

**EL CAMINO COLLEGE MATHEMATICAL SCIENCES
DIVISION CURRICULUM COMMITTEE MEETING**

Amendments in RED.

October 20, 2020

Present: Edwin Ambrosio, Sue Bickford, Carl Broderick, Diaa Eldanaf, Greg Fry, Milan Georgevich, Arturo Hernandez, Kenneth Key, Marlow Lemons, Matthew Mata, Pavan Nagpal, Gerson Valle

Review Minutes

Kenneth Key motions to approve the minutes, Diaa Eldanaf seconds the motion. All in favor. Sue Bickford abstains. Minutes approved.

Course Review

The following courses have been submitted for course review.

1. CSCI 40 (2 year)
2. Engineering 1
3. Math 40
4. Math 67

Outstanding

The following courses are still outstanding. E. Ambrosio mentioned he received the course reviews for Math 170, Math 180 and Math 220, yesterday from Greg Fry. G. Fry mentioned that there were no changes Math 170, Math 180 and Math 220, except for the textbook updates.

Math 110 and Math 116 had changes made because of the hours **and no update was provided. Edwin stated he would follow up with the curriculum committee.** The DE would like to know if Math 110 and Math 116 can be offered in the preferred synchronous format. E. Ambrosio will follow up with Lavonne Plum and Janet Young. Math 116 was submitted with the modified version in March of this year during the time when the pandemic began. E. Ambrosio will check the status with the CCC and will take action on the item. It was explained that Math 116 was submitted only as face to face in the spring, but unsure if it got on the list of the DE addendum, Dr. Lemons mentioned that Math 116 was listed as one of the courses to vote on.

E. Ambrosio received an email from Janet Young who runs the CCC, stating that Dr. Shankweiler will respond to the Math 12 faculty because the course is out of compliance. It was explained that the course is out of compliance with Title IX, but it's in compliance with Title IX but don't want to take it out of compliance. At the moment Math 12 is set up so that it would have live hours, or would have more hours meeting than it had units with the notion that students would have less time to work outside of class and have work more inside of class, but was challenged.

E. Ambrosio will reach out to Sue Bickford with what the next steps are once he hears regarding this course.

1. CSCI 12 (2 year – lecture/lab unit issues)
2. Math 100 (reactivated)
3. Math 170
4. Math 180
5. Math 210 (Math ADT issues)
6. Math 220
7. Math 12
8. Math 116

Course Proposal Updates

1. **Engineering Graphics-** The engineering graphics course proposal is currently on hold at the moment because of the lab component. P. Nagpal mentioned that they are trying to work with Industry and Technology department with this course and will be looking into non-lab courses, in which will require a survey ready to conduct. This survey will be for the students in MESA. This will be further discussed in detail at the Engineering meeting on Thursday, October 22, 2020 but, at the moment, is being put on hold.
2. **Data Science II-** E. Ambrosio spoke with instructor Solomon Russell and mentioned, this course is currently being worked on and is on hold as of now.
3. **Introduction to STEM-** G. Valle explained that, at the moment, they will be co-opting some human development courses. They are still having many things to figure out, such as who is going to own this course (Mathematical Sciences, Natural Sciences, or Human Development), and what would be the minimum qualifications for the instructor teaching this course (ideally a STEM faculty would be wanted to teach this course). It was questioned if this course will be transferrable, will it affect the total units. The idea is to keep it at one unit max. The concern is that students may already have at the max 60 units and how can this course be embedded into the mathematics degree for transfer curriculum. It was explained that part of the point of this course is to alleviate all of the things that they are hearing from faculty that students are not ready to take STEM courses primarily in math courses, but in general all of them. G. Valle also mentioned, how to fit this into already-really-packed unit load that many stem majors are taking, and at the moment is being discussed. At the moment, they are trying to do this so that students know what their options and understand what is required of them, also this course is not being made a required course. It was questioned, since the course is with the shell of the human development course, will their content have to be part of the course as well, since it will be part of an existing course. Ken Key mentioned that if this course gets finalized, can it be provided to students in the beginning of their education through the STEM META Major process and can also make this course available to all those students on their way to success for which ever path they choose to go? It was explained that the plan of this course is to be taught in the first semester

when students first come in, as retention and also as recruitment for students that are undecided or taking general studies. This course this have a lot of human development topics, and that is why Human Development department is reaching out, stating that this is a human development course and should be taught by human development instructors. This course will not be taught next year, as many areas of this course need to be discussed. G. Valle also explained that they are talking about collaborating with the Human Development department to use either HDEV 101 or HDEV 105 for the meantime while another course gets developed. It was mentioned that it is very important to discuss the content of the course so students can transfer with 80 units or more, the 60 units does not work for STEM students. Many STEM students transfer with more than 80 units. Ideally, this course would be great if its transferrable. It was also mentioned that none of the human development courses do not meet the needs of the STEM students and if something else be developed, the topics are similar, but they do not address the needs of the STEM students. It was explained that in other programs, there may be other courses, such as chemistry and physics that faculty can teach, perhaps that can be a possibility. Those options can be good because they can help build credibility and leverage that is needed and to have faculty from the STEM area to teach the course. It was explained that, for some reason, STEM faculty cannot teach the course but can do collaborative teaching. Ken Key suggested, if one of the human development courses need to be chosen, HDEV 105 should be one of them, it is STEM-focused, and if they can agree to that, they can give some latitude to employ some of the critical elements that are necessary for that course. It was explained that this course would not be part of the pipeline for any math courses and will not be part of the AB 705, it will fall more closely to human development. This course is for the interest of the STEM majors, and it would be to help them understand that math is difficult and hours of studying will be needed. It was recommended to tell students that they will have to study several hours a week and to remind them that everyone is here to support them. Dr. Lemons mentioned that it was his understanding that another component of this course was career exploration. G. Valle confirmed that.

Announcements

E. Ambrosio thanked everyone for their hard work.

Next DCC meeting will be on November 17, 2020.