

Recommendations

ACCUPLACER Cutscore Revisions – Elementary Algebra Test

Accuplacer EALG	Current Cut Scores	Current Placement	Proposed Cut scores	Proposed Placement
	0-31	Math 602	0-49	Refer to Arithmetic Test
	32-70	Math 101	50-90	Math 104
	71-105	Math 104	91-120	Math 2, 4A, 12 or refer to CLM
	106-120	Math 2, 4A, 6, 8, 12, 17A		

(See: cut score change m101.doc, D. Sunday, October 2011.)

Supporting Summary Data for Changes – Math 101

Mean Grades for Accuplacer Elementary Algebra Test Scores

A progression of bottom level cut score level changes compared to average grades received in the course (without w grades)

Given mean grades and standard deviations,

Increasingly higher cut scores were evaluated below. A target mean grade of 2.45 was not reached until the cut score was set to 55. Given standard deviations that ranged from 1.36 to 1.39, if the lower limit for Math 101 was set at 50, the mean average grade is still over 2.0 (2.30) with a *sd* of 1.379 -- midway between 1.36 and 1.39.

Potential Impact of the Placement Score Change of 50-78:

With a cutscore of 50, potentially 40 more students per term would be placed into basic level Math 601/602 courses. (Given an N for the six semesters evaluated in the data, 457 students with current cut score to 149 students who scored at 50 and above).

Progressive Summaries for Analyzing a Cutscore Increase for Math 101:

Mean Grade Averages for all students who placed into Math 101 <u>and</u> who took the course given:					
Overall	N	Minimum	Maximum	Mean	Std. Deviation
4 pt. GPA	457	0	4	1.99	1.388
Cut score of 39	N	Minimum	Maximum	Mean	Std. Deviation
4 pt. GPA	260	0	4	2.17	1.356
Cut score of 42	N	Minimum	Maximum	Mean	Std. Deviation
4 pt. GPA	222	0	4	2.22	1.355
Cut score of 45	N	Minimum	Maximum	Mean	Std. Deviation
4 pt. GPA	193	0	4	2.25	1.374
Cut score of 48	N	Minimum	Maximum	Mean	Std. Deviation
4 pt. GPA	173	0	4	2.26	1.396
Cut score of 50	N	Minimum	Maximum	Mean	Std. Deviation
4 pt. GPA	149	0	4	2.30	1.379
Cut score of 55	N	Minimum	Maximum	Mean	Std. Deviation
4 pt. GPA	110	0	4	2.45	1.359

Recommendations

ACCUPLACER Cutscore Revisions – College Level Math Test

Accuplacer CLM	Current Cut Scores	Current Placement	Proposed Cut Scores	Proposed Placement
	0-31	Math 602	0-49	Refer to Arithmetic Test
	32-70	Math 101	50-90	Math 104
	71-105	Math 104	91-103	Math 2, 4A, 12
	106-120	Math 2, 4A, 6, 8, 12, 17A	104-120	Math 18A ^{1*}

(See: Endnote and CLM cut score change realignment.doc, D. Sunday, October 2011.)

Math 4A, 6, 12 - CLM Cutscore at 24-59					
	N	Minimum	Maximum	Mean	Std. Deviation
CLMScr	33	24	56	36.55	8.548
4 pt. GPA	33	0	4	2.82	1.103

Math 8, 17A – CLM Cutscore at 60-97					
	N	Minimum	Maximum	Mean	Std. Deviation
CLMScr	26	60	97	73.00	8.926
4 pt. GPA	26	0	4	2.50	1.476

There were no scores higher than 97 for the CLM.

Distribution and Progression for Transfer Level Math Courses given CLM Scores at 60 (previous floor) and Above					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	60	1	3.7	3.7	3.7
	61	1	3.7	3.7	7.4
	62	1	3.7	3.7	11.1
	64	1	3.7	3.7	14.8
	65	1	3.7	3.7	18.5
	66	4	14.8	14.8	33.3
	67	1	3.7	3.7	37.0
	68	3	11.1	11.1	48.1
	71	1	3.7	3.7	51.9
	73	1	3.7	3.7	55.6
	76	2	7.4	7.4	63.0
	77	2	7.4	7.4	70.4
	78	1	3.7	3.7	74.1
	79	1	3.7	3.7	77.8
	81	1	3.7	3.7	81.5
	83	4	14.8	14.8	96.3
	97	1	3.7	3.7	100.0
Total	27	100.0	100.0		

ⁱ Note: Only 27 students were found with scores higher than 60 on the CLM test, and only 26 received grades in a transfer level math course. This placement level could not be statistically validated given the six semesters of Columbia College data available. The recommendation above Math 2, 4A and 12 was derived from cut score ranges obtained from other colleges' placement rules. (See: ACCUPLMath_Cut Scores.xls, Alex Campbell, 2010.)