Merritt College
2017-2018 Annual Program Update Template

Merritt College Data Profile: Fall 2016 and Spring 2017

*Note: Headcount is unduplicated number of students per term. Retention and Success is based on Enrollments, which are duplicated.

Headcount by Gender	*Fall 2016*		*Spring 2017*	
Female	4514	64%	4742	64%
Male	2396	34%	2485	34%
Unknown/Unreported	133	2%	132	2%
Headcount by Race/Ethnicity				
American Indian	29	0%	26	0%
Asian	1129	16%	1227	17%
Black / African American	1903	27%	1864	25%
Hispanic / Latino	2064	29%	2195	30%
Pacific Islander	47	1%	42	1%
Two or More	369	5%	384	5%
Unknown / NR	341	5%	381	5%
White	1161	16%	1240	17%
Headcount by Age				
Under 16	38	1%	100	1%
16-18	808	11%	764	10%
19-24	2430	35%	2552	35%
25-29	1186	17%	1255	17%
30-34	766	11%	775	11%
35-54	1296	18%	1401	19%
55-64	327	5%	315	4%
65 & Above	192	3%	197	3%
Total Headcount	7043		7359	

	Fall 2016		*Spring 2017*	
Gender	Retention %	Success %	Retention %	Success %
Female	78%	66%	79%	70%
Male	78%	65%	79%	68%
Unknown/Unreported	83%	72%	82%	75%
Race/Ethnicity	Retention %	Success %	Retention %	Success %
American Indian	83%	77%	74%	60%
Asian	83%	76%	84%	78%
Black / African American	73%	57%	74%	60%
Hispanic / Latino	76%	65%	80%	70%
Pacific Islander	79%	69%	80%	74%
Two or More	77%	65%	78%	66%
Unknown / NR	82%	69%	83%	72%
White	85%	78%	85%	78%
Age Range	Retention %	Success %	Retention %	Success %
Under 16	82%	82%	94%	89%
16-18	78%	65%	82%	74%
19-24	75%	62%	76%	65%
25-29	77%	66%	79%	70%
30-34	82%	71%	81%	71%
35-54	81%	70%	82%	74%
55-64	83%	71%	85%	73%
65 & Above	84%	78%	85%	72%

Distance Education

Retention and Success by Distance Ed	Fall 2016		Spring 2017	
	Retention %	Success %	Retention %	Success %
100% online	70%	62%	74%	59%
Hybrid	69%	53%	74%	61%
Face to Face	80%	69%	81%	72%

I. Program Information

Purpose: This section will identify basic information about your program. 2015-2016 Program reviews and 2016-2017 APU can be found at: http://www.merritt.edu/wp/institutional-research/program-review/

Program Name: Mathematics

Date: 10/13/2017

Program Type (circle or highlight one): **Instructional** **Non-Instructional** **Student Services or Special Programs** **Administrative Unit**

College Mission Statement: The mission of Merritt College is to enhance the quality of life in the communities we serve by helping students to attain knowledge, master skills, and develop the appreciation, attitudes and values needed to succeed and participate responsibly in a democratic society and a global economy.

Program Mission:

The Mathematics Department's mission is to offer lower division college math courses needed for the associate in arts and associate in science degrees, vocational certificates, and transfers to four-year colleges. These courses are intended as the first two years of college math courses and as such have been designed to satisfy the general education requirements for graduation as well as the requirements for transfer. In addition, the department offers the Associate in Science degree in mathematics for Transfer (AS-T) and remedial courses covering the math content of high school courses from arithmetic to intermediate algebra. Mathematics is the language of the sciences and as such these courses are needed as prerequisite to science courses and student success in general.

Date of Last Comprehensive Program Review: September 26, 2015

Date of Comprehensive Program Review Validation: October 31, 2016

II. Reporting Progress on Attainment of Program Goals

Purpose: In this section, you will look at your goals stated in the 2015-2016 program review and 2016-2017 APU, align the program goals with the District and College Goals, and report on the progress, revision, or completion of the program goals.

Program Goal *Copy the Goals Reported from Program Review Question 10 or Appendix B, or 16-17 APU Section II or input the new/revised goal. These are suggested categories of goals.	**Which institutional goals will be advanced upon completion?** (PCCD and MC Goal Mapping)	**Progress on Goal** (indicate date next to the appropriate status for the goal)	**Goal Detail and Measurement – How did you/will you evaluate this Goal?** (If your goal was **completed**: How did you **evaluate** or determine the **outcome**? If your goal is **ongoing**: What is your **measure** and **target**? If your goal is **new or revised**: What is your **measure and target**?)
Assessment Improve assessment scores and /or increase placement scores by 15% for each cohort of students. Increase the number of students who place in math 201 by 15%. Please revisit this Are you still looking to increase placement in math 201? Can a goal be set for success rate for math pathways courses? Can we use Moving In Moving Through, Moving On Language?	1. PCCD Goal: __A, C_____ 2. Merritt Goal:__A, C __	Completed: _____ (date) Revised/New: _____ (date) Ongoing: __10/13/17_____ (date)	All items in the previously stated goal are activities which will support students in scoring higher on assessment tests, ultimately, shortening the pathway to transfer level math courses. Interventions: Math Jam - Serve at least 50 math students with pre-assessment activities whose aim is to increase student scores on assessment tests. Work closely with the Counseling Department to offer Study Skills/Learning Resources classes and/or workshops, and to improve Math Placement Testing. Online Modular Test prep Are there still plans for this? Challenges: Some students may not seek support before taking the assessment. Coordinating support services may be Challenging. Promotion of the assessment program.

Program Goal *Copy the Goals Reported from Program Review Question 10 or Appendix B, or 16-17 APU Section II or input the new/revised goal. These are suggested categories of goals.	**Which institutional goals will be advanced upon completion?** (PCCD and MC Goal Mapping)	**Progress on Goal** (indicate date next to the appropriate status for the goal)	**Goal Detail and Measurement – How did you/will you evaluate this Goal?** (If your goal was **completed**: How did you **evaluate** or determine the **outcome**? If your goal is **ongoing**: What is your **measure** and **target**? If your goal is **new or revised**: What is your **measure and target**?)
Curriculum (if applicable) Goal 1: Develop curriculum for math courses which allow students to complete a transfer level math course in 3 semesters after college entry. Identify a cohort of students who are not in the 3 course pathway and compare to success rates in the traditional pathway. Has a cohort of students been identified? Goal 2: Add at least 1 curriculum addendum to a course to enable at least 1 course to be taught online or hybrid (math 13 or math 203) There should be movement on this goal since last year. Is there a way to initiate this? Goal 3: Institutionalize math Jam as a noncredit course to support student learning (through a college readiness certificate program)	1. PCCD Goal:__A,C,D 2. Merritt Goal: _A,C,D	Completed: _____ (date) Revised/New: _____ (date) Ongoing: ___10/13/17_____ (date)	The Basic Skills and Student Outcomes Transformation Grant will enable the math department to develop and pilot a new pre-algebra and statistics pathway (Math 240) which focus to non-science majors. Math Jam will allow students to take placement tests with recently refreshed foundational skills. Based on results from math jam, some students are able to place into a higher math courses and shorten their path to transfer. Since we currently do not offer Online math courses, new curriculum must be developed. Instructors must be trained to deliver courses in this format. Students may not want to purchase the tools which are necessary to be successful in an online format. Distance Addendum for Course? (Math 13?) in projected to be in process by Decemeber 2017 Identify Merritt instructor who can deliver instruction online or who will participate in the Merritt DE program to teach hybrid section.
Instruction (if applicable) Goal 1: Offer the calculus sequence more regularly (at least one section of math 3A, math 3B, and math 3C) during the	1. PCCD Goal:_ _A____ 2. Merritt Goal: __A___	Completed: _____ (date) Revised/New: _____ (date) Ongoing: ____10/13/17_____	Increase offering of Calculus sequence courses to build up AS-T Math degree program. Challenges:

Program Goal *Copy the Goals Reported from Program Review Question 10 or Appendix B, or 16-17 APU Section II or input the new/revised goal. These are suggested categories of goals.	**Which institutional goals will be advanced upon completion?** (PCCD and MC Goal Mapping)	**Progress on Goal** (indicate date next to the appropriate status for the goal)	**Goal Detail and Measurement – How did you/will you evaluate this Goal?** (If your goal was **completed**: How did you **evaluate** or determine the **outcome**? If your goal is **ongoing**: What is your **measure** and **target**? If your goal is **new or revised**: What is your **measure and target**?)
2017 – 2018 academic year.		(date)	Calculus courses have often been cancelled due to low enrollment. More promotion should be done to increase interest in these courses. There is progress on this goal. Additional sections of math 3A, 3B, and 3C are being offered simulatenously at merritt college. Enrollment in these sections appears to be stable.
Student Success and Student Equity Develop a tutors training program, and hire more math faculty and a Math Lab technician. Is this still a goal?	1. PCCD Goal:__A___ 2. Merritt Goal__A___	Completed: _____ (date) Revised/New: ____10/13/17____ (date) Ongoing: _____ (date)	Direct supervision of math tutors, and hire more math faculty and a Math Lab technician.
Professional Development, Institutional and Professional Engagement, and Partnerships Goal: Offer at least 1 technology based training to math faculty GOAL:	1. PCCD Goal:_A, B, D 2. Merritt Goal_A, B, D	Completed: _____ (date) Revised/New: _____ (date) Ongoing: _____10/13/17_____ (date)	

Program Goal *Copy the Goals Reported from Program Review Question 10 or Appendix B, or 16-17 APU Section II or input the new/revised goal. These are suggested categories of goals.	**Which institutional goals will be advanced upon completion?** (PCCD and MC Goal Mapping)	**Progress on Goal** (indicate date next to the appropriate status for the goal)	**Goal Detail and Measurement – How did you/will you evaluate this Goal?** (If your goal was **completed**: How did you **evaluate** or determine the **outcome**? If your goal is **ongoing**: What is your **measure** and **target**? If your goal is **new or revised**: What is your **measure and target**?)
Increase departmental participation in learning center support Goal: Sustain dual partnership opportunities with OUSD and charter schools			
Other Goals	1. PCCD Goal:_____ 2. Merritt Goal_____	Completed: _____ (date) Revised/New: _____ (date) Ongoing: _____ (date)	

III. Data Trend Analysis

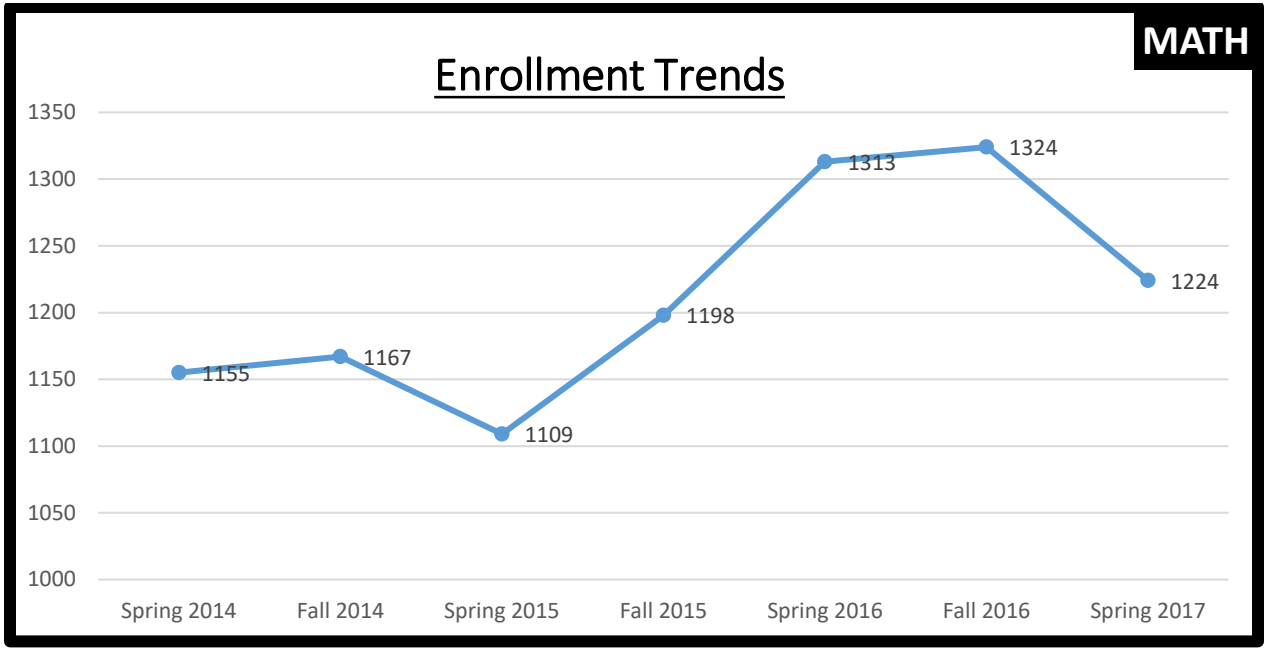
Purpose: In this section, you will report, review and reflect on your program data. You may copy and paste the tables that were provided to you in your data packet via email.

**Please review and reflect upon the data for your program that was sent via email or Dropbox. You will be asked to comment on significant changes in the data and/or achievement gaps. Focus upon the most recent academic year and/or the years since your last comprehensive program review. ****If you have questions or concerns regarding your data, please contact Samantha Kessler, Research and Planning Officer: skessler@peralta.edu.*

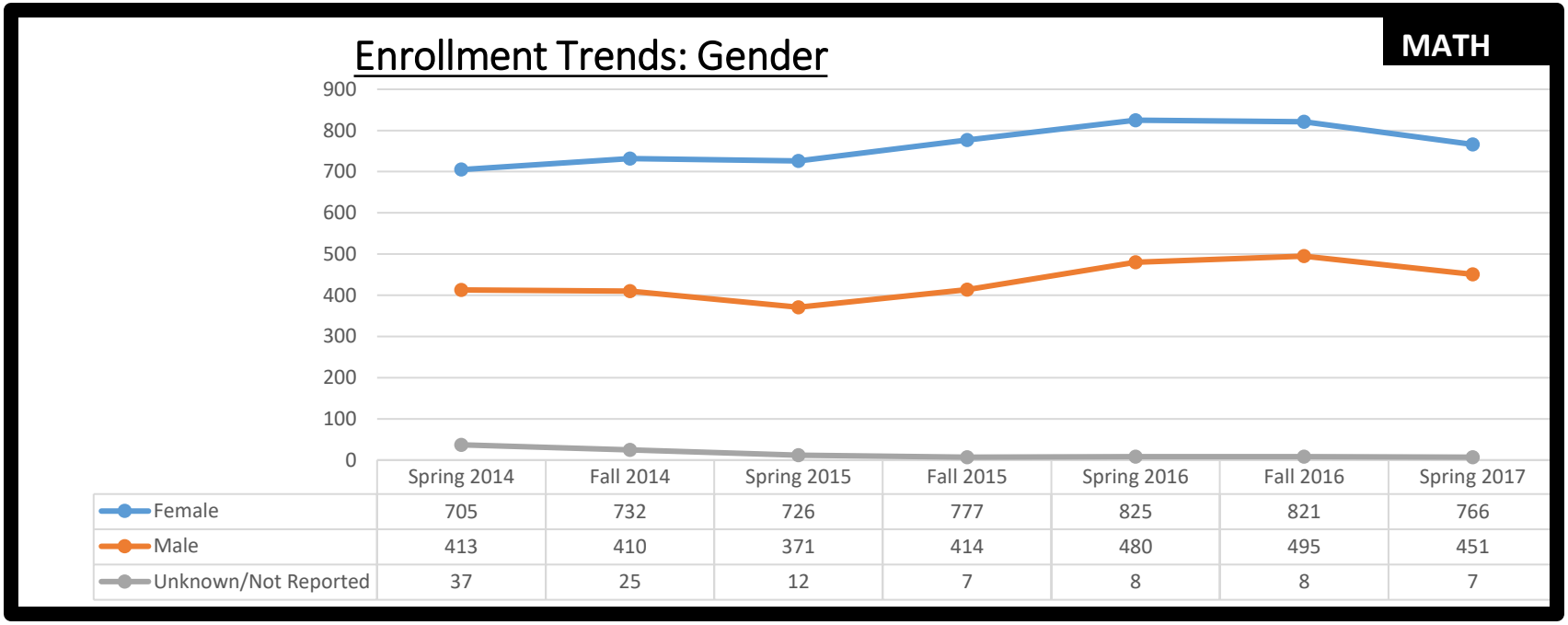
Student Enrollment Demographics:

Enrollment Total

Term	# Enrollments
Spring 2014	1155
Fall 2014	1167
Spring 2015	1109
Fall 2015	1198
Spring 2016	1313
Fall 2016	1324
Spring 2017	1224



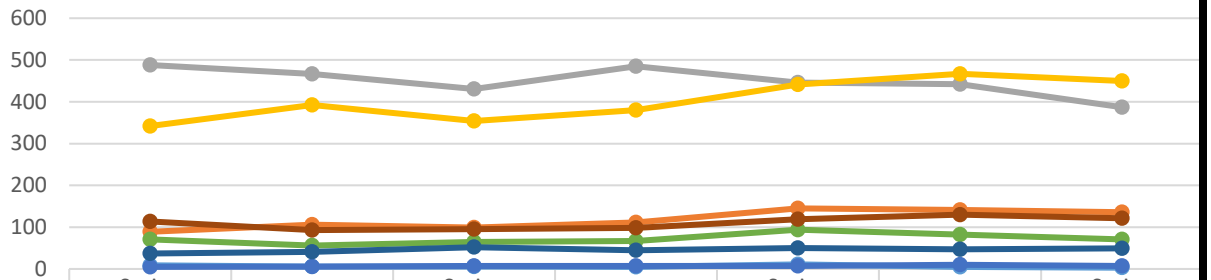
Gender	Female	Male	Unknown/Not Reported
Spring 2014	705	413	37
Fall 2014	732	410	25
Spring 2015	726	371	12
Fall 2015	777	414	7
Spring 2016	825	480	8
Fall 2016	821	495	8
Spring 2017	766	451	7



Term	American Indian	Asian	Black / African American	Hispanic / Latino	Pacific Islander	Two or More	Unknown / NR	White
Spring 2014	9	89	488	342	5	71	37	114
Fall 2014	6	106	467	392	6	56	41	93
Spring 2015	6	99	431	354	7	65	52	95
Fall 2015	5	111	485	380	7	67	45	98
Spring 2016	11	145	446	441	7	94	50	119
Fall 2016	5	141	442	467	10	82	47	130
Spring 2017	3	136	387	450	7	71	49	121

Enrollment Trends: Race/Ethnicity

MATH

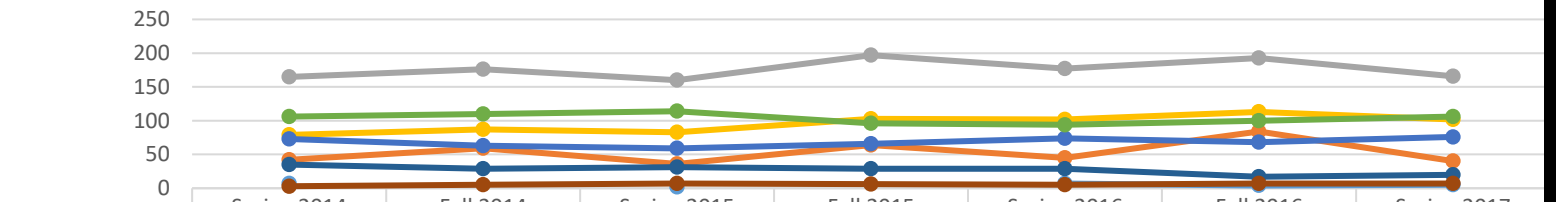


	Spring 2014	Fall 2014	Spring 2015	Fall 2015	Spring 2016	Fall 2016	Spring 2017
American Indian	9	6	6	5	11	5	3
Asian	89	106	99	111	145	141	136
Black / African American	488	467	431	485	446	442	387
Hispanic / Latino	342	392	354	380	441	467	450
Pacific Islander	5	6	7	7	7	10	7
Two or More	71	56	65	67	94	82	71
Unknown / NR	37	41	52	45	50	47	49

Term	Under 16	16-18	19-24	25-29	30-34	35-54	55-64	65 & Above
Spring 2014	7	42	165	79	73	106	35	3
Fall 2014		59	176	87	63	110	29	5
Spring 2015	2	36	160	83	59	114	31	7
Fall 2015		64	197	103	66	96	29	6
Spring 2016	7	45	177	102	74	94	29	5
Fall 2016	4	84	193	113	68	100	17	7
Spring 2017	5	40	166	102	76	106	20	7

Enrollment Trends: Age

MATH



	Spring 2014	Fall 2014	Spring 2015	Fall 2015	Spring 2016	Fall 2016	Spring 2017
Under 16	7		2		7	4	5
16-18	42	59	36	64	45	84	40
19-24	165	176	160	197	177	193	166
25-29	79	87	83	103	102	113	102
30-34	73	63	59	66	74	68	76
35-54	106	110	114	96	94	100	106
55-64	35	29	31	29	29	17	20
65 & Above	3	5	7	6	5	7	7

Special Populations Enrollments By Term

MATH

# Enrollments Term	Low Income Spring 2014	Fall 2014	Spring 2015	Fall 2015	Spring 2016	Fall 2016	Spring 2017
Not Low Income	154	175	155	150	25	40	26
Undetermined	20	33	15	83	415	347	376
Low Income	336	321	322	328	93	199	120

# Enrollments	DSPS Status						
Term	Spring 2014	Fall 2014	Spring 2015	Fall 2015	Spring 2016	Fall 2016	Spring 2017
DSPS Students	72	80	91	89	86	110	89
Non DSPS Students	438	449	401	472	447	476	433

# Enrollments	Foster Youth Status						
Term	Spring 2014	Fall 2014	Spring 2015	Fall 2015	Spring 2016	Fall 2016	Spring 2017
Not Foster Youth	484	499	471	545	518	577	515
Foster Youth	26	30	21	16	15	9	7

# Enrollments	Veteran Students						
Term	Spring 2014	Fall 2014	Spring 2015	Fall 2015	Spring 2016	Fall 2016	Spring 2017
Non Veterans	489	505	465	531	502	559	494
Veterans	21	24	27	30	31	27	28

1. **What changes have occurred in enrollment since 2015-2016 program review?**

Ethnicity
African-American enrollment has dropped by 11%, while Latino/Hispanic enrollment has increases by 12% and Asian enrollments have seen slight increases over the past year. Other ethnic groups have remained relatively constant.

Gender
Female enrollment is 63% of total enrollment.

Age Group
The 19 – 24 age group has higher enrollment than other age group.

Spring 2017 Math classes enrollment dropped significantly.

Course Sections and Productivity:

	Spring 2014		Fall 2014		Spring 2015		Fall 2015		Spring 2016		Fall 2016		Spring 2017	
Course	# Sections	Prod.	# Sections	Prod.	# Sections	Prod.	# Sections	Prod.	# Sections	Prod.	# Sections	Prod.	# Sections	Pro
1 PRE-CALCULUS	1	22.00	1	24.00	1	27.00	1	28.00	1	33.00	2	23.46	1	26.0
113 WORKSHOP/STATISTICS							1	10.94	1	22.19	1	20.79	1	23.3
13 INTRO TO STATISTICS	4	20.62	4	22.50	4	25.37	4	24.75	4	30.37	5	26.34	5	23.9
201 ELEMENTARY ALGEBRA	5	24.00	6	22.42	5	20.90	6	24.09	5	23.40	6	24.17	7	19.3
203 INTERMEDIATE ALGEBRA	5	20.50	5	21.10	5	20.40	5	19.90	5	26.00	5	21.50	6	19.7
250 ARITHMETIC	6	16.67	5	20.10	5	19.10	6	17.67	4	18.65	4	20.38	4	15.3
253 PRE-ALGEBRA	5	22.60	4	21.50	5	20.80	4	19.13	4	24.25	4	23.75	4	21.0
271 WORKSHOP/PRE-ALGEBRA	1	11.99	1	14.99	1	10.08			1	10.99	1	5.50	1	5.5
3A CALCULUS I	1	10.50	1	13.00	1	10.00	1	15.50	1	7.50			1	25.5
3B CALCULUS II	1	15.00	1	14.00			1	7.50	1	18.50	1	22.00	1	16.5
3C CALCULUS III											1	10.00		
3E LINEAR ALGEBRA									1	9.50				
50 TRIGONOMETRY							1	12.50						
Total Sections and Productivity by Subject and Term	**29**	**20.25**	**28**	**20.93**	**27**	**20.80**	**30**	**20.50**	**28**	**23.35**	**30**	**22.63**	**31**	**20.2**

Please comment on changes that have occurred in productivity since the 2015-2016 program review. (e.g. increase, decrease or no change)

Productivity from 2015 – 2016 department-wide was (find production numbers for spring 2016) extremely high at 23.35. Productivity has remained constant over the year. This may be in part due to the fact that many math courses have enrollments of as many as 50 – 65 students. We are working closely with Dean Holloway to expand the number of sections and cap enrollment at 40 to ensure that students have improved access to their instructor. The District wide Math discipline faculty passed a motion on September 15, 2017 to recommend all math courses class size maximum as 40 students. This approach will allow instructors to spend more time with individual students and lead to increase students' success.

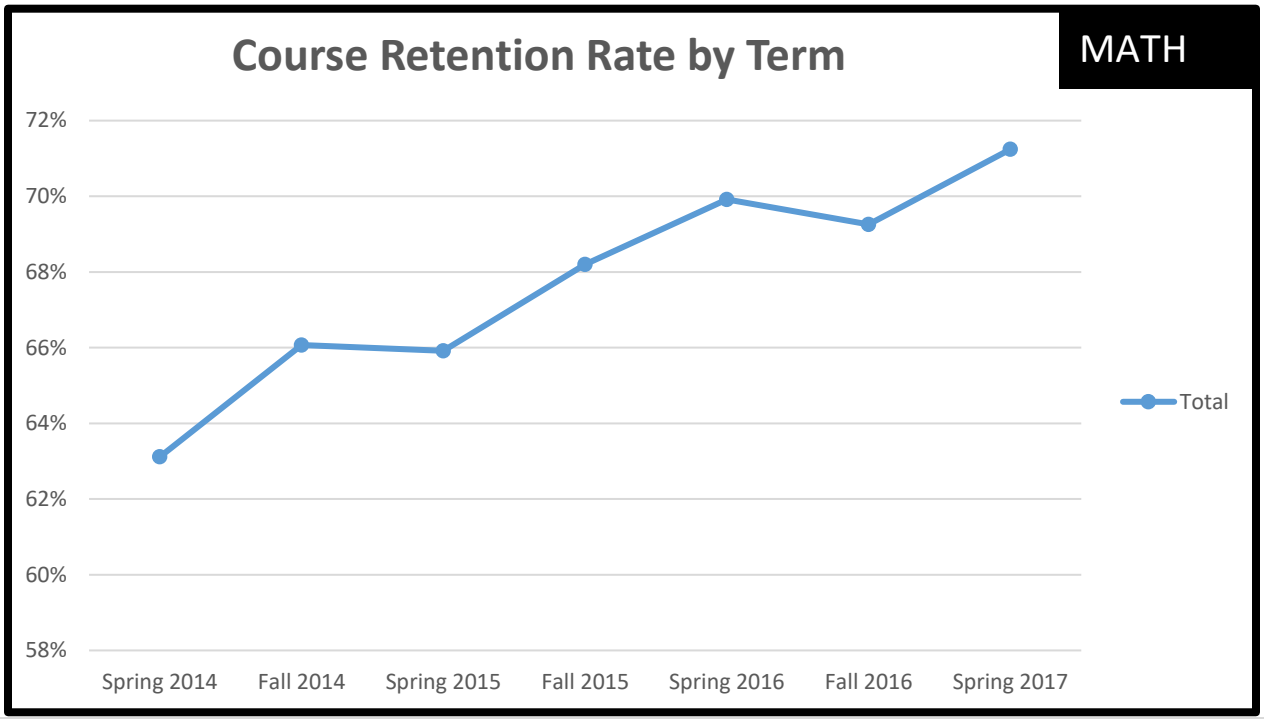
Student Success:

Row Labels	Total Retention %
Spring 2014	63%
Fall 2014	66%
Spring 2015	66%
Fall 2015	68%
Spring 2016	70%
Fall 2016	69%
Spring 2017	71%
Grand Total	**68%**
Subject	MATH

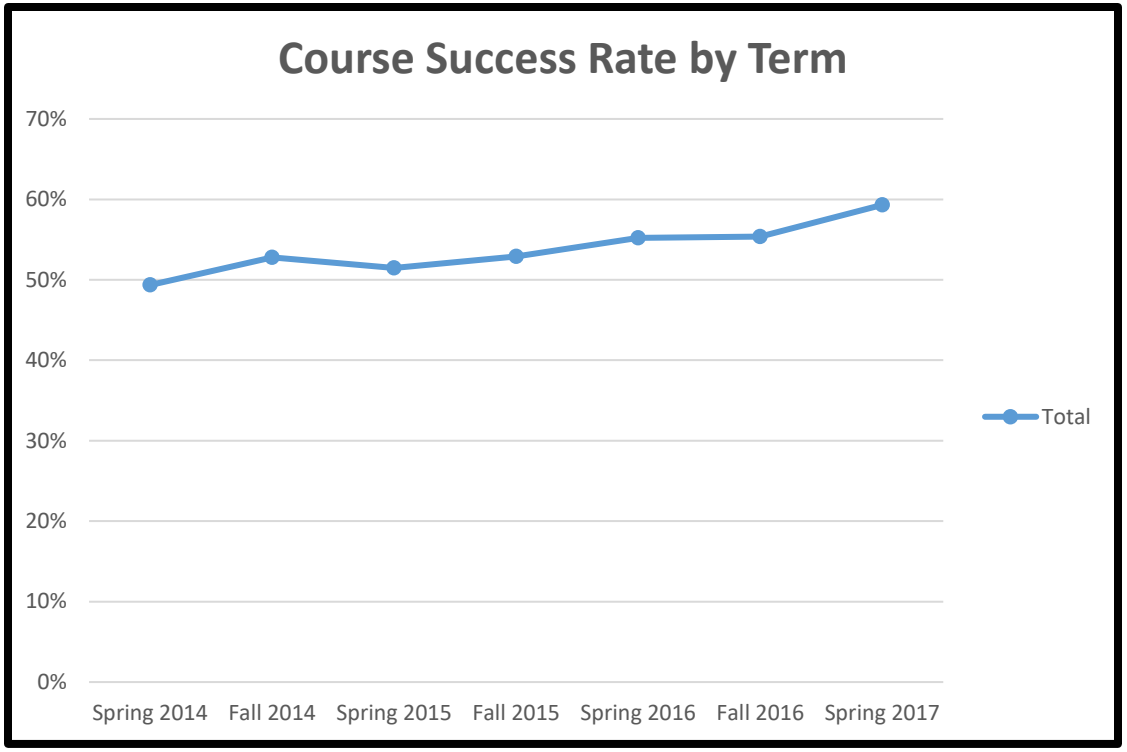
Row Labels	Total Success %
Spring 2014	*49%*
Fall 2014	53%
Spring 2015	51%
Fall 2015	53%
Spring 2016	55%
Fall 2016	55%
Spring 2017	59%
Grand Total	**54%**

	Retention %						
Course Description	Spring 2014	Fall 2014	Spring 2015	Fall 2015	Spring 2016	Fall 2016	Spring 2017
ARITHMETIC	65%	57%	66%	64%	73%	70%	59%
CALCULUS I	62%	92%	85%	87%	93%		88%
CALCULUS II	90%	75%		93%	70%	82%	79%

CALCULUS III						95%	
ELEMENTARY ALGEBRA	56%	58%	47%	62%	51%	59%	62%
INTERMEDIATE ALGEBRA	50%	64%	63%	62%	67%	62%	73%
INTRO TO STATISTICS	79%	69%	67%	77%	74%	75%	72%
LINEAR ALGEBRA					58%		
PRE-ALGEBRA	62%	77%	78%	71%	78%	78%	77%
PRE-CALCULUS	86%	73%	83%	61%	83%	67%	83%
TRIGONOMETRY				92%			
WORKSHOP/PRE-ALGEBRA	54%	93%	85%		82%	73%	100%
WORKSHOP/STATISTICS				100%	92%	82%	87%
Total Rates by Subject and Term	**63%**	**66%**	**66%**	**68%**	**70%**	**69%**	**71%**



	Success %						
Course Description	**Spring 2014**	**Fall 2014**	**Spring 2015**	**Fall 2015**	**Spring 2016**	**Fall 2016**	**Spring 2017**
ARITHMETIC	40%	39%	38%	38%	42%	45%	43%
CALCULUS I	57%	92%	80%	87%	93%		82%
CALCULUS II	90%	61%		80%	62%	82%	79%
CALCULUS III						95%	
ELEMENTARY ALGEBRA	44%	40%	34%	45%	35%	46%	50%
INTERMEDIATE ALGEBRA	40%	52%	54%	48%	52%	47%	59%
INTRO TO STATISTICS	73%	68%	63%	75%	67%	69%	62%
LINEAR ALGEBRA					47%		
PRE-ALGEBRA	45%	62%	60%	50%	63%	57%	63%
PRE-CALCULUS	68%	56%	65%	45%	74%	49%	71%
TRIGONOMETRY				76%			
WORKSHOP/PRE-ALGEBRA	54%	73%	75%		64%	55%	64%
WORKSHOP/STATISTICS				100%	92%	82%	87%
Total Rates by Subject and Term	**49%**	**53%**	**51%**	**53%**	**55%**	**55%**	**59%**



Retention and Success by Gender

Gender	Term Retention % Spring 2014	Fall 2014	Spring 2015	Fall 2015	Spring 2016	Fall 2016	Spring 2017
Female	64%	66%	65%	69%	72%	69%	73%
Male	63%	66%	67%	67%	67%	70%	68%
Unknown/Not Reported	57%	72%	83%	71%	63%	88%	57%

Retention and Success by Gender

Gender	Success % Spring 2014	Fall 2014	Spring 2015	Fall 2015	Spring 2016	Fall 2016	Spring 2017
Female	50%	53%	52%	53%	57%	55%	60%
Male	48%	52%	51%	52%	51%	55%	57%
Unknown/Not Reported	43%	64%	67%	71%	63%	75%	57%

Retention and Success By Race/Ethnicity

Race/Ethnicity	Term Retention % Spring 2014	Fall 2014	Spring 2015	Fall 2015	Spring 2016	Fall 2016	Spring 2017
American Indian	33%	50%	67%	60%	64%	60%	67%
Asian	65%	84%	75%	86%	71%	75%	69%
Black / African American	57%	61%	60%	62%	66%	62%	66%
Hispanic / Latino	67%	63%	70%	69%	69%	71%	73%
Pacific Islander	40%	67%	57%	71%	86%	70%	100%
Two or More	62%	75%	63%	67%	76%	70%	72%
Unknown / NR	76%	68%	65%	69%	72%	66%	69%
White	77%	76%	73%	76%	80%	82%	81%

Race/Ethnicity	Success % Spring 2014	Fall 2014	Spring 2015	Fall 2015	Spring 2016	Fall 2016	Spring 2017
American Indian	33%	50%	67%	40%	64%	60%	67%
Asian	53%	73%	67%	75%	65%	63%	66%
Black / African American	41%	47%	40%	44%	46%	45%	50%
Hispanic / Latino	55%	48%	56%	54%	55%	57%	62%
Pacific Islander	20%	33%	29%	29%	71%	70%	86%
Two or More	49%	61%	52%	52%	60%	55%	54%
Unknown / NR	51%	59%	58%	62%	64%	53%	61%
White	68%	73%	68%	68%	69%	73%	74%

Retention and Success Rates by Age Group

Age Range	Term Retention % Spring 2014	Fall 2014	Spring 2015	Fall 2015	Spring 2016	Fall 2016	Spring 2017
Under 16	50%		100%		88%	100%	100%
16-18	72%	69%	67%	71%	78%	72%	72%
19-24	63%	63%	67%	66%	70%	68%	69%
25-29	60%	69%	68%	65%	72%	71%	76%
30-34	65%	74%	68%	71%	72%	72%	74%
35-54	62%	67%	65%	74%	63%	70%	73%
55-64	72%	57%	36%	73%	67%	56%	73%
65 & Above	100%	67%	43%	67%	67%	57%	71%

	Success %						
Age Range	Spring 2014	Fall 2014	Spring 2015	Fall 2015	Spring 2016	Fall 2016	Spring 2017
Under 16	50%		100%		75%	100%	80%
16-18	57%	50%	52%	53%	62%	55%	56%
19-24	47%	47%	50%	49%	54%	53%	56%
25-29	48%	61%	57%	55%	59%	62%	66%
30-34	52%	67%	57%	56%	60%	56%	59%
35-54	51%	57%	51%	64%	49%	55%	66%
55-64	56%	50%	30%	63%	48%	50%	50%
65 & Above	100%	67%	29%	33%	50%	57%	71%

Retention and Success Rates by DSPS Status

	Term Retention %						
DSPS STATUS	Spring 2014	Fall 2014	Spring 2015	Fall 2015	Spring 2016	Fall 2016	Spring 2017
DSPS Students	58%	61%	61%	70%	61%	66%	64%
Non DSPS Students	64%	67%	67%	68%	71%	70%	72%

	Success %						
DSPS STATUS	Spring 2014	Fall 2014	Spring 2015	Fall 2015	Spring 2016	Fall 2016	Spring 2017
DSPS Students	37%	43%	42%	57%	50%	48%	50%
Non DSPS Students	50%	54%	53%	52%	56%	56%	60%

Retention and Success Rates by Low Income Status

Low Income students	Term Retention % Spring 2014	Fall 2014	Spring 2015	Fall 2015	Spring 2016	Fall 2016	Spring 2017
Low Income Students	63%	64%	65%	65%	70%	71%	69%
Not Low income	63%	72%	69%	81%	67%	85%	85%
Undetermined	70%	65%	71%	66%	70%	68%	71%

Low Income students	Success % Spring 2014	Fall 2014	Spring 2015	Fall 2015	Spring 2016	Fall 2016	Spring 2017
Low Income Students	48%	50%	49%	50%	49%	53%	60%
Not Low income	57%	64%	60%	66%	48%	71%	74%
Undetermined	30%	46%	53%	49%	56%	56%	59%

Retention and Success Rates by Foster Youth Status

Foster Youth Status	Term Retention % Spring 2014	Fall 2014	Spring 2015	Fall 2015	Spring 2016	Fall 2016	Spring 2017
Not Foster Youth	64%	67%	66%	68%	70%	69%	72%
Foster Youth Status	40%	44%	46%	67%	69%	89%	14%

	Success %						
Foster Youth Status	Spring 2014	Fall 2014	Spring 2015	Fall 2015	Spring 2016	Fall 2016	Spring 2017
Not Foster Youth	50%	53%	52%	53%	55%	55%	60%
Foster Youth Status	20%	29%	21%	44%	50%	44%	14%

Retention and Success Rates by Veteran Status

	Term Retention %						
Veteran Sataus	Spring 2014	Fall 2014	Spring 2015	Fall 2015	Spring 2016	Fall 2016	Spring 2017
Not Veterans	63%	66%	66%	68%	70%	69%	71%
Veterans	67%	71%	63%	60%	64%	78%	79%

	Success %						
Veteran Sataus	Spring 2014	Fall 2014	Spring 2015	Fall 2015	Spring 2016	Fall 2016	Spring 2017
Not Veterans	49%	53%	52%	53%	55%	55%	59%
Veterans	57%	54%	48%	57%	55%	67%	68%

1. **Describe the course retention and successful course completion rates and any changes since the 2015-2016 program review**

Course completion rates and course success rates in Math have increased slightly. This is a good thing. Is there anything that can be attributed to this increase in success and retention rate? The math department should highlight the fact that it is moving the needle somewhat.

2. **Describe any achievement gaps present in your disaggregated enrollment, retention and successful course completion data. (Your data is disaggregated by Gender, Race/Ethnicity, Age, and student populations: DSPS, Low Income, Foster Youth and Veterans)**
Low income students retention and success rates are improving, but, still lower than other students. Foster youth retention and success rates dropped significantly. Veterans retention and success rates increased significantly after hiring the Veterans counselor.

Student Success in Distance Education/Hybrid classes versus face-to-face classes:

Not applicable

1. **Describe any difference in the Retention and Success of face-to-face and distance education courses.**

The math department currently does not offer hybrid or online courses. Can there be a mention that there is a plan to initiate a DE addendum to teach a math course in the near future. (to provide access to more students)

Other program specific data. Other data could include: departmental research via survey or special projects that significantly supports the goals or future plans for the program. **Can something be mentioned about the pathways projects in development / maybe something anecdotal regarding how students like it and will demand more sections of the pathways courses soon.**

IV. Aligning Program Goals, Activities and Planning

Purpose: In this section, you will align your program, department or unit goals with the Educational Master Plan goals. You will also be asked to comment on how your department, unit or program is helping the College to achieve the targets set by the Equity, SSSP and Basic Skills Plans.

1. Educational Master Plan Alignment: Please use the following matrix to demonstrate how your program goals align with the 2015-2020 Educational Master Plan Goals.

2015-2020 EMP Goals

Foundations:

1. Assess students' strengths and needs thoroughly to accelerate completion of certificates, degrees and transfer readiness.
2. Support and develop programs, curriculum and services that increase completion of courses, certificates, degrees and transfer.
3. Establish an organizational structure that promotes coordination, innovation, and accountability, and which embeds basic skills development across the campus.

Career Technical Education:

1. Develop opportunities for CTE students to engage in campus and community experiences that enhance learning and student success (program-level clubs/enterprises, activities that develop soft skills, etc.) by contextualizing and proactively engaging students.
2. Create a Merritt-wide infrastructure that streamlines and develops employer partnerships, including offering High quality internships, serving on advisory boards, and engaging in curriculum development.
3. Strengthen Merritt College's "on ramps" to our CTE pathways by enhancing distance education, dual enrollment, adult education, contract education, etc., and provide differentiated supports that ensure student success for targeted population.
4. Create proactive strategies to engage faculty, students, and employers to support program success and sustainability that increase student-level academic and career outcomes.

Transfer:

1. Establish fully functioning transfer center.
2. Acquire more and better data (Higher granularity) on transfer rates. Collect transfer data to include UC, State, and Private institutions.
3. Augment and strengthen specific partnerships with academic departments in CSUs, UCs, and privates to develop transfer pipelines.
4. Augment and strengthen support services for transfer students campus-wide.
5. Augment and strengthen support for transfer students within academic programs.

Directions: 1) input your program and department goals. 2) Identify which area of the Ed Master Plan this Goal aligns to – Foundations, Transfer and/or CTE. Describe the activities your department or program will complete to meet the goal. 5) What standard or goal do you think the activities will help the college achieve as a measurable outcome (Completion rate, degree/cert completion, transfer, remedial rates). Place and X in the standard(s) and/or goal(s) your program activity will impact.

Program/ department or unit Goal	Foundations	Transfer	CTE	How does this goal or the program activities align with the Educational Master Plan Strategic Directions and/or Goals?	Measurable Outcomes: Institution Set Standards and IE Goals					
					Successful Course Completion Rate	Retention Rate (F to F Persistence)	Degree or Cert. Completion	Transfer	Remedial Rate Math (Basic Skill Success)	Remedial Rate English (Basic Skills Success)
To increase retention and success rates in Math courses, particularly basic skills courses If goals have been added above, they should be mapped to IE goals	*x*	x	*x*	*The Objective of these activities is to provide student with more options and increase enrollment. Offering courses at the high school also strengthens partnerships with the high schools and can build a pipeline from the HS to Merritt to improve HS to college transition and student success.*	*X*	*x*			x	
Offer one more section of Math Jam in winter/summer break	x			More students who take math jam will increase their ability to test higher on the placement exam, and lessen the number of levels before transfer					x	
Create accelerated algebra sequence for STEM/non STEM majors		x		Decreasing the number of levels before transfer has been shown to increase the student success metrics	x	x	x			
Create accelerated pre-algebra sequence	x	x	x	Decreasing the number of levels before transfer has been shown to increase the student success metrics.	x	x			x	

2. Student Equity, Student Success and Support Program (SSSP), and Basic Skills Target Groups: These plans analyzed student success outcomes and disproportionately impacted student populations. The chart below outlines the results of this analysis, and is a summary of the

student populations and focused outcomes that the College indicated it would like to increase as a result of the Student Equity Plan (E), SSSP Plan (S), and Basic Skills Plan (B).

a. As a program, department or unit, review your data and describe any activities you are doing to address student equity gaps and special populations in the table below. Describe the target or focused student population, the problem/observation, the activity/intervention, and the intended outcome. How does your activity align with the College's Equity, SSSP and Basic Skills Goals (list the target group and indicator in the last box below)? In your description, please note if the activity or intervention was funded by one of these grants in the past academic year (15-16).

2015-16 Student Equity Plan, Student Success and Support Program Plan (SSSP), and Basic Skills Goal Summary

The **Student Equity Plan, SSSP Plan,** and **Basic Skills Plans** outlined goals and activities to increase the following indicators, with special focus on the student populations below:	Access (Headcount)	Successful Course Completion (All Subjects)	Math Course Completion	English Course Completion	Fall to Spring Retention	Basic Skills: BS Math Course Completion	Basic Skills: BS English Course Completion	Basic Skills: BS ESL Course Completion	Number of Degrees	Number of Certificates	Number of Transfers to UC and CSU
Males	E S	E	S								
African American	E S	E	E S	E	E			E	E S	E S	E S
Hispanic/Latino	E S	E			E			E	E	E S	E S
Native American								E	E S	E S	E
Hawaiian/Pacific Islander		E									
Foster Youth	E	E						E	E	E	E
Disabled	E										
Veterans	E										
Low Income		E									
All Students		S	B	B		E S B	E S B	S	S	S	

***S = SSSP, E=EQUITY, B=BASIC SKILLS**

Directions: 1) Describe a challenge, achievement gap or observation you made in your program data. 2) Describe an activity or intervention your program does to address the data. 3) Note which student populations this activity or intervention targets. 4) describe the intended measurable outcome of the activity. Think about which indicator, from the summary chart below, this activity will help to impact. 5) Note which Plan and Goal this activity aligns to (SSSP, Equity, or Basic Skills)

I think the 'activity/intervention' fields should be placed in the 'Problem, achievement gap, or observation' area. I changed the first 2

Is your program planning for changes, improvements or initiatives that align with Student Equity, SSSP or Basic Skills Initiative? Please report on the *PLANNING* for 2017-2018.				
Problem, Achievement Gap or Observation (data)	**Activity/Intervention**	**Target Student Population**	**Outcome (or intended outcome from the list of indicators above: access, course completion, retention, BS course completion, degree, cert. transfers)**	**Relevant College Equity/SSSP/BS Goal**
Students often assess 3 to 4 levels below transfer even if they have taken relatively high levels of math in the past	***Lower Math placement of Incoming Basic- Skills students (STEM and non-STEM)Are we still doing this? Are we using multiple measures or using another metric?***	*African American and Hispanic/Latinos*	***Students will be given the opportunity to prepare before taking the assessment.*** ***Ideally,they will place into a higher level of math then before attending the Math Jam***	*SSSP and Equity Plan – Access for African Americans and Latinos*
Students are failing to complete math 13 (statistics).	***Create alternative pathway to statistics prerequisite Support courses***	All Social Sciences majors students	***New alternative statistics pathway will give more chances to non STEM major students to reach Math 13 (statistics) class.***	*SSSP and Equity Plan*

Achievement gap of African-American students	***African-American students (especially males) have a low success rate in math courses***	***Sankofa Program***	***Provide African-American students targeted support in basic skills/transfer level courses. (embedded tutoring, early alert system, counseling, etc)***	*SSSP and Equity Plan – Access for African Americans*
Curriculum development for STEM Majors	***There is a great deal of overlap in the elementary algebra and intermediate algebra courses***	***Accelerated Algebra for STEM majors***	***New course would combine math 201and math 203 into one semester and help students move to transfer level math courses faster***	
Curriculum development for CTE Nursing Students	***Nursing students are failing licensing exams because of poor math skills***	***Contextualized math course for nursing students***	***Students will be taught math concepts that are relevant to their field (unit conversion, percentages etc.)***	
Incoming high school students	***Students often assess 3 to 4 levels below transfer even if they have taken relatively high levels of math in the past***	***Multiple Measures Placement***	***Students may be able to justify being placed into a higher level math class if they have proof of a similar course on their transcript, or by the word of a trusted partner (high school, tutoring center) etc.***	
Transfer level Students, AS-T in math	***Ensuring that the Merritt College Associate in Science degree will help them to transfer to CSU easily***	***Math major students***	***Students will be assured that their credits will be transferred to the 4 year institution.***	
Offering calculus sequence regularly including Math 3E and 3 F	***Math 3A-Math 3F courses offering***	***Math major students***	***Build up AS-T in math degree program***	

b. Are additional resources required to facilitate the activities or interventions related to this area? If yes, make sure to discuss with your Dean.

The Math/Physical Sciences and English departments at Merritt College were awarded one of the Basic Skills and Student Outcomes Transformation grant amounting in about $1.5 million In 2016. With this grant, from 2016 to 2019, the department should be able to put initiatives in place which may begin to address these issues.
Math discipline needs to hire at least two more Math instructors and Math Lab Technician.

3.Student Equity, Student Success and Support Program (SSSP), and Basic Skills Funding: In addition to identifying focused student populations and targets for improving student outcomes, these plans outlined activities the College would engage in to improve the indicators above.

Did your program receive funding from any of the sources below in 2016-2017? What was the outcome of this funding?

Please report on the outcomes from 2016-2017 funding.				
Plan	**What was funded?**	**Was this part of a larger activity or initiative?**	**What need did this address?**	**What measurable outcome resulted in this funding?**
Student Equity Plan			The math/physical science department supports a STEM club on campus to increase the level of interest around math courses and exploring using math/science in a career. The department intends to visit at least one local high school to inform students about our programs at Merritt and encourage students to enroll in our upper level math courses (perhaps this could be done with CIS) Can there be a BtG pilot of early college math advising for Merritt Math courses at some local OUSD high schools/ Charter schools?	
SSSP Plan			Orientation. Assessment for Placement. Pre-requisite challenges. Multiple measures placement will take place during fall 2016. Embedded tutors (possibly embedded counselors for the BSSOT grant). Follow up with at risk students.	

			Early alert system is in effect. Several instructors have been working with the counselors in the early alert system.	
Basic Skills Plan	***Basic Skills and Student Outcomes Transformation grant***	The math department intends to develop courses which will shorten the number of levels below transfer. Studies have shown that increasing the level of rigor with substantial support to the students will increase student success rates for some students. Through the grant, the math department will also explore how technology can be used to help students success.	Expand the use of multiple measures to place students. Expand the Math Jam test preparation program. Begin institutionalization process of math jam as noncredit offering Replace multi-level remedial sequences with accelerated courses. Embed student support services (tutoring and counseling) in the accelerated basic skills courses.	
Strong Workforce	***Not applicable***			

V. Curriculum and Assessment Status

Purpose: In this section, you will plan for curriculum review and discuss assessment plans and findings. If your Program, Department or Unit does not have a curriculum component, please put N/A. You should reference the *CurricUNET META*, and *Taskstream.*

Curriculum Review Plan

In preparation for the implementation of structured curriculum review in the 2018-2019 academic year, departments and programs are being asked this year to submit curriculum review plans, indicating when all courses and programs shall be reviewed. One-third of non-CTE curriculum should be reviewed each year, resulting in all non-CTE courses and programs being reviewed within the three-year program review cycle. Half of CTE curriculum should be reviewed each year, resulting in all CTE courses and programs being reviewed every two years in conjunction with the program review/annual program update cycle.

Directions

All department chairs, program directors, and full-time faculty members should have access to CurricUNET META to view the active curriculum inventory. If you don't have access, contact LaShaune Fitch, Curriculum Specialist, at lfitch@peralta.edu.

- List all active courses, certificates, and degrees.
- Indicate which year each course, certificate, or degree shall be reviewed (including deactivations and reactivations).
- Add more rows to each table as needed.

Course Number	Course Name	2018-2019	2019-2020	2020-2021
Math 250	Arithmetic	*x*		
Math 253	Prealgebra	*x*		
Math 201	Elementary Algebra	x		
Math 203	Intermediate Algebra	x		
Math 13	Statistics			x
Math 1	PreCalculus	x		
Math 2	Precalculus with Analytic Geometry		x	
Math 3A	Calculus I			x
Math 3B	Calculus II			x
Math 3C	Calculus III			x
Math 3E	Linear Algebra			x

Math 3F	Differential Equations			x
Math 16A	Calculus for Business and Life/Social Sciences			x
Math 16B	Calculus for Business and Life/Social Sciences		x	
Math 50	Trigonometry		x	
Math 15	Math for liberal Arts Students		x	
Math 202	Geometry	x		
Math 270	Math workshop for Arithmetic		deactivate	
Math 271	Math workshop for Pre-Algebra		deactivate	
Math 272	Math workshop for Elementary Algebra		deactivate	
Math 273	Math workshop for Intermediate Algebra		deactivate	
Math 113	Math workshop for Statistics		x	

Program Type	Program Name	2018-2019	2019-2020	2020-2021
Associate of Science in Math	*Math*		Deactivate? Sounds good!	
Associate in Science in Math	AS-T in Math			x

Student Learning Outcomes Assessment

Use the following table to document the results of the student learning outcomes assessment completed in 2016-2017. Please discuss which courses and PLO's were assessed, the results, changes that were made or plan to be made.

Learning Outcomes Assessed in 2016-2017		**Results**	**Changes Made (or to be made)**	**Status (Completed or planned date)**
Course/Program	Learning Outcome Assessed			
Math 202/Math 3E	All outcomes assessed		SLOs have been revised.	completed
Math 250, Math 253,	All outcomes assessed			completed

Math201, Math 203, Math 13, Math 1, Math 3A, Math 3B, Math 3C, Math 113				
AS-T in math	All outcomes assessed			completed

1. What meaningful dialogue takes place in both shaping and assessing course and program level outcomes? Where can one find the evidence of the dialogue?

We discussed at the Department meetings. See the Department meetings minutes for the evidence of the dialogue.

2. Attach the completed Fall Schedule Assessment Planning Template (due to CDCPD mid-September).

SLOs Assessments (all SLOs):

Math 250: David Strohl

Math 253: David Strohl

Math 201: Dan Lawson

Math 203: Tae-Soon Park

Math 1: Tae-Soon Park

Math 240: Dan Lawson

Math 3B: Michelle Lee

Math 3C: Trung Nguyen

Math 13: Rebecca Uhlman

Math 113: Suman Shah

PLOs Assessments:

Math 13: Rebecca Uhlman

Math 1: Tae-Soon Park

Math 3B: Michelle Lee

Math 3C: Trung Nguyen

ILO Assessment: Critical Thinking Skills ILO for Fall 2017

VI. Additional Questions for CTE, Counseling, Library and Student Services/Admin Units

Purpose: In this section, certain programs or departments will answer questions specific to the program. **Leave the section blank if your program, department or unit is *not CTE, Counseling, Library or Student Services/Administration.***

For CTE:

1. Please describe any recommendations resulting from advisory committee meetings that have occurred since your last program review.

2. Did your program work with a Deputy Sector Navigator and if so, how did this lead to program changes or improvements?

3. Is your discipline/department/program currently participating in any grants specific to the program? Please discuss your progress in meeting the stated goals in the grant.

For Counseling:

1. What has the counseling department done to improve course completion and retention rates? What is planned for the future?

2. What has the counseling department done to improve SSSP counseling services? Please discuss your progress in improving SSSP counseling services.

For Library Services:

1. Please describe any changes in the library services, collections or instructional programs since the last program review or APU and fill in the information below:

	This Academic Year	Previous Academic Year (s)	Explanation of Changes
Library Open Hours Per Week			
Library Visits (gate count)			
Other Library Usage			
Total Library Materials Expenditures			
Total Print Book Collection (Titles)			
Total E-book Collection (Titles)			
Total Database Subscriptions			
Total Media Collection (Titles)			
Total Print Periodical Subscriptions			
General Circulation Transactions			
Reserve Circulation Transactions			
In-house circulation Transactions (optional)			
Media Circulation Transactions (optional)			
E-book Circulation Transactions Describe (optional)			
Other circulations Transactions – Describe – (optional)			
Total circulation Transactions			

For Student Services and/or Administrative Units:

1. Briefly describe the results of any student satisfaction surveys or college surveys that included evaluation and/or input about the effectiveness of the services provided by your unit. How has this information informed unit planning and goal setting?

2. Briefly describe any changes that have impacted the work of your unit.

VII. New Resource Needs Not Covered by Current Budget

Purpose: In this section, programs will documents new and repeat resource requests ***not covered by current budget***, and document the support of the request with data or evidence.

Human Resources: If you are requesting new or additional positions, in any job classification, please explain how new positions will contribute to increased student success.

Human Resource Request(s)	**Dollar Amount**	**Already Requested in Recent Program Review or APU? (yes/no)**	**What Program Goal does this request align to? (cut and paste from section II)**	**What data or evidence supports this request? (If discussed in a section above, please give a brief statement and page reference.)**	**How will this resource contribute to student success? (1-3 sentences)**
2 full time math faculty	$160,000	yes	The Mathematics department is in desperate need of manpower. In this time of economic hardship, people are needed who will motivate students to engage fully to achieve their educational goals. This manpower is also needed to help with the heavy workload of the Math Department.	College Productivity Target and The math department productivity. The math department average class sizes are too large. A decrease in productivity would be an acceptable trade- off for smaller class sizes and potentially increased success rates	**Full time math Positions** will increase the number of faculty who will contribute to curriculum development as well as presenting the material in alternative ways.
1 math lab technician	$50,000		Develop a tutors training program, and hire a Math Lab technician to supervise all Math Lab services.	Reports from the college learning center suggest that someone is needed to coordinate tutors and possible testing of self-paced/online courses.	**Math lab technician position** to standardize and administer math tutor training. The math lab tech could also proctor self-paced/make up exams for math courses.

*New faculty and staff requests must be listed here.

Technology and Equipment: How will the new technology or equipment contribute to student success?

Technology and Equipment	Dollar Amount	Already Requested in Recent Program Review or APU? (yes/no)	What Program Goal does this request align to? (cut and paste from section II)	What data or evidence supports this request? (If discussed in a section above, please give a brief statement and page reference.)	How will this resource contribute to student success? (1-3 sentences)
6 iPads for instructional use *40 graphing calculators* *Apple TV* *8 laptop computers for instructors* 1 Portable projector	$4,800 $4,400 $16,000 $1,000	Yes Yes Yes No no	Offer at least 1 technology based training to math faculty	Modern math instruction usually involves some form of technology aided instruction. The iPad/laptop computers are leading devices used by instructors.	*Materials will enable the faculty to: Embed graphics and use color effectively into lecture presentations.* Enable students more access to class materials. Give more flexibility when creating lecture notes and presentation materials in the smart classroom.

Facilities: Has facilities maintenance and repair affected your program in the past year? How will this facilities request contribute to student success?

Facilities	Dollar Amount	Already Requested in Recent Program Review or APU? (yes/no)	What Program Goal does this request align to? (cut and paste from section II)	What data or evidence supports this request? (If discussed in a section above, please give a brief statement and page reference.)	How will this resource contribute to student success? (1-3 sentences)
Dedicated math computer lab ***Adequate office space.***	$100,000	yes	Develop curriculum for math courses which allows the student to complete a transfer level math course in 3 semesters after college entry	New Math courses required dedicated math computer lab. *Many math classes are taught in rooms*	Improve students retention and success rates.

			(identify a cohort of students who are not in the 3 course pathway and compare to success rates in the traditional pathway)	*that also serve as labs and contain equipment that is not used by the math department.* *At times some of these materials must be moved or reoriented in order to teach the math class effectively.* *Often, classrooms do not have the necessary seating to accommodate the class. A lockable storage drawer in each Math classroom is also requested.*	

Professional Development or Other Requests: How will the professional develop activity contribute to student success? What professional development opportunities and contributions make to the college in the future?

Professional Development	**Dollar Amount**	**Already Requested in Recent Program Review or APU? (yes/no)**	**What Program Goal does this request align to? (cut and paste from section II)**	**What data or evidence supports this request? (If discussed in a section above, please give a brief statement and page reference.)**	**How will this resource contribute to student success? (1-3 sentences)**
Training in use of smart tablet integration *Training to develop and integrate online/hybrid courses to enhance math course* Flipped Classroom Training Supplemental Instruction Training	$10,000	yes	Offer at least 1 technology based training to math faculty	Using the tablet in teaching will allow students to access the material in additional ways (online via the cloud, video lecture etc.). Online/Hybrid courses will attract additional students. Learning to teach in this format will keep us competitive with the experiences students get at other schools. Online courses are becoming increasingly common in the college system. BCC, Laney and COA offer online math courses. If the department is able to develop a new math computer lab, it will become even more relevant to teach in an online/hybrid format	Improve students retention and success rates.

Signatures

Discipline, Department or Program Chair

Print name	*Signature*	*Date*

Dean

Print name	*Signature*	*Date*