

University of Hawai'i - West O'ahu
Faculty Senate Proposed Resolution

Author of Resolution: Student Affairs Committee

Date submitted: 04/01/2022

Resolution:

Resolved, That University of Hawai'i - West O'ahu students upon meeting admission requirements earn direct placement into MATH 100 (3 credits), MATH 103M/MATH 103L (5 credits) and MATH 115M/MATH 115L (5 credits); and be it

Resolved, That University of Hawai'i - West O'ahu students must continue to earn course placement to enroll directly MATH 103 (3 credits), MATH 115 (3 credits) or higher; and be it

Resolved, That University of Hawai'i - West O'ahu Early College, Running Start and/or Early Admit students must continue to demonstrate course readiness to enroll directly into any UHWO Math course; and be it

Resolved, That all University of Hawai'i - West O'ahu math course placement scores will be valid for (2) years; and be it

Ordered, That this policy shall be posted in the University of Hawai'i - West O'ahu General Catalog and the UHWO web-site.

Intended Purpose or Rationale:

After careful consideration and collaboration with the Math department, this resolution revises the current Math Course placements.

In May of 2020, UHWO passed a temporary policy to remove the placement requirement and provided a pathway directly into MATH 100 and MATH 103M/MATH 103L. This COVID pivot, aligned with other UH 4 year campuses in creating very clear pathways into programs and more seamless entry points into math courses. Without the temporary memo waiving course placement for MATH 100 and MATH 103M/MATH 103L which expires in May 2022, students are currently required to earn a course placement indicator for any UHWO Math course.

The difference between MATH 103 (3 credits) and MATH 103M/L (5 credits) is that MATH 103M and MATH 103L are co-requisite courses which include a lab to further support students' readiness to successfully pass the course. Based on the efficacy of MATH 103M/MATH 103L, a newly developed MATH 115M/MATH 115L will be offered Fall 2022.

Data: The Math auto-placement policy began in May 2020 and was extended until May 2022. John Stanley was able to pull data to compare pre-policy (before May 2020) and post-policy (after May 2020) grades and retention rates. We specifically reviewed all grades and retention

rates from all students enrolled in the following courses: (a) Lower level math courses: MATH 100, MATH 103M/MATH 103L, MATH 115, and (b) Upper level statistics courses that have Math as a prerequisite: PUBA 341, BUSA 320, and SSCI 210. See the appendix for details on these grades and retention rates. Please take note of the large sample size to support our observations.

Data - Grades: We want to highlight the many positive changes that occurred in the post-policy period. Within the data listed in Appendix A, we highlighted the positive changes in green. For example, students in MATH 100, MATH 103ML, MATH 115, BUSA 320, and SSCI 210 received more A's post-policy [as compared to pre-policy]. Further, students in MATH 100, MATH 103ML, MATH 115, BUSA 320, and SSCI 210, received less D's, F's, W's, and I's post-policy. Students experienced huge grade benefits after the math placement requirements were removed.

Data - Retention: UHWO student experience in their 100-level math class has been proven to be one of the reasons linked to retention. From this link, we observed the retention rates among the math courses as well as upper-level statistics courses. Within the data listed in Appendix B, we highlighted the positive changes in green. For example, more students were retained

post-policy within these four courses: MATH 100, MATH 115, BUSA 320, and SSCI 210 [as compared to pre-policy]. Further, fewer students were "not retained" in five of the six courses (MATH 100, MATH 103M/MATH 103L, MATH 115, BUSA 320, and SSCI 210). UHWO experienced huge retention benefits after the math placement requirements were removed.

MATH 115: Faculty in the upper-level statistics courses shared their preference for students to take MATH 115 Statistics as their prerequisite, instead of other math courses. Tutors at the No'eau Center also notice that students are better prepared for the upper level statistics if they are able to enroll in a MATH 115 course. This is because MATH 100/MATH 103 covers less than one month's worth of statistics. However, the current policy automatically placed students into MATH 103M/MATH 103L. Starting Fall 2022, UHWO's math department will be offering a MATH 115M/MATH 115L course. The ML attached to the course is a 5 credited course which gives students extra help if/when needed (as compared to a 3 credit MATH 100/103/115 course).

Data - MATH 115: We also obtained data on the percentage of students that took MATH 115 pre- and post-policy. The student samples were from BUSA 320, PUBA 341, and SSCI 210. Please see Appendix C for this data. From the gathered data, we can see that a higher % of BUSA 320 students completed MATH 115 during the post-policy period (25% pre-policy to 35% post-policy). SSCI 210 students experienced the same increase. 25% of SSCI 210 students pre-policy had completed MATH 115, while 32% of SSCI 210 students post-policy had completed MATH 115. These observations could have related to the higher retention rates noted in Appendix A and B.

Appendix A - Data - Grades

MATH 100	# of Students		# of Students		% Change
	Pre-policy	%	Post-policy	%	
A	8	21%	60	50%	144%
B	14	36%	18	15%	-58%
C	6	15%	13	11%	-30%
DFWI	11	28%	29	24%	-14%
Total	39		120		

MATH 103M/MATH 103L	# of Students		# of Students		% Change
	Pre-policy	%	Post-policy	%	
A	161	31%	294	40%	29%
B	117	22%	141	19%	-15%
C	103	20%	116	16%	-21%
DFWI	144	27%	193	26%	-5%
Total	525		744		

MATH 115	# of Students		# of Students		% Change
	Pre-policy	%	Post-policy	%	
A	44	24%	97	49%	105%
B	58	31%	45	23%	-28%
C	48	26%	24	12%	-54%
DFWI	35	19%	33	17%	-12%
Total	185		199		

BUS 320	# of Students		# of Students		% Change
	Pre-policy	%	Post-policy	%	
A	258	43%	241	47%	10%
B	139	23%	118	23%	0%
C	94	16%	63	12%	-21%
DFWI	108	18%	87	17%	-5%
Total	599		509		

PUBA 341	# of Students		# of Students		% Change
	Pre-policy	%	Post-policy	%	
A	80	33%	28	21%	-35%
B	54	22%	19	15%	-34%
C	53	22%	22	17%	-23%
DFWI	57	23%	62	47%	103%
Total	244		131		

SSCI 210	# of Students		# of Students		% Change
	Pre-policy	%	Post-policy	%	
A	57	25%	128	41%	69%
B	57	25%	84	27%	11%
C	47	20%	33	11%	-47%

DFWI	71	31%	64	21%	-32%
Total	232		309		

Appendix B - Data - Retention

	# of Students		# of Students		
	Pre-policy	%	Post-policy	%	% Change
MATH 100					
Retained	32	82%	100	83%	2%
Not Retained	7	18%	20	17%	-7%
Total	39		120		

	# of Students		# of Students		
	Pre-policy	%	Post-policy	%	% Change
MATH 103M/MATH 103L					
Retained	417		593		0%
Retained	108	79%	151	80%	
Not Retained		21%		20%	-1%
Total	525		744		

	# of Students		# of Students		
	Pre-policy	%	Post-policy	%	% Change
MATH 115					
Retained	158	85%	172	86%	1%
Not Retained	27	15%	27	14%	-7%
Total	185		199		

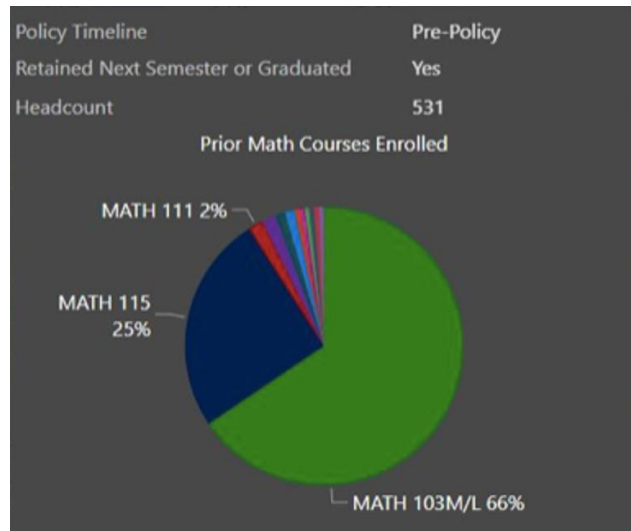
	# of Students		# of Students		
	Pre-policy	%	Post-policy	%	% Change
BUSA 320					
Retained	531	89%	462	91%	2%
Not Retained	68	11%	47	9%	-19%
Total	599		509		

	# of Students		# of Students		
	Pre-policy	%	Post-policy	%	% Change
PUBA 341					
Retained	223	91%	113	86%	-6%
Not Retained	21	9%	18	14%	60%
Total	244		131		

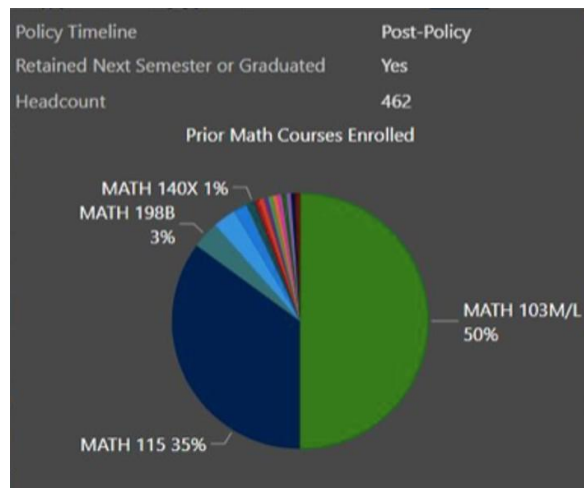
	# of Students		# of Students		
	Pre-policy	%	Post-policy	%	% Change
SSCI 210					
Retained	206	89%	280	91%	2%
Not Retained	26	11%	29	9%	-16%
Total	232		309		

Appendix C - MATH 115

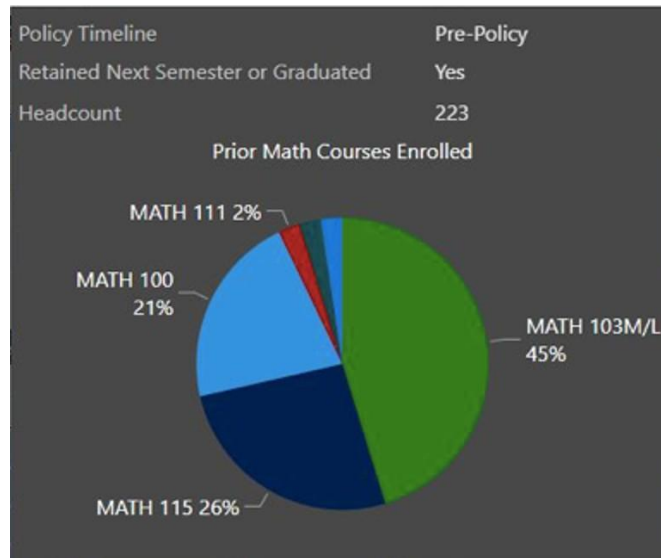
% of BUSA 320 students that took a certain math course pre-policy



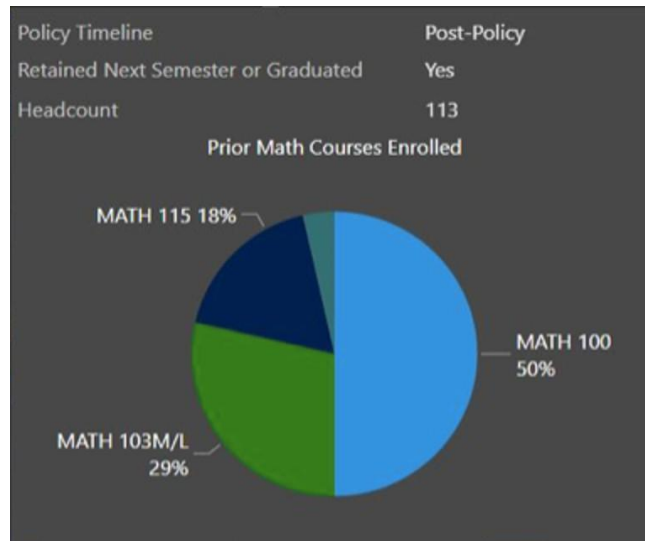
% of BUSA 320 students that took a certain math course post-policy



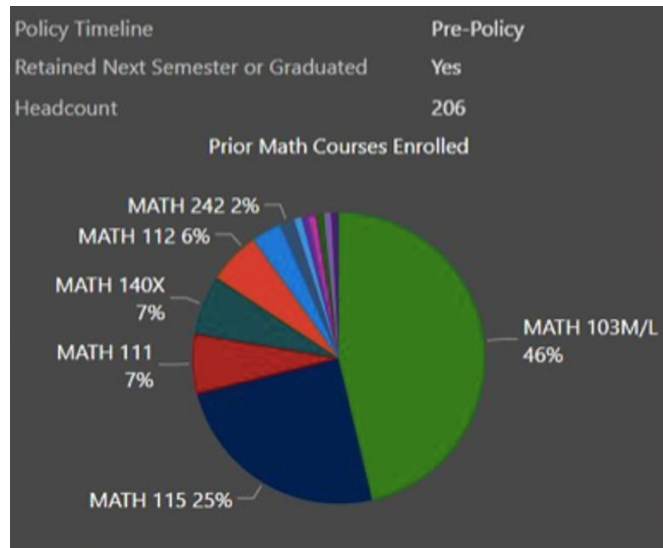
% of PUBA 341 students that took a certain math course pre-policy



% of PUBA 341 students that took a certain math course post-policy



% of SSCI 210 students that took a certain math course pre-policy



% of SSCI 210 students that took a certain math course post-policy

