

Mathematical Sciences Division Council
Agenda, February 9, 2016

1. Unit Plans

a. Due Feb. 15, 2016

EL CAMINO COLLEGE

MATHEMATICAL SCIENCES DIVISION COUNCIL

February 9, 2016

Present: Diaa Eldanaf, Jill Evensizer, Junko Forbes, Greg Fry, Art Hernandez, Linda Ho, Anna Hockman, Lars Kjeseth, Bonnie Mercado, Ashod Minasian, Solomon Russell, Catherine Schult-Roman, Jacquelyn Sims, Susan Taylor, Linda Ternes, Lijun Wang, Paul Yun

UNIT PLANS

Final Unit Plans are due on 2/15/16.

Dean J. Sims asked Division Council to review the Unit Plans and check for accuracy as well as provide any suggestions, clarifications or recommendations.

Recommendations from the various programs were included in the Unit Plans.

The Unit Plans will go on to the Area Plans process where all the different divisions compete for funding.

Each category has its own ranking order. Dean J. Sims ranked them based on experiences with Unit Plans last year, specifically what has a better chance at getting funded.

Dean J. Sims will eventually meet with the VP of Academic Affairs to provide an overall ranking.

Some of the items listed in the Unit Plan will make use of department funding.

Recommendation to have an orientation for all new faculty.

In order to have another computer lab, the department may need to convert regular classrooms to computer labs in order to increase section offerings for classes such as Computer Science. The department needs more classrooms and has the FTES to back the need for growth. Dean J. Sims will discuss the need for additional classrooms with the VP.

Dean J. Sims has been working with a contractor on quotes for chairs with wheels for at least three classrooms.

L. Schreier requested a chair and desk for the Math Study Center, which may be covered with department funding.

Dean J. Sims will advocate for higher pay for tutors.

Division Council was informed to review the Unit Plans in depth and send Dean J. Sims any additional recommendations.

RECOMMENDATIONS

Category: Staffing; #52 --- should be \$5,000 per “academic year” instead of “semester”

Category: Staffing; #52 ---- remove “developmental” and make this a recommendation for all programs, including Computer Science and Engineering, with five or more sections. Also include that the course coordinators should be on a rotation cycle every two semesters and receive Release Time.

Category: Staffing; #52 ---- remove “evaluating” and replace with “assist”

Category: Facilities; #1 ---- Susan Taylor will update the rationale and send back to Jackie. Requested one of the labs be a more group friendly computer lab similar to a laptop cart lab.

Additional recommendation by Susan Taylor/Committee D --- add more tables and chairs throughout the building for students to work on (place wherever its legal)

Additional recommendation --- under “Instructional Equipment” add document camera

Category: Other ---- switch the ranking of #31 (Professional Development – Manipulative Training) and #32 (Professional Development – Technology Training)

Category: Software/Hardware ---- switch the ranking of #39 (three additional computer labs) and #40 (increased wireless capabilities)

Category: Staffing ---- move “Full Time Technician” to the #2 on the ranking.

	A	B
1	Mathematical Sciences Unit Plans Categorized - 2016 - 2017	
2		
3	Facilities	
4	Three Additional Computer Labs	\$500,000
5	More Classrooms for Mathematical Sciences (preferred in MBA)	
6	Total	\$500,000
7		
8	Furniture	
9	Desks and Chairs with Wheels	\$60,000
10	Chair and Desk for Math Study Center	
11	Total	\$ 60,000
12		
13	Instructional Equipment	
14	Projector Bulbs	\$1,600
15	Projector Transmitters	\$400
16	Projector Receivers	\$400
17	Projector Switcher	\$1,700
18	Epson Projector (Standard Room)	\$1,500
19	Epson Projector (Dual Room)	\$2,700
20	Scanners	\$1,000
21	Total	\$9,300
22		
23	Non-instructional Equipment	
24	Lockers for tutors	
25	Total	\$0
26		
27	Other	
28	Professional Development - Statistics Training/Conference	\$20,000
29	Professional Development - Tutor Training	\$8,000
30	Professional Development - Accelerated Courses	\$25,000
31	Professional Development - Manipulatives Training	
32	Professional Development - Technology Training	
33	Professional Development - Cultural Literacy Training	\$25,000
34	Supplemental Instruction Budget Increase	\$60,000
35	Tutoring Budget Increase	\$50,000
36	Total	\$188,000
37		
38	Software/Hardware	
39	Three Additional Computer Labs	\$500,000
40	Increased Wireless Capability in MBA	
41	Electronic Tracking System	
42	Landline Phones in All Classrooms	\$2,000
43	Apple Computers in Workrooms	\$6,000
44	Laptop Cart for Group Friendly Computer Lab	
45	Timekeeper System Replaced	
46	Total	\$508,000

	A	B
47		
48		
49	Staffing	
50	Fulltime Tutor Coordinator	\$90,000
51	FulltimeMESA/STEM Program Coordinator	
52	Course Coordinators	\$60,000
53	Fulltime STEM Student Advisor	\$55,000
54	Fulltime MESA Counselor	\$80,000
55	Special Assignments to create Cultural Responsive Teaching Activities	
56	Fulltime Technician (ITS)	\$80,000
57	Engineering/Mathematics Fulltime Instructor	\$90,000
58	Mathematics Fulltime Instructors (5)	\$450,000
59	Computer Science Fulltime Instructors (2)	\$180,000
60	Total	\$270,000
61		\$1,150,000
62		
63		
64		
65		
66		
67		
68		
69		
70		
71	Overall Total	
72		\$2,415,300

	A	B	C
1	Mathematical Sciences Unit		
2	Plans Categorized - 2016 - 2017		
3	Facilities		
4	Three Additional Computer Labs	\$500,000	\$150,000 per classroom. This estimate is based on the CS faculty plan for a classroom conversion to a computer lab. ITS was consulted but was unable to confirm the amount as they said every situation is unique. There is more demand for computer science courses, and accelerated courses are showing great success with improving student success rates. We are also growing our hybrid offerings. And more instructors are using online homework and projects. The current amount of computer labs in our division is not
5	More Classrooms for Mathematical Sciences (preferred in MBA)		CMII Program Review, 2014
6	Total	\$500,000	
7			
8	Furniture		
9	Desks and Chairs with Wheels	\$60,000	Purchase three classroom sets of desks and chairs that have wheels on them. \$163/chair, 309.96/table (that seats two). Total price per classroom including labor and setup \$20,000. For three classrooms, \$60,000. This classroom furniture with wheels should allow for ease of transition from lecture set-up to group set-up. More instructors are using
10	Chair and Desk for Math Study Center		
11	Total	\$ 60,000	
12			

	A	B	C
13	Instructional Equipment		
14	Projector Bulbs	\$1,600	4 bulbs at \$400/each. Many instructors have incorporated the use of audio visual during their lectures. When the equipment fails, it takes a while before a technician can come and assess the problem, and then it takes even more time to order the necessary parts to make the repairs. During the current semester, it took, 6 weeks to repair the audio visual equipment in three of our classrooms. We had to shuffle and move around teachers who really needed to use the equipment. And there were some instructors, they were not able to rotate, and this caused a huge interruption in their instruction. We want to order additional parts for the audio visual equipment, so that repairs may be made quickly and not have to wait an inconvenient amount of time. It is also our understanding that extra audio visual equipment is not available because due to its funding, replacement parts could not be ordered. So
15	Projector Transmitters	\$400	2 at \$200/each. (See rationale above)
16	Projector Receivers	\$400	2 at \$200/each. (See rationale above)
17	Projector Switcher	\$1,700	One switcher. (See rationale above)
18	Epson Projector (Standard Room)	\$1,500	One Projector/Standard Room (see rationale above)
19	Epson Projector (Dual Room)	\$2,700	One Projector/Dual Room (see rational above)
20	Scanners	\$1,000	Two scanners at \$500/each. One for each faculty workroom. Faculty create homework solutions, exam keys, handouts, etc... And need to make soft copies to be able to email to students. CMII Program Review, 2014
21	Total	\$9,300	
22			
23	Non-instructional Equipment		
24	Lockers for tutors		
25	Total	\$0	
26			

	A	B	C
27	Other		
28	Professional Development - Statistics Training/Conference	\$20,000	Reserve staff development funds for Math 150 (Statistics) instructor training, including teaching workshops/conferences. Cost Estimate = \$15,000 - \$20,000. Create and run a series of workshops training new statistics instructors, in order to increase the pool of instructors prepared to do an excellent job teaching the course, in light of the expected increased demand for these sections. (equity, progress toward completion, and student success, Strategic Initiative B) CMII and CMD
29	Professional Development - Tutor Training	\$8,000	Reserve staff development funds for instructors who conduct tutor training and materials used during tutor training. Cost estimate \$4,000 per semester or \$8,000 per year.) Funding for tutor training. While it is nice to get flex credit for our volunteers, I think we would get more participation and ultimately more support if we were able to pay the people that helped out during tutor training. This would also help tremendously if we want to split the training at some point (one section for classroom/one section for center), have training during the term, and or provide additional materials to the tutors for the training. Right now, I think an approximate cost would be around \$4000 per term to adequately pay for faculty participation. Tutoring and CMII

	A	B	C
30	Professional Development - Accelerated Courses	\$25,000	Many programs are working with course teams. Instructors (fulltime and adjunct) meet regularly to collaborate and employ some consistent strategies in certain classes including the accelerated unique courses. Similar to the consistency project in Humanities)Classroom Observation Opportunities for BAM and GEA Instructors) During the expansion of the accelerated courses, offer compensated opportunities for fulltime and adjunct instructors interested in teaching BAM or GEA to observe current instructors in their classrooms and labs and attend weekly meetings.
31	Professional Development - Manipulatives Training		Offer workshops on use of manipulatives in teaching. (instructional quality and support, professional development, Strategic Initiatives A and B) CMD-Professional Development#2
32	Professional Development - Technology Training		Funding for professional development workshops or conferences be provided to focus on using iPad technology in General Education Math Courses. CMII
33	Professional Development - Cultural Literacy Training	\$25,000	Create and offer professional development workshop series focused on cultural literacy and culturally responsive teaching (CRT) for fulltime and adjunct faculty teaching developmental mathematics, with adjunct faculty paid for the training and target start date fall, 2016. (equity, instructional support, professional development, Strategic Initiatives A and B) CMD-Equity#1
34	Supplemental Instruction Budget Increase	\$60,000	Growth of program. More SI sessions being offered within and outside Mathematical Science. Minimum wage increase
35	Tutoring Budget Increase	\$50,000	Minimum wage increase and growth
36	Total	\$188,000	
37			

	A	B	C
38	Software/Hardware		
39	Three Additional Computer Labs	\$500,000	\$150,000 per classroom. This estimate is based on the CS faculty plan for a classroom conversion to a computer lab. ITS was consulted but was unable to confirm the amount as they said every situation is unique. There is more demand for computer science courses, and accelerated courses are showing great success with improving student success rates. We are also growing our hybrid offerings. And more instructors are using online homework and projects. The current amount of computer labs in our division is not enough to support the current need. And with the plan growth in our Computer science program, and accelerated courses, more computer labs are needed.
40	Increased Wireless Capability in MBA		Set up sufficient wireless capability to support the use classroom sets of tablets or thin clients throughout the MBA building. (instructional and student learning support, progress toward completion through greater course offerings, Strategic Initiative B)
41	Electronic Tracking System		With the offering of Math 100 (Supervised Tutoring), more traffic is expected in the Math Study Center. Currently, students sign in manually. We need an electronic tracking system to keep track of students hours in the MSC and to claim accurate apportionment. Tutoring
42	Landline Phones In All Classrooms	\$2,000	Landline phones are needed for campus emergencies including active shooters, power outages, etc...\$60/phone, 31 classrooms. CMII Program Review, 2014

	A	B	C
43	Apple Computers in Workrooms	\$6,000	Two IMac, 21.5 inch desktop, with printer and Magic track pad (\$1800), yearly service (\$500), toner (\$300). One in each workroom. CS faculty are encountering more and more students who use apple products for their programming classes and request support for apple compilers. Additionally, for creation of new CS courses including gaming, Python, programming apps for iPhones and other highly sought after topics, faculty need the equipment to become familiar with what the students are using, to create the necessary curriculum, and to offer flexibility to students. CS Program Review, 2013
44	Laptop Cart for Group Friendly Computer Lab		Create more classrooms that can be used as both computer labs and group-work-friendly classrooms, utilizing tablets or thin clients or equivalent. (instructional and student learning support, progress toward completion through greater course offerings, Strategic Initiative B
45	Timekeeper System Replaced		This system constantly malfunctions causing tutors and other casual employees to have to manually sign in, and their hours have to be manually tracked.
46	Total	\$508,000	
47			
48			

	A	B	C
49	Staffing		
50	Fulltime Tutor Coordinator	\$90,000	With plans to offer Math 100 and receive apportionment for supervised tutoring, there is a need for a fulltime coordinator in the Math Study Center. Currently, we have a part time coordinator, who is only on campus for 3 days a week for half a day. There needs to be more consistent leadership in this center to provide tutor training, tutor development, faculty relationships, advertising, and improvements. CMII Program Review, 2014, CS Program Review, 2013. CMI Program Review, 2012, CMD, and Tutoring
51	Fulltime MESA/STEM Program Coordinator		
52	Course Coordinators	\$60,000	Provide reassigned time for a course coordinator for each developmental mathematics course with ten or more sections. Duties may include assisting instructors with course materials, student activities, and other resources, promoting professional development opportunities, coordinating faculty cohorts and shared office hours, managing course SLO assessments, conducting ongoing surveys of students and instructors, disseminating research results, and evaluating adjunct instructors. 12 at \$5,000 per semester or \$2,500 per semester. This is about 2.5 hours/week at Rate I.
53	Fulltime STEM Student Advisor	\$55,000	A STEM student advisor is needed to assist in organizing, coordinating, and executing student STEM activities such as professional development workshops, field trips, and assist in the recruitment of students throughout the year .
54	Fulltime MESA Counselor	\$80,000	A dedicated STEM counselor is needed to meet the needs and demands of the growing MESA/ASEM student population. The current counselor splits their time with other divisions.

	A	B	C
55	Special Assignments to create Cultural Responsive Teaching Activities		Create summer special assignments for faculty to create CRT-aligned activity packets (arcs) for quantitative reasoning (Math 12/23/37); for problem solving (Math 37/40/67/73); and for linear modeling (Math 37/67) for use in a professional development workshop series and for use in indicated courses. (equity, instructional support, Strategic Initiatives A and B) CMD-Equity#2
56	Fulltime Technician (ITS)	\$80,000	With four computer labs, 31 instructor stations in all classrooms, 15 computers in workrooms and front office, a full-time technician dedicated to Mathematical Sciences is needed. Hardware and software updates are quite regular, and
57	Engineering/Mathematics Fulltime Instructor	\$90,000	
58	Mathematics Fulltime Instructors (5)	\$450,000	
59	Computer Science Fulltime Instructors (2)	\$180,000	
60	Total	\$270,000	
61		<u>\$1,150,000</u>	
62			
63			
64			
65			
66			
67			
68			
69			
70			
71	Overall Total		
72		\$2,415,300	