

College of San Mateo

Mathematics and Science

Division Program Review

Year: 2014

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PROGRAM/PROJECT/INITIATIVE	ACCOMPLISHMENTS	GOALS	NOTES/INST PRIORITIES
Interdisciplinary/Reading Apprenticeship.	With Biology faculty Theresa Martin taking the lead, many departments across the college attended RA workshops, developed FIGs (Faculty Inquiry Groups) and adopted RA tools to increase student interest and success in reading course text and related materials	Institutionalize the program. It has been presented to IPC, and has begun the migration to the Dean of Academic Support	Staffing is an issue that is already plaguing the program transition as the new interim dean has no staff. CSM INSTITUTIONAL PRIORITIES: 1, 2 AND 3
Supplemental Instruction – mathematics	After three years of building	Successfully implement the	Again, the programs is being handed

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department	this program in the math department, the program and program outcomes data was presented to IPC. The decision was made to pursue an aggressive expansion of SI across the college and into additional department for three years and then to go back and reassess the outcomes.	institutionalization of SI across the college in 3 years.	off to the Dean of Academic Support. There are challenges already as the one staff person in the Learning Center who could train SI leaders has moved to District. This leaves a lone math faculty to do the SI training and while she can support training of the math SI leaders this spring n (there is some small funding still available), she cannot support the pairing of faculty and student SIs and the SI training of students in departments outside of math
Chemistry and biology faculty are working with Peter Bruni (from the district) to develop XLO (extra large online courses) for our credit audience to allow for larger class sizes. As they develop materials for the credit courses, they will also be look at how to sever the	Funding has been secured from the district to support this initiative through fall 2015.	By the end of this project, the faculty hope to have identified the course requirements to support on line courses of 100. In addition, will have developed materials for use in the credit course and access by the larger community audience.	Work has already begun with regular meetings to establish timelines and goals for each semester. INSTITUTIONAL PRIORITIES: 1, 2, 3 AND 4

<p>community at large. The current plan is allow the community members in as guest...no credit...no faculty contact....but they can see all posted course materials.</p>			
<p>Astronomy supernova research</p>	<p>This semester there was an important astronomical event. A supernova was observed by many astronomers, including students and faculty in our astronomy classes. The faculty took advantage of this unique opportunity and set students to do special investigations of the supernova.</p>	<p>The faculty and students have begun to compare their data to that obtained by research astronomers around the globe. The data is matching up nicely. The goal would be to have the student researchers present this information to the Board of Trustees at a Board meeting in fall 2014.</p>	<p>It would be nice if the College has some way of recognizing the special work done by the faculty and students on this project</p> <p>INSTITUTIONAL PRIORITIES: 1, 2 AND 3</p>
<p>Division Office</p>	<p>The Division Office is kept very, very busy supporting the amazing initiatives rolled out by faculty. This is on top of</p>	<p>This semester we lost our student worker of 17 years and we really need to replace this position. Ideally we would need 0.5 OA II.</p>	<p>The division faculty work very hard to develop ways to support student success. This usually takes the form of a new initiative (RA, SI).</p>

	the regular work required to support the largest division on campus. (see inserted comparison of division workloads below)		However, in order for the faculty to move forward, they need some support from the dean and the division staff. With the loss of Joan Donath, we are seriously hampered in staying on top of all our division obligations and supporting the new faculty initiatives. INSTITUTIONAL PRIORITIES: 3 AND 4
Mathematics – remodel of the math 811 (arithmetic) course.	Course is still 3 units but meets 5 hours per week. Faculty are supported by SI leaders and by counseling faculty to work on student study habits. Faculty give common exams to compare across the courses.	The goal is to increase student success in math 811	This project was started in fall 2013, so the first significant outcomes will be after spring 2014...but, the preliminary data is very good. INSTITUTIONAL PRIORITIES: 1, 2, 4 AND 5

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Division	Semester	Contract Code	Number of Faculty	Total Sections	Total Workload	Total FTE
Math/Science	201308	FC	32	124	4,487.83	29.917
		HH	72	96	4,908.61	32.724
	201403	FC	32	114	4,584.00	30.561
		HH	65	108	4,700.92	31.340
Creative Arts/SoSci	201308	FC	26	126	3,292.00	21.950
		HH	57	107	2,961.00	19.740
	201403	FC	24	132	3,132.00	20.881
		HH	52	111	2,851.00	19.006
Language Arts	201308	FC	24	96	3,062.50	20.412
		HH	43	90	2,897.50	19.315
	201403	FC	23	93	2,950.00	19.663
		HH	45	88	2,900.00	19.328
Business/Tech	201308	FC	15	68	1,884.50	12.567
		HH	49	70	2,044.90	13.633
	201403	FC	16	69	2,018.00	13.456
		HH	46	74	2,145.00	14.302
P.E.	201308	FC	9	82	1,248.75	8.325
		HH	14	38	601.25	4.008
	201403	FC	9	91	1,241.25	8.275
		HH	14	54	661.25	4.408

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Resources Requested (Non-Duplicates with Individual Program Reviews)**Classified Staff****0.50 OA II to work in the division office****1.0 OA II to work in the Integrated Science Center and the Math Resource Center****Student Assistants****Need additional student workers to staff the Math Resource Center and the Integrated Science Center (5 for math, primarily for summer, and two for the ISC). The request is for the fiscal year.****Faculty Needs (*these may be duplicates as I have not read all the program reviews yet*)****2 nursing****1 biology****1 chemistry****1 physics****2 mathematics****Facilities****Computer lab for mathematics, capable of serving 35 students. There are large numbers of AI (artificial intelligence) computer programs, that would test students to start at the appropriate level in a math course and then allow them, under the**

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supervision of and instructor, to move through the material at their own pace. We are losing opportunities to make our students successful.

Equipment and Technology

In general, for the division, the challenge at this point is maintenance and replacement.

Please attach additional pages as needed