and Kap CCs in June 2012).

Status of distance delivered pre engineering courses

EE 160 Tep is offering one section in the spring 2012; meetings on collaborate once/week; students were prescreened to participate in online section using an assessment of “are you ready for an online course?”; 50% of students who participated in online section in Fall 2011 did not pass the course. Having difficulty editing wordpress.

EE211 – first offering of course since development. Trialing use of “kit” to complete the lab component. Having difficulty editing wordpress. Mark Hoffman offered to pilot distance delivery to Maui in ETRO 150 which is similar to EE211. Transfer of ETRO 150 for EE211 can be accomplished by a case by case review.

Phys 272 offered Fall 2011, met online twice a week using Collaborate; students were located all together on campus. Did not use DCDC website as had difficulty editing wordpress. Success rate was about 60% which is comparable to f2f course. Maria Bautista reported that she recently received a “kit” that could be use for Physl 272L which she will review. Will be offered online in Fall 2012. It is not yet determined if DCDC developed website will be used.

Faculty from EE 160, 211 and Phys 272 to meet to discuss continued use of DCDC developed courses as we have not progressed in being able to offer these courses as online courses to neighbor island students.

Leticia Colmenares has offered Chem 100L online using a commercially prepared kit. She may be interested in developing Chem 161/162 or 171 labs as online courses.

Peter Crouch mentioned that UHM has signed up for an ebook deal with McGraw Hill for Fall 2012 which will reduce the cost of a book and may allow the purchase of a lab kit by students.

Development of Calculus courses as distance courses

Calculus I and II are completed. Calc 1 will be offered in Fall 12 by Win CC and Calc II in Spring 2013 by Lee CC. Calc III will be developed in Spring 2012 by Jiajia Seffrood from Lee CC and will be offered in Fall 2013.

Louise Pagotto shared the list of the pre engineering courses offered by distance or f2f. See attached.

PCR Update

The legislative request to support the engineering consortium, use of emporium methods and distance delivery of pre engineering courses was reduced to \$500,000. It was not funded. The group decided that funding is needed to support the work across campuses (emporium method, distance education, projects among students, etc) and faculty to teach

which would be shared resources across the CC campuses and faculty to teach lower division engineering courses that are experienced and interested in teaching by distance.

UHH BS in Engineering Science

UHH has an ATP for the above degree. There will be a Systemwide meeting to discuss engineering within the UH system on July 20, 2012

UHH has 2 FTE for engineering; required courses are aligned with pre engineering curriculum; there would be shared courses with UHM COE; an engineering science degree is ABET is eligible for accreditation. Two concentrations are planned, instrumentation and sustainable energy. There are professional engineers on the Big Island who may serve as affiliate faculty. Distance delivery is being discussed, possibly for the 4th year.

Khan Academy

Peter Crouch reviewed the work available in the Khan Academy. Discussion focused on how it might be used, barriers to using it and benefits, etc.