

Committee on Preparatory Education Meeting
Minutes
Monday March 14, 2011

Present: Frank Bauerle (NSTF Rep), Sarah-Hope Parmeter (ELWR Coordinator), Donna Hunter, David Smith(Chair), Susanna Wrangell (staff).

Absent: Gabriel Elkaim.

Guests: Mathematics Professor Marty Weissman and Stacey Sketo-Rosener, Coordinator of Academic Advising.

I. Announcements.

Chair Smith updated committee members on UCOPE's agenda items.

Summary of UCOPE meeting:

Reviewed and voted on candidate writing prompts for AWPE.

There was a discussion on the interpretation of Senate Reg. 636, item E: Once enrolled at UC, a student must satisfy ELWR *before* being able to transfer credit from other institutions for satisfying other UC writing requirements. In other words, a student can satisfy ELWR and C1/C2 at a Community College (CC) before they ever come here, but they cannot enroll at UC, struggle with ELWR, and duck out over the summer to take an easier course at a CC just to get them over the hump. UCOPE said that this was what was intended, and is reasonable, but there are also cases of students who leave UC for a whole year after their freshman year to catch up at the CC in a more comprehensive way; apply for readmission, and then cannot receive transfer credit; this was seen as perhaps an unintended side-effect, but there was no proposal to suggest a re-working of the regulation. It was said that these harder cases could be handled by reasonable consideration of petitions.

There was a contentious discussion about further fee increases for AWPE (from \$90 to \$110, possibly \$120 by 2011/12), triggered by an increase in the number of students getting fee waivers. It was said that on-line grading had reduced the cost, and that it should have been able to become self-sustaining without further hikes.

Members were asked to discuss a new curriculum called STATWAY recently voted on for adoption at CSU. It's essentially "developmental mathematics focusing on topics needed for success in statistics or for math literacy." All we did was look over the advertisement for it and the quant people in the room said it looked like a nice alternative to shoving everyone through pre-calc whether they will need calculus or not. I don't know if it differs from our AMS 2 in any interesting way, but I can get details if there is interest.

Toward the end we had a general round of "what's on your mind." I decided to use this time to describe our experiments with stretch Math 2 and stretch Core courses. The representative from Merced said they are still waiting for an ESL program, and I mentioned that they might have a long wait. Irvine and Davis put in an online instruction proposal to that big opportunity last year for online math modules to address specific skills. I didn't get details but I could try.

CPE member felt strongly that a fee increase to the AWPE testing is not fair for students who can afford to pay, to underwrite the payment of students on fee waivers. (students who cannot afford to pay), students should only pay the real cost of scoring and taking the exam. CPE is against the fee hike for these tests.

Spring quarter scheduling: members will be polled via email and the new meeting time and day will be sent out within two weeks.

January 24 minutes approved with corrections.

Action Item: The updated draft will be posted to the committee website.

II. Meeting with Pablo Reguerrin Agenda Planning.

Here are some questions and topics CPE members would like to be addressed at today's meeting:

- What is the status of students who enter UCSC poorly prepared, what is being done to help these students?
- What processes are in place and what help is available?
- The current Survey on Retention, what are the questions, and how many students participate?
- Do students finish the survey, what is the sample number and is this mandatory or is it hard to get this data?
- How effective is the survey in identifying the student's needs?

Action Item : CPE designates will; meet with Pablo Reguerrin this afternoon and report back at our first spring quarter meeting.

III. Math Diagnostics Scoring Procedures Update.

CPE members consulted with Mathematics Professor Marty Weissman on math scores and how they determine where a student will be placed and how successful the students are based on their scores. CPE members wondered if it would be better for the students to take the courses at the community college system before entering UC, the success rate would be higher, but faculty in the past have expressed concern with the quality of course content based on the community college and is the reason, historically, why UCSC would rather teach the courses here "in house". Professor Weissman explained the MDTP test from UCSD that UCSC uses is broken up into different elements of mathematical areas with 60 multiple choice questions to find student's strengths and weaknesses.

The class cut offs used at UCSC are based on historical data or what other schools do. Professor Weisman generated data from UCSC students to actually see if the present cut offs are reasonable, for Math 11 & 19 they are.

The MDTP test is for teachers to see what the students learned, so the teachers can adjust their curriculum and teaching , it is not suppose to be used as a testing placement exam. It is a readiness test for students. Here are some probability percentage samples:

The current cutoffs on the Math Placement Exam (MPE) are useful for predicting the pass-rate for students in Math 11 and Math 19A. More precisely, a student who (barely) meets the cutoff on the MPE for calculus has approximately an 80% chance (+/- 5% or so) of passing that calculus class.

A minority of students who take the placement exam demonstrate mastery of linear equations. Only a small minority (20% or less) demonstrate mastery of trigonometry.

Should our campus be teaching Math 2, data from the VPDUE last year suggests that they do succeed in the major (PBSci majors) after placing in Math 2. If UCSC eliminated Math 2, which is not a college level course, it only pre pares students for pre calculus, would the students transfer in “prepared” or take it at a community college, which also have enrollment caps due to budget reductions.

Math 2 and Math 2 stretch students are doing well and pass the class one grade higher than those who just go directly into Math 3. Math 2 enrollments are over 200 students, 10% went into stretch (225) out of 3500 students. Frosh Math 3 had 700 students and two classes were held. For the course, AMS 2 students just sign up for it, there are no placement tests.

Data scores can be printed out for the students, which identify weak and strong areas of math competencies then student placement in the correct course. CPE Representative Bauerle will follow up and find out how the process is completed and what the costs are. CPE Representative and Professor Weissman will track and see who could do the printing. The data comes in an excel spreadsheet and could be emailed to the student. The diagnostic tool is for instructors, so they can get the data for the students enrolled in their courses. Some faculty on campus would use this data. A student with a score of 35, but who needs Math 19A, is Math 3 the best place for them? It is not really better to take Math 11A. This student would need to get some targeted help, but how would we do this? There is the LSS center and also ALEKS. ALEKS is a testing tool that can help the student, online Math 3, or a sufficiently high score on the placement exam, is required for entry into Math 19A. The problem is that students sometimes cannot place into Math 19A, and get stuck in Math 3 instead, when they would probably be better served by a quick refresher of forgotten material rather than an entire pre-calculus course like Math 3.

The Mathematics department is currently in discussion with the AMS department, deans, etc., about developing a new placement test to solve these issues. At the rate of development, the test could be ready by Summer 2012.

There is a systemwide writing program placement test, maybe there should be one for math placement as well. CPE chair Smith will send in a request for the April 29 UCOPE meeting agenda for the possibility of systemwide placement exam for mathematics.

So attests,

David Smith, Chair
Committee on Preparatory Education