

Mathematical Sciences Division Council
Agenda, January 21, 2016

1. Unit Plans
 - a. Due Feb. 15, 2017
2. Instructors having all online assessments (quizzes, exams, etc.)
 - a. Should there be a department recommendation?
3. Fall and Winter scheduling (Winter 2017, January 5 – February 7, classes will meet for 5 weeks, M – Fr)
 - a. Should we offer 4 and 5 unit classes during Winter session?

EL CAMINO COLLEGE

MATHEMATICAL SCIENCES DIVISION COUNCIL

January 21, 2016

Present: Luis Barrueta, Diaa Eldanaf, Greg Fry, Art Hernandez, Linda Ho, Anna Hockman, Natalie Koch, Bonnie Mercado, Ashod Minasian, Solomon Russell, Larry Schreier, Jacquelyn Sims, Susan Taylor, Linda Ternes, Jared Thilenius (ASO Rep), Nathalie Vidal (ASO Rep), Lijun Wang, Paul Yun

UNIT PLANS

Division Unit Plans for campus-wide funding are due to VPs by 2/15/16, however, recommendations must be sent to Dean J. Sims by 2/1/16 as they will need to be inputted into TracDat.

The Unit Plans are separated into several categories including staffing, instructional equipment, furniture supplies, etc. Each category is to be ranked individually.

The Division was granted a supply augmentation. Pencil sharpeners and board erasers will be covered with the augmentation.

The Division was also funded for classroom calculator sets and workroom printers.

Dean J. Sims was advised to keep the projector receivers, bulbs and classroom computers in the Unit Plan as a carryover from the previous Unit Plan.

Division Council will need to decide what items will be carried over from the last Unit Plan based on the recommendations from each of the committees. Carrying over items reminds the VP's that the Division does need that specific item.

Dean J. Sims requested that Division Council members review the Unit Plan with their respective committees and send their prioritized list to Dean J. Sims.

Dean J. Sims and L. Ternes will determine commonalities among all of the committees and include each committee's top five.

Reminder that there is a separate process for hiring full-time faculty, therefore, instructor positions should have the lowest ranking in the staffing category of the Unit Plans.

The Math Division will be competing with all other divisions on campus, so it is important to be strategic on what is included on the Unit Plan and how it is ranked.

Some of the recommendations from Program Review can be handled internally.

INSTRUCTORS HAVING ALL ONLINE ASSESSMENTS (QUIZZES, EXAMS, ETC.)

There is a concern that having all assessments completed online allows more opportunities for cheating. It was suggested that there be a departmental recommendation on how many exams can be given online.

A. Minasian recommended no more than 20% of assessments be given online.

L. Ternes recommended that we review the OEI guidelines to see if there are specific guidelines on this.

Recommendation that not all the assessments be online. The Division will follow-up with a specific percentage.

FALL AND WINTER SCHEDULING

Dean J. Sims is currently working on the fall 2016 schedule. Any recommendations should be sent to her via email.

S. Taylor recommended that we preemptively convert some of the Math 73 classes to Math 80.

Winter session is set for 1/5/17 – 2/7/17 meeting Monday through Friday for five weeks. Summer 2017 will be one six week session and one eight week session.

Generally, the department has offered only three unit courses along with Math 150 classes. The department will consider offering more four and five unit classes as a pilot.

Math Academy will be offered as a non-credit course for both fall and winter.

ANNOUNCEMENTS

A. Minasian created a summary regarding gender and sexual based misconduct and included this in his syllabi as an informational item of resources available to students.

New state guidelines require faculty and administration to participate in training for Title IX as they are considered “responsible parties” and must report any misconduct. The college is working on making the workshops available.

Jaynie Ishikawa is the Title IX Officer.

At the moment, classified employees are not required to inform a Title IX officer, however, they are working on having all employees become responsible parties.

CM CSCI Prioritized List of Recommendations (2016 – 2017)

Computer Science 2013 Program Review Recommendation 2 Recommendation 2013-B: (Faculty Hiring) It is recommended that a full-time Computer Science faculty and/or a hybrid Math/CS faculty be hired. Also, a search for part-time faculty capable of teaching the CS curriculum is desirable.

Computer Science 2013 Program Review Recommendation 3 Recommendation 2013-C: (MESA Workshops and Tutoring) It is recommended that a MESA workshop and facilitator be created for CSCI-1 for the Spring 2014 semester. MESA workshops for CSCI-2 and CSCI-3 would also be desirable by Fall 2014. Fund more hours for the Computer Science tutor.

Computer Science 2013 Program Review Recommendation 4 Recommendation 2013-D: (Technology) It is recommended that budgeting be made available to allow faculty to explore newer technologies in order to meet student demand. An example would be the purchase of iPads.

Computer Science 2013 Program Review Recommendation 5 Recommendation 2013-E: (Curriculum) Establish an AS-T Degree for Computer Science. This has already been presented at the College Curriculum Committee. The current status of the degree is being reviewed at the Chancellor's office level.

Computer Science 2015 NEW Recommendation 1 Make Macs available to Computer Science faculty would help the faculty to continue to provide support to those students who prefer to use Mac for program development. Two iMacs, 21.5 inch desktop, with printer and Magic trick pad, yearly service, and toner. One in each workroom (two in total)

Computer Science 2015 NEW Recommendation 2 New Lab

CM Engineering Prioritized List of Recommendations (2016 – 2017)

Engineering 2013 Program Review Recommendation 1

Reactivate and offer the Electric Circuits course

Engineering 2013 Program Review Recommendation 2

Add Engineering as a FSA for the interested and qualified instructor.

Engineering 2013 Program Review Recommendation 4

Hire tutors capable of tutoring the Statics and Electric Circuits courses

Engineering 2013 Program Review Recommendation 5

Hire a mathematics instructor who can also teach engineering.

MESA Prioritized List of Recommendations (2016 – 2017)

MESA 2015 Recommendation 1 MESA|STEM Program Coordinator

MESA 2014 Recommendation 2 MESA|STEM Student Advisor

MESA 2014 Recommendation 3 MESA|STEM Counselor

MESA 2015 Recommendation 4 Instructional Supplies

CMD Prioritized List of Recommendations (2016 – 2017)

Mathematics CM4 2015 Recommendation K

Use students' educational plans to assist in setting up semester-by-semester course offerings (equity, progress toward completion, and student success, Strategic Initiatives B and F) Collegewide#1

Mathematics CM4 2015 Recommendation B Compensate adjunct instructors teaching developmental mathematics for one or two office hours per week (Recommendation 2012D.3- equity, instructional support, Strategic Initiative B) CMD-Equity#3

Mathematics CM4 2012 Program Review Recommendation 4 Recommendation 2012B.2 (Management – Course Coordinators) 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.

Mathematics CM4 2015 Recommendation A Hire a fulltime tutoring coordinator. (student learning support, Strategic Initiative B) Division-Department#4

Mathematics CM4 2015 Recommendation F 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) Division-Department#5

Mathematics CM4 2015 Recommendation H 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) Division-Department#5

Mathematics CM4 2015 Recommendation G Create more unstructured study space for students in the hallways of the MBA building, using more tables and chairs where possible. (student learning support, Strategic Initiative B) Division-Department#6

Mathematics CM4 2015 Recommendation I Find or create more unstructured study space for students in and beyond the MBA building, possibly utilizing unused space in the Student Activity Center. (student learning support, Strategic Initiative B) Division-Department#6

Mathematics CM4 2015 Recommendation L Conduct research into students' access to transfer-level courses, in particular Math 120, 130, 150, and 170. Plan a general education math "catch-up year" for Math 120 and Math 150 sections based on research results. Offer more Math 150 sections in various formats, including hybrid, large lecture sections, weekend classes, at least on a temporary basis, in order to catch up with demand. (equity, progress toward completion, and student success, Strategic Initiatives B and E) Division-Department#1

Mathematics CM4 2015 Recommendation O Based on mounting evidence of the ineffectiveness of using placement exams for placement, the disproportionately negative impact of placement-exams-based placement on SEP-targeted populations, and based on recent developments from the UC and CSU, pilot an alternative placement process (including alternate measures for placement into Math 150) using HS transcripts and GPA among SEP-targeted populations and a small cohort of the general population, tracking two-year progression and comparing to current placement process students. (equity, progress toward completion, and student success, Strategic Initiative B) Division-Department#2

Mathematics CM4 2015 Recommendation P 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) Division-Department#3

Mathematics CM4 2015 Recommendation R 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

Mathematics CM4 2015 Recommendation Q 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

Mathematics CM4 2012 Program Review Recommendation 1 Recommendation 2012A.1 (Professional Development – 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.

Mathematics CM4 2012 Program Review Recommendation 5 Recommendation 2012F.1 (Student Learning Outcome Assessments – Improve the Quality of Assessment Cycles) Create more comprehensive assessment instruments, involve more voices throughout the assessment process, and have more thorough follow-up on each assessment cycle.

Hire more fulltime faculty committed to teaching quality statistics courses and developmental mathematics. (Recommendation 2012C.2, equity, progress to completion, Strategic Initiative B) Division-Department#8

Create the means for co-requisite courses), appropriate academic strategies courses, and even SI sessions to be offered as course supplements that students can sign up for at registration, so that these can be built into a student's schedule of classes. (learning support, Strategic Initiative B) Collegewide#2

Mathematics CM4 2015 Recommendation V Develop noncredit co-requisite courses for students not quite reaching cut scores for placement in certain courses. (equity, progress toward completion, student success, Strategic Initiative B) CMD-Curriculum#1

Mathematics CM4 2015 Recommendation X Facilitate BAM and GEA staffing requests to allow for weekly meetings and the potential to cover each other's classes. (Recommendation 2012C.4, equity, instructional quality, Strategic Initiative B) CMD-Staffing#1

Mathematics CM4 2012 Program Review Recommendation 7 Recommendation 2012C.1 (Staffing and Course Offerings – Growth and Study of BAM and GEA) Increase the number of sections of BAM (Mathematics 37) and GEA (Mathematics 67) through reducing sections of Mathematics 12, 23 and 73.

Mathematics CM4 2015 Recommendation S Norm our associate degree math competency test and all other challenge tests, which may require funding for Accuplacer tests. (compliance with Title 5 regulations, equity, progress toward completion, Strategic Initiative B) Division-Department#7

Mathematics CM4 2015 Recommendation N Create/recruit a Developmental Mathematics Student Equity Advisory Student Group – students used to create research questions and gather data for developmental mathematics program review, particularly related to student equity but also in general – make this a sustainable group to help us review SLO assessments, etc. (equity, learning support, instructional effectiveness, Strategic Initiatives B and E) CMD-Equity#5

Mathematics CM4 2015 Recommendation M Expanding SMA into the winter session, as well as mid-fall and mid-spring semesters prior to registration period for SEP-targeted populations, with an estimated cost per Math Academy with 25

Students: \$6,500.00. (follow-up action to Recommendation 2012E.1 progress to completion, equity, placement, college-readiness, Strategic Initiative B) CMD-Equity#4

Mathematics CM4 2015 Recommendation BB Increase tutor availability during finals period. (instructional support, Strategic Initiative B) Division-Department#10

Mathematics CM4 2015 Recommendation Y Based on the continually improving success of GEA, propose that Math 67 satisfy the associate degree math competency requirement. (equity, progress toward completion, Strategic Initiative B) Collegewide#3

Mathematics CM4 2015 Recommendation CC Promote tutoring in classrooms by having guest tutors visit classrooms once or twice during each semester and by having students lead review sessions for targeted "just in time" topics. (instructional support, Strategic Initiative B) Division-Department#11

Mathematics CM4 2015 Recommendation Z Conduct research into students' experiences with guidance through developmental mathematics toward each students' educational plan and then coordinating the messages of fulltime and adjunct instructors and counselors. (progress toward completion, equity, Strategic Initiatives B and E) CMD-Equity#6

Mathematics CM4 2015 Recommendation AA Offer workshops on use of manipulatives in teaching. (instructional quality and support, professional development, Strategic Initiatives A and B) CMD-Professional Development#2

Mathematics CM4 2015 Recommendation J Re-key door to MBA 325 as a classroom lock to provide instructors with 24/7 access to equipment, manipulatives, and other resources. (instructional support, Strategic Initiatives A and B) Division-Department#9

CM3 Prioritized List of Recommendations (2016 – 2017)

Mathematics CM3 2014 Program Review Recommendation 1

RECOMMENDATION 2014 #1 (Reinstate the Teacher Education Program [TEP]): We recommend that the college reinstate the Teacher Education Program (TEP).

Mathematics CM3 2014 Program Review Recommendation 2

RECOMMENDATION 2014 #2 (Coordination among Deans, Instructional Faculty, and Counselors): We recommend increasing the coordination among deans, faculty and counselors.

Mathematics CM3 2014 Program Review Recommendation 3

RECOMMENDATION 2014 #3 (An Increase in the Completion Rate of the Three Course Series): We recommend that there be an increase in the number of students completing the three course series (Math 110, Math 115, Math 116).

Mathematics CM3 2014 Program Review Recommendation 4

RECOMMENDATION 2014 #4 (Dedicated Classroom): We recommend that Math 110, Math 115, and Math 116 are offered in MBA 103. (Facilities)

Mathematics CM3 2014 Program Review Recommendation 5

RECOMMENDATION 2014 #5 (Updated Software): We recommend designing a long-range, sustainable plan to purchase and use current versions of the required software for the Math for Teachers courses. (Technology)

Mathematics CM3 2014 Program Review Recommendation 6

RECOMMENDATION 2014 #6 (SLO Data Collection): We recommend that instructors of Math 110, Math 115, and Math 116 collect attendance data with the SLO data and analyze this.

CM2 Prioritized List of Recommendations (2016 – 2017)

Mathematics CM2 2014 Program Review Recommendation 5:

Increase number of sections of Math 150 by offering additional sections of evening, weekend, and/or hybrid classes, scheduling the dedicated classrooms efficiently, and offering more sections during the summer sessions. We can start by offering 50 sections per year and then increase (or decrease) as necessary.

Mathematics CM2 2014 Program Review Recommendation 9

We recommend hiring 3 full-time faculty members in the next 2 years who are capable of teaching all levels of mathematics, in particular General Education transfer-level courses (Math 120, Math 130, Math 140, Math 150 and Math 165) to fill in staffing needs. The average cost for hiring a full-time faculty member including the cost of health care and pension is approximately \$90,000/year.

Mathematics CM2 2014 Program Review Recommendation 4

The General Education Mathematics Program recommends that the College provide students and faculty the bare necessities, such as: Classrooms: erasers, pencil sharpeners, emergency landline phones, Common areas: printers, scanners, clocks, pencil sharpeners, dry erasers

Mathematics CM2 2014 Program Review Recommendation 7

Funding should be established to maintain existing equipment and purchase new equipment (document readers, laptops, computers) and software as needed, retain currency (license renewals of Mathematica, Scientific Notebook), and provide for new and innovative technologies (tablet PCs, SMART boards, InterWrite pads, clicker sets) in the classrooms, computer labs, tutoring center, and faculty offices.

Mathematics CM2 2014 Program Review Recommendation 2

We also recommend that faculty computer laptops be replaced to keep up with classroom technology.

Mathematics CM2 2014 Program Review Recommendation 13

Funding for professional development workshops or conferences be provided to focus on using iPad technology in General Education Math Courses.

Mathematics CM2 2014 Program Review Recommendation 8

Hire a full-time tutoring coordinator in our Math Study Center to plan, develop and coordinate a comprehensive tutoring program.

CM1 Prioritized List of Recommendations (2016 – 2017)

Mathematics CM1 2012 Program Review Recommendation 2

Recommendation 2012B: (Faculty Hiring) It is recommended that four more Full-Time tenure track professors that can teach ALL levels from developmental to most CM1 and CM2 courses to allow for flexibility in scheduling be hired beyond our present count of forty. It is further recommended that CM1 courses be taught by full-time instructors only.

Mathematics CM1 NEW Recommendation 1

Offer more sections of Math 80, the gateway course to STEM classes. With the growth of the CS offerings we will need more sections of this course.

Mathematics CM1 NEW Recommendation 2

Increase the number of Math 210 sections to two in the fall and two in the spring. With the growth of the CS offerings we will need more sections of this course, which is required for CS majors, because it covers mathematics related to computing.

Mathematics CM1 NEW Recommendation 3

Increase the number of sections of Math 170, 180, 190, 191, 220, 270, in a gradual way, not too many too soon. The CM1 Program Review in 2016 will offer more detailed suggestions on scheduling, after analyzing the trends of recent years. Also, CS majors will need to take most of these courses, so we will need more.

Mathematics CM1 NEW Recommendation 4

Create more computer lab space - convert a classroom to a computer lab. Some instructors use Mathematica for their STEM courses and need to take students to the lab occasionally. Also, the CS program needs more labs to help sustain growth.

Mathematics CM1 2012 Program Review Recommendation 4

Recommendation 2012D: (Facilities) It is recommended that funding be provided for an expanded tutoring center. Perhaps some instructor office hours could take place in the tutoring center. Computers and a reserve desk, stocked with textbooks and calculators, should be added.

Mathematics CM1 2012 Program Review Recommendation 5

Recommendation 2012E: It is recommended that SI sections be funded for CM1 courses and that funding be increased for MESA workshops.

Mathematics CM1 NEW Recommendation 5

Funding should be established to maintain existing equipment and purchase new equipment as needed (document readers, laptops, computers), retain currency (license renewals of *Mathematica*, *Scientific Notebook*), and provide for new and innovative technologies (tablet PCs, SMART boards, InterWrite pads, clicker sets) in the classrooms, computer labs, tutoring center, and faculty offices.

Mathematics CM1 NEW Recommendation 6

We also recommend that faculty computer laptops be replaced soon in order to keep up with the technological upgrades.

	A	B
1	Mathematial Sciences Unit Plans Categorized - March 2015	
2		
3	Classroom Equipment	
4	Pencil Sharpeners	\$1,500
5	Node Chairs	\$60,000
6	Three more computer labs	\$500,000
7	Classroom Board Erasers	\$450
8	Landline Phones for emergencies	\$2,000
9	More Classrooms in MBA designated for Mathematical Sciences	
10	Total	\$563,950
11		
12	Instructional Equipment	
13	Scanners	\$1,000
14	Printers	\$2,800
15	Classroom sets of Calculators	\$25,000
16	Projector Bulbs	\$1,600
17	Projector Transmitters	\$400
18	Projector Receivers	\$400
19	Projector Switcher	\$1,700
20	Epson Projector (Standard Room)	\$1,500
21	Epson Projector (Dual Room)	\$2,700
22	Apple Computers in Workrooms	\$6,000
23	Replace Faculty Laptops	\$50,000
24	Total	\$93,100
25		
26	Staffing	
27	Fulltime Tutor Coordinator	\$90,000
28	Fulltime Mesa Counselor	\$80,000
29	Fulltime STEM Student Advisor	\$55,000
30	Fulltime Technician (ITS)	\$80,000
31	Engineering Instructor	\$90,000
32	Mathematics Instructors (3)	\$270,000
33	Total	\$665,000
34		
35	Other	
36	Supply Augmentation	\$5,000
37	Professional Development	\$25,000
38	Professional Development	\$25,000
39	Course Coordinators	\$60,000
40	Laptop for the Division Office	\$1,500
41	Total	\$116,500
42		
43		
44	Overall Total	\$1,438,550

	A	B	C
1	Mathematial Sciences Unit Plans Categorized - March 2015 (Tentative)		
2			
3	<u>Classroom Equipment</u>		
4	Pencil Sharpeners	\$1,500	(50 at \$30/each. Pencil Sharpeners were never installed in the classrooms when moving into the new MBA building. This is a huge need for students, CMII Program Review, 2014)
5	Node Chairs	\$60,000	\$500/chair. 120 chairs for 3 classrooms. These chair/desk combos have wheels and allow for ease of transition from lecture set-up to group set-up. More instructors are using group formation and instruction time is lost during transition and set up from one format to the other.
6	Three more 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 are 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 divisoin 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.
7	Classroom Board Erasers	\$450	\$2.50/eraser. 6 per classroom, 31 classrooms. Many instructors have students simultaneously work on problems while at the board. CMII Program Review, 2014
8	Landline Phones for emergencies	\$2,000	\$60/phone, 31 classrooms. CMII Program Review, 2014
9	More Classrooms in MBA designated for Mathematical Sciences use		CMII Program Review, 2014
10	Total	\$563,950	
11			
12	<u>Instructional Equipment</u>		

	A	B	C
13	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
14	Printers	\$2,800	Two printers at \$1400/each. One for each faculty workroom. The current printers (Dell) are no good. They constantly jam, and faculty are left without any printing options. This interrupts prep time and affects classroom instruction. CMII Program Review, 2014
15	Classroom sets of Calculators	\$25,000	200 at \$125/each. While we do currently have a calculator loan program, this supplies gets exhausted usually within the first 3 weeks of the semester. Many instructors are incorporating technology into the curriculum, and are requiring students to use calculators. These calculators are very expensive and many students cannot afford them. When an instructor wants to work on a project during class, there is a need to have a class set of calculators so that all students may participate. CMII Program Review, 2014. CMI Program Review, 2012
16	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 the entire campus has to wait, while replacement parts are "ordered." Also, giving the timing, and the fact the all parts may be on the same life cycle, we expect parts to go out or stop working simultaneously, and we want to be prepared to repair the equipment as soon as possible. CMII Program Review, 2014. CM III Program Review, 2014,.

	A	B	C
17	Projector Transmitters	\$400	2 at \$200/each. (See rationale above)
18	Projector Receivers	\$400	2 at \$200/each. (See rationale above)
19	Projector Switcher	\$1,700	One switcher. (See rationale above)
20	Epson Projector (Standard Room)	\$1,500	One Projector/Standard Room (see rationale above)
21	Epson Projector (Dual Room)	\$2,700	One Projector/Dual Room (see rational above)
22	Apple Computers in Workrooms	\$6,000	Two I Mac, 21.5 inch desktop, with printer and Magic trick 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, programmin 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
23	Replace Faculty Laptops	\$50,000	33 at \$1500/each
24	Total	93100	
25			
26	Staffing		
27	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 Reveiw, 2013. CMI Program Review, 2012
28	Fulltime Mesa Counselor	\$80,000	A dedicated STEM counselor is needed to mee the needs and demands of the growing MESA/ASEM student population. The current counselor splits their time with other divisions.
29	Fulltime STEM Student Advisor	\$55,000	A STEM student advisor is needed to assist in organizing, coodinating, and executing student STEM activities such as professional development workshops, field trips, and assist in the recruitment of students throughout the year .

	A	B	C
30	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
31	Engineering Instructor	\$90,000	
32	Mathematics Instructors (3)	\$270,000	
33	Total	\$665,000	
34			
35	Other		
36	Supply Augmentation	\$5,000	We are already about 2,000 off our highest allocation, and with the growth in our department, additional supplies are needed. Chalk and Markers are about 35% of our supply budget. And we have to skimp on how much we can put out at one time. Instructors, SI coaches, tutors are always requesting more markers. Also more instructors are doing group work and board work. Having many students at the boards simultaneously, and using the markers for this activity as well. Also, more computer labs, call for more printing by students. Printing of homework , programs, and assignments while in class. We are also spending more on printing cartridges)
37	Professional Development (Instructor Collaboration)	\$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)
38	Professional Development (Cultural Sensitivity Training)	\$25,000	Many students especially in the developmental courses are from various ethnic minorities. These students are not being successful in our courses. Culturally Senisitive Responsive Teaching Training is needed. Requested in Committee D Program Review, 2012
39	Course Coordinators	\$60,000	12 at \$5,000 per semester or \$2,500 per semester. This is about 2.5 hours/week at Rate I.
40	Laptop for Division Office	\$1,500	For taking minutes at the plethora of department and committee meetings that happen in such a large division.
41	Total	\$116,500	
42			
43			
44	Overall Total	\$1,438,550	

Section Comparison

	Fall 2015	Fall 2016	Difference
CSCI 1	10	10	0
CSCI 2	5	5	0
CSCI 3	3	3	0
CSCI 12	1	1	0
CSCI 16	1	2	1
CSCI 30	1	1	0
CSCI 40	0	0	0
Eng 1	1	1	0
Eng 9	1	1	0
Math 12	20	20	0
Math 23	18	18	0
Math 37	12	12	0
Math 40	20	20	0
Math 60	4	4	0
Math 67	7	7	0
Math 73	28	28	0
Math 80	36	36	0
Math 110	2	2	0
Math 115	1	1	0
Math 116	0	0	0
Math 120	5	5	0
Math 130	10	11	1
Math 140	1	1	0
Math 150	26	26	0
Math 160	0	0	0
Math 161	2	2	0
Math 165	4	5	1
Math 170	10	10	0
Math 180	11	11	0
Math 190	10	10	0
Math 191	7	7	0
Math 210	1	1	0
Math 220	4	4	0
Math 270	3	3	0

*If difference is not zero, it is due to cancellation in fall 2015

2012/WI

SEC NAME	START DATE	END DATE	Bldg Room	INSTR METH	Days Offered	START TIME	END TIME	Last Name	First Name
MATH-130-0176	1/4/2012	2/7/2012	MCS 204	LEC	MTWTHF	8:00:00 AM	10:05:00 AM	Morales	Eduardo
MATH-130-0180	1/4/2012	2/7/2012	MCS 219A	LEC	MTWTHF	10:30:00 AM	12:35:00 PM	Glucksman	Marc
MATH-150-0190	1/4/2012	2/7/2012	MCS 203	LEC	MTWTHF	8:00:00 AM	9:50:00 AM	Bickford	Susan
MATH-150-0190	1/4/2012	2/7/2012	MCS 203	LEC	MTWTHF	12:00:00 PM	12:50:00 PM	Bickford	Susan
MATH-150-0192	1/4/2012	2/7/2012	MCS 216	LEC	MTWTHF	8:00:00 AM	9:50:00 AM	Martinez	Alice
MATH-150-0192	1/4/2012	2/7/2012	MCS 216	LEC	MTWTHF	12:00:00 PM	12:50:00 PM	Martinez	Alice
MATH-170-0198	1/4/2012	2/7/2012	MCS 208	LEC	MTWTHF	8:00:00 AM	10:05:00 AM	Bateman	Michael
MATH-170-0200	1/4/2012	2/7/2012	MCS 207	LEC	MTWTHF	10:30:00 AM	12:35:00 PM	Broderick	Carl

2013/WI

SEC NAME	START DATE	END DATE	Bldg Room	INSTR METH	Days Offered	START TIME	END TIME	Last Name	First Name
MATH-130-0176	1/2/2013	2/5/2013	MBBM 130	LEC	MTWTHF	8:00:00 AM	10:05:00 AM	Glucksman	Marc
MATH-130-0180	1/2/2013	2/5/2013	MBBM 130	LEC	MTWTHF	10:30:00 AM	12:35:00 PM	Broderick	Carl
MATH-150-0190	1/2/2013	2/5/2013	MBBM 132	LEC	MTWTHF	8:00:00 AM	9:50:00 AM	Moreno	Kaysa
MATH-150-0190	1/2/2013	2/5/2013	MBBM 132	LEC	MTWTHF	12:00:00 PM	12:50:00 PM	Moreno	Kaysa
MATH-150-0192	1/2/2013	2/5/2013	MBBM 134	LEC	MTWTHF	8:00:00 AM	9:50:00 AM	Martinez	Alice
MATH-150-0192	1/2/2013	2/5/2013	MBBM 134	LEC	MTWTHF	12:00:00 PM	12:50:00 PM	Martinez	Alice
MATH-170-0198	1/2/2013	2/5/2013	MBBM 136	LEC	MTWTHF	8:00:00 AM	10:05:00 AM	Meyer	Trudy
MATH-170-0200	1/2/2013	2/5/2013	MBBM 136	LEC	MTWTHF	10:30:00 AM	12:35:00 PM	Bateman	Michael