

Peralta Community College District

UNIT PLAN UPDATE Template ~ November 2009

Each discipline will complete this form to update the unit plans developed in 2008. These will be reviewed at the college level and then forwarded to the district-wide planning and budgeting process. The information on this form is required for all resource requests – including faculty staffing requests – for the 2010-11 budget year.

I. OVERVIEW

		Date Submitted:	
Discipline	Mathematics - Math	Dean:	Dr. Rebecca Kenney
Department Chair	Jason Holloway		
Mission/History <i>Brief, one paragraph</i>	The mathematics department at Merritt College has traditionally provided a lower division undergraduate mathematics program and an associate's degree in mathematics. In these times, most students do not seek a degree in mathematics, but are required to take math courses to gain admittance into a vocational, allied health program, or transfer to a 4 year institution. For a variety of reasons, the math course offerings at Merritt are weighted heavily towards basic skills and pre-transfer level courses. It is the aim of the mathematics department to give Merritt College students a solid foundation in mathematics and help them translate these skills in their science courses and in other disciplines. Ultimately it is also the goal of the department to offer Merritt College students transfer level mathematics courses that are a part of most healthy community college math departments.		

II. EVALUATION AND PLANNING

Please review the program review data and the CSEP review criteria and complete the following matrix.

Annual Trend Baseline Data					
Year	Annual FTES	%FTES growth	FTEF in program	FTES /FTEF	comments
2008/09	281.28	0%	15.38	18.29	Severe budget cuts in 2008 - 2009
2007/08	282.38	5%	16.59	17.02	Most adjunct faculty not hired in 08 – 09
2006/07	268.06	1%	16.04	16.71	
2005/06	264.17	n/a	14.82	17.82	

Fall Semesters Baseline Data							
	2004	2005	2006	2007	2008	CODE	Comments
1. Enrollment (duplicated)	1294	1180	1171	1150	1201		Enrollment remains strong and relatively constant. One of the most productive departments at Merritt College
2. Sections (master sections)	34	36	35	36	35		
3. FTEF	7.85	8.43	8.35	8.26	8.19		Higher than the college average
4. FTES	159.30	147.12	149.03	144.64	152.08		
5. FTES/FTEF	20.2	17.4	17.8	17.5	18.5		
7. Program Cost (Cost methodology is under development. Please complete the remaining items. This step to be completed later.)							

Qualitative Assessments	Narrative
8. Community and labor market relevance Present evidence of community need based on Advisory Committee input, industry need data, McIntyre Environmental Scan, McKinsey Economic Report, etc. This applies primarily to career-technical (i.e., vocational programs).	Basic Skills courses in mathematics continue to be a topic of concern at the community college level. The majority of students at Merritt assess two to three levels below a transfer level math course. With largely enrolled basic skills math courses, many students who need more focused attention cannot receive it.

9. College strategic plan relevance	
Check all that apply <input type="checkbox"/> New program under development <input checked="" type="checkbox"/> Program that is integral to the college's overall strategy <input checked="" type="checkbox"/> Program that is essential for transfer <input type="checkbox"/> Program that serves a community niche. <input type="checkbox"/> Programs where student enrollment or success has been demonstrably affected by extraordinary external factors, such as barriers due to housing, employment, childcare etc. Other _____	

Action Plan Steps to Address CSEP Results

Please describe your plan for responding to the above data. Consider curriculum, pedagogy/instructional, scheduling, and marketing strategies. Also, please reference any cross district collaboration with the same discipline at other Peralta colleges.

10. ACTION PLAN -- Include overall plans/goals and specific action steps.

Merritt College has identified Basic Skills courses in math and English as an institutional priority. The mathematics department has three main goals to reach for in the near future. They are as follows:

- Increase the performance/retention of students in pre-transfer level courses
- Assess departmental student learning outcomes in one or more math courses
- Begin offering transfer level math courses

Merritt has obtained a title III grant and a MAP grant that were obtained specifically to increase performance in Basic Skills courses by various groups. Through the Title III grant, the mathematics department is re-aligning student learning outcomes from course to course before transfer level. The some instructors are also using the grant to fund training and a learning bank that is geared toward improving the quality of Basic Skills instruction at Merritt College. The MAP (Maximizing Academic Potential) grant is aimed towards helping African American males succeed in their courses. Most of these students are enrolled in a pre-transfer level math course and may take advantage of a special tutor who is trained to attend to their needs.

Finally in an effort to increase retention in Merritt College’s intermediate algebra (math 203). Some instructors have been using Supplemental Instruction (SI) to support their lectures. SI sessions are designed to be regularly scheduled, student led study sessions that directly support class instruction.

Looking forward, there are talks among the counseling department and the mathematics department to form learning communities which are designed to increase student retention and help cohorts of students learn basic skills and relate common college success strategies to several of their courses.

Additional Planned Educational Activities

11. Health/safety/legal issues:		
Student Learning Outcomes (SLOs) 2008/09		
12. Have you completed Student Learning Outcomes (SLO’s) for all your courses?	YES <u> XXX </u>	NO <u> </u>
12a. If you answered no to question 12 then, what percentage have you completed?		
13. What are you assessing this year? Please attach your assessment results and action plan. List needed resources in	<u> XXX </u> course outcomes <u> </u> program outcomes <u> </u> institutional learning outcomes	

Section III of Unit Plan.

BUDGET			
Budget Categories	Allocated 08/09	Expended 08/09	Requested 09/10
Fund 1			
Fund 14	\$630	\$629	
Fund 17	\$3,326	\$1,971	
Measure A			
VTEA			
Total	\$3,956	\$2,600	

ADDITIONAL REVENUE: GRANTS, PRIVATE SALES, AND DONATIONS			
Name of Grant/Donation/Sale	Awarded/Generated 08/09	% Expended 08/09	Comments

PERSONNEL NEEDS 09/10									
Personnel DATA	CD Enrl F2008	Tot FTES F2008	Contract FTEF F2008	Ext Srv FTEF F2008	Tmp FTEF F2008	Total FTEF F2008	Contract %	FT/PT	FTES /FTEF
		12021	152.08	0.20	0.00	5.47	0.40	50%	

Comments			
Current	If filled	If not filled	# FTE (faculty assigned)

Narrative: Are PT faculty available? Can FT faculty be reassigned to this program? Implications if not filled

Faculty Staff Requests 2010-2011:

1 Full time math faculty - Due to the unfilled position of one retired, full-time faculty. Currently the math department is among the most productive at the college. New faculty may bring skills and energy which may foster student persistence and success in basic skills courses. They also can potentially help with important assessment work and analysis that should be done within the math department.

In the new recession era, more students are expected to attend community colleges in need of training or retraining. As the institution now realizes that reduced class sizes are needed to increase success rates in basic skills courses, the math department must grow to accommodate this effort and continue to serve its existing students effectively.

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FACULTY ETHNICITY F2008			
Ethnicity	# of Contract	# of Adjunct	Total
Asian	3	1	2
African American	1	2	3
Filipino			
Hispanic/Latino			
Native American			
Other			
White	2	3	7
Unknown			
Total	6	6	12

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FACULTY GENDER FALL 2008			
Gender	# of Contract	# of Adjunct	Total
Male	5	4	9
Female	1	2	3
Not Supplied			
Total	6	6	12

RESOURCE NEEDS
Equipment/Material/Supply/ Classified/Student Assistant Needs:
Please describe any needs in the above categories.
With the substantial budget cuts and reduction of adjunct faculty, the workload for full-time instructors has increased due to increased class size. Basic skills courses with large enrollments (over 40 students) are very difficult to manage from a grading standpoint and should be supported with a student aid, or reader to help manage homework assignments.
Students frequently complain that the support services, namely the learning center tutors, do not effectively serve their needs. Either they cannot receive good tutoring, or they cannot get their financial aid. It would be helpful to have at least 5 copies of each math text in the library and also make additional funding available that will enable a math instructor to staff the learning center during a specified number of hours during the semester. Student tutors should also be required to observed each instructor whom they support at least a few times.
Instructors at Merritt realize the difficulties taking basic skills courses are facing and are willing to receive training to refine their practice. Funds are needed to facilitate retreats where faculty can learn

about current and effective best practices in the basic skills math courses. Faculty are interested in purchasing resource materials geared towards basic skills education. Whether it be software, books, or videos, there is an interest in creating a resource library around the practice of teaching the students in the community in which we serve.

Innovation in the classroom is not solely represented by online classes. Using personal response recording devices creates a whole new dynamic to the classroom. Students can receive instant feedback and remain anonymous by using their 'clickers' Results are tallied and can be stored for later analysis. Students will remain engaged throughout the class session if they are actively using the technology. The math department requests funding to buy 50 response devices to use as a pilot program in one or more classes. If it proves to be effective, the devices may be used in other disciplines

Some math instructors prefer to use documents in presentations without wasting resources to copy materials. The math department requests funding to purchase a 'nomad' projection device.

Many instructors use graphing calculators and would like to have class sets available for students to use during the class session. The math department is requesting the funds to purchase 100 graphing calculators.

A steady supply of dry erase pens and multicolored and white dustless chalk are always needed. Some instructors use LCD projectors that are very old and difficult to move around. Updated projector carts and projectors are needed for instructors who use them.

Facilities Needs (Items that should be included in our Facilities master Plan) for Measure A funding:

IV. ACADEMIC PERFORMANCE MEASURES AND EQUITY

Student Demographic: Ethnicity			
Ethnicity	Baseline Fall 04-07	Fall 08	College Average
Asian	9%	8% (94)	16%
African American	56%	50% (602)	36%
Filipino	2%	2% (26)	3%
Hispanic/Latino	17%	22% (259)	14%
Native American	1%	1% (12)	1%

Other	1%	1% (15)	2%
White	9%	9% (113)	21%
Unknown	5%	7% (80)	6%

Student Demographic: Gender			
Gender	Baseline Fall 04-07	Fall 08	College Average
Male	31%	31% (375)	31%
Female	68%	65% (782)	69%
Not Supplied	1%	4% (44)	0%

Analysis

1. What are you doing to increase access?

In most cases, the math department at Merritt has larger representations of each ethnic group than is seen at the college level. Merritt's student population is mainly made up of African Americans and Latinos who compose about 72% of the total student population. All other ethnic groups have percentages that are similar to the college percentages, save the White group, who only make up 9% of the department population, but 21% of the total college enrollment. This is in part due to the fact that Merritt College offers so many pre-transfer level math courses and many of these students choose to take their math courses at another institution. Many instructors at Merritt would like to offer more transfer level math courses to capture some of this population. In the past, transfer level math courses were always offered at Merritt, but recently, many of these courses have virtually disappeared from the departmental offerings. The department would like to offer a more complete program to teach students all necessary information needed to succeed in courses that include the first two courses of the Calculus series. If Merritt can offer more rigorous courses, students may be more apt to take them at Merritt.

Student Retention Rate <i>Students who do not withdraw or drop</i> By Ethnicity		
Ethnicity	Baseline Fall 04-07	Fall 08
Asian	70%	71% (94)
African American	56%	65%(602)
Filipino	71%	73% (26)
Hispanic/Latino	66%	69% (259)
Native American	62%	58% (12)

Other	71%	60% (15)
White	72%	72% (113)
Unknown	72%	74% (80)
Math Average	62%	67%
College Average 72%		

Student Retention Rate <i>Students who do not withdraw or drop</i> By Gender		
Gender	Baseline Fall 04-07	Fall 08
Male	62%	70%
Female	62%	62%
Not Supplied	72%	68%

Analysis
<p>1. If your disciplines retention rate is beneath the colleges rate, then why? In areas aggregated by race, the math department has retention rates that are above the college average. Overall, the math department has a retention rate that is slightly lower than the college average. Math courses are typically more difficult for students than non-science courses, which may explain the disparity in the retention rate.</p>
<p>2. If your retention rate is below the college rate, then what are you doing to increase retention? To increase retention, some instructors are using resources from the MAP grant and the Title III grant to provide services for the students (see action plan 10)</p>
<p>3. If your retention rate is above the college's rate do you have any best practices to share?</p>

Student Course Completion Rate (SCCR) <i>Students who receive grades A, B, C or Credit</i> by Ethnicity		
Ethnicity	Baseline Fall 04-07	Fall 08
Asian	64%	56% (94)
African American	44%	44% (602)
Filipino	58%	62% (26)
Hispanic/Latino	58%	54% (259)

Native American	46%	25% (12)
Other	66%	47% (15)
White	67%	64% (113)
Unknown	64%	53% (80)
Math Average	52%	50%
College Average Fall 2008: 60%		

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Student Course Completion Rate (SCCR) Students who receive grades A, B, C or Credit by Gender		
Gender	Baseline Fall 04-07	Fall 08
Male	50%	52% (782)
Female	52%	46% (375)
Not Supplied	6%	48% (44)

Analysis
<p>1. If your disciplines Successful Course Completion Rate (SCCR) is beneath the colleges rate, then why?</p> <p>As math courses are sequential in nature and build upon themselves, many students find it difficult to complete a course if they have not gained a good understanding of the material taught in the pervious course. Missing one day of class could result in failure if a key piece of information is not absorbed.</p>
<p>2. If your sccr is below the college rate, then what are you doing to increase it?</p> <p>A possible symptom of poor sccr could be a lack of consistency in the math department assessment. The math department is working on setting departmental standards and sharing best practices.</p>
<p>3. If your sccr is above the college's rate do you have any best practices to share?</p>