

Course Placement Service Report



SOUTHERN ARKANSAS UNIVERSITY (0142)
Magnolia, AR

Placement Group: OUT-OF-STATE

Subject Area: Mathematics

Data Cohort: 20152016

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Course Placement Report

Information for Making Placement Decisions

Placement Group: OUT-OF-STATE

Summary of Placement Variables

This table summarizes the placement variables used in requested analyses for each reference course. The table shows number of students, mean value, and standard deviation.

The descriptive statistics for course completers are based on students who receive A-F grades. However, if you chose to treat W grades as unsuccessful outcomes, the statistics will also include students with W grades.

		OUT-OF-STATE			Students who completed course		
Reference course	Placement variable	N	Mean	SD	N	Mean	SD
CLG ALG/MTH LIT	ACT Mathematics Score	182	19.2	4.1	76	19.5	3.3
	High School Mathematics Grade Average	150	3.2	0.6	64	3.1	0.6
	ACT Mathematics Score and High School Mathematics Grade Average	150	19.6 3.2	4.1 0.6	64	19.6 3.1	3.2 0.6

Summary of Course Outcomes

This table summarizes the course outcomes used in requested analyses for each reference course.

The table shows number of students, mean course grade, standard deviation, percent B or higher, percent C or higher, total of just W and I grades, and W grades not treated as successful.

		Grades used in analysis						
Reference course	Placement variable	N	Mean	SD	Percent B or higher	Percent C or higher	Total of W and I grades	W grades treated as not successful
CLG ALG/MTH LIT	ACT Mathematics Score	76	2.6	1.3	64	79	2	Yes
	High School Mathematics Grade Average	64	2.6	1.2	66	81	1	Yes
	ACT Mathematics Score and High School Mathematics Grade Average	64	2.6	1.2	66	81	1	Yes

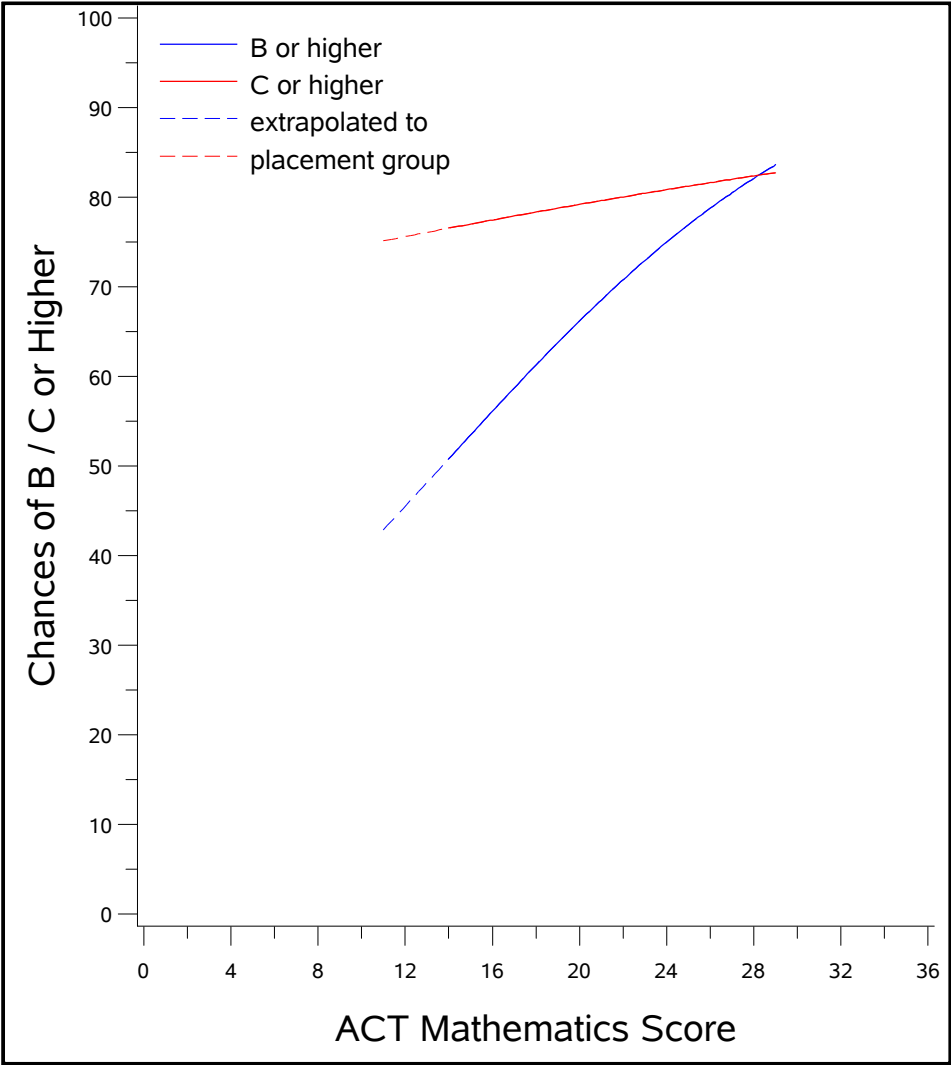
This table and graph report students' chances of achieving a B / C or higher in CLG ALG/MTH LIT, given their ACT Mathematics Score. For example, the chance that a student with an ACT Mathematics Score of 20 would obtain a B or higher in CLG ALG/MTH LIT is 66%.

If present, the boldface scores labeled as Opt. B and Opt. C in the table show the cutoff scores that are associated with the maximum accuracy rate. The information in the table and graph can be used to advise students about their chances of success in CLG ALG/MTH LIT.

Chance of Success in CLG ALG/MTH LIT,
Given ACT Mathematics Score

ACT Mathematics Score		Chance of success (B or higher)	Chance of success (C or higher)
Opt. B	29	84	83
	28	82	82
	27	80	82
	26	79	82
	25	77	81
	24	75	81
	23	73	80
	22	71	80
	21	69	80
	20	66	79
	19	64	79
	18	61	78
	17	59	78
	16	56	77
	15	53	77
	14	51	77
	13	48	76
	11	43	75

Chance of Success in CLG ALG/MTH LIT,
Given ACT Mathematics Score



Note: The chances of success for one or both criteria are all above or below 50%. No optimal cutoff score exists.

Placement Information for CLG ALG/MTH LIT Using ACT Mathematics Score

This table shows the effects of using different ACT Mathematics Score cutoffs in CLG ALG/MTH LIT. For example, if you were to require students to have an ACT Mathematics Score of at least 20 to be placed into CLG ALG/MTH LIT, then you would expect:

- about 64% of your students would be placed in a lower-level course
- about 54% of your placement decisions would be correct
- about 74% of those placed in CLG ALG/MTH LIT would obtain a B or higher

ACT Mathematics Score			B or higher		C or higher	
		Percent placed in lower-level course	Accuracy rate	Success rate	Accuracy rate	Success rate
	29	97	38	84	23	83
	28	95	40	83	24	83
	27	92	42	82	27	82
	26	90	43	81	28	82
	25	86	45	80	30	82
	24	82	47	79	33	82
	23	77	49	78	35	81
	22	73	51	77	38	81
	21	69	52	76	41	81
	20	64	54	74	43	81
	19	53	57	72	49	80
	18	45	59	70	54	80
	17	32	61	68	62	80
	16	15	63	66	71	79
Opt. B	15	4	64	64	77	79
	14	2	64	64	78	79
	13	1	64	64	79	79
	11		64	64	79	79

If present, the shaded rows highlight the optimal cutoff scores (i.e., those that lead to the highest percentage of correct placement decisions).

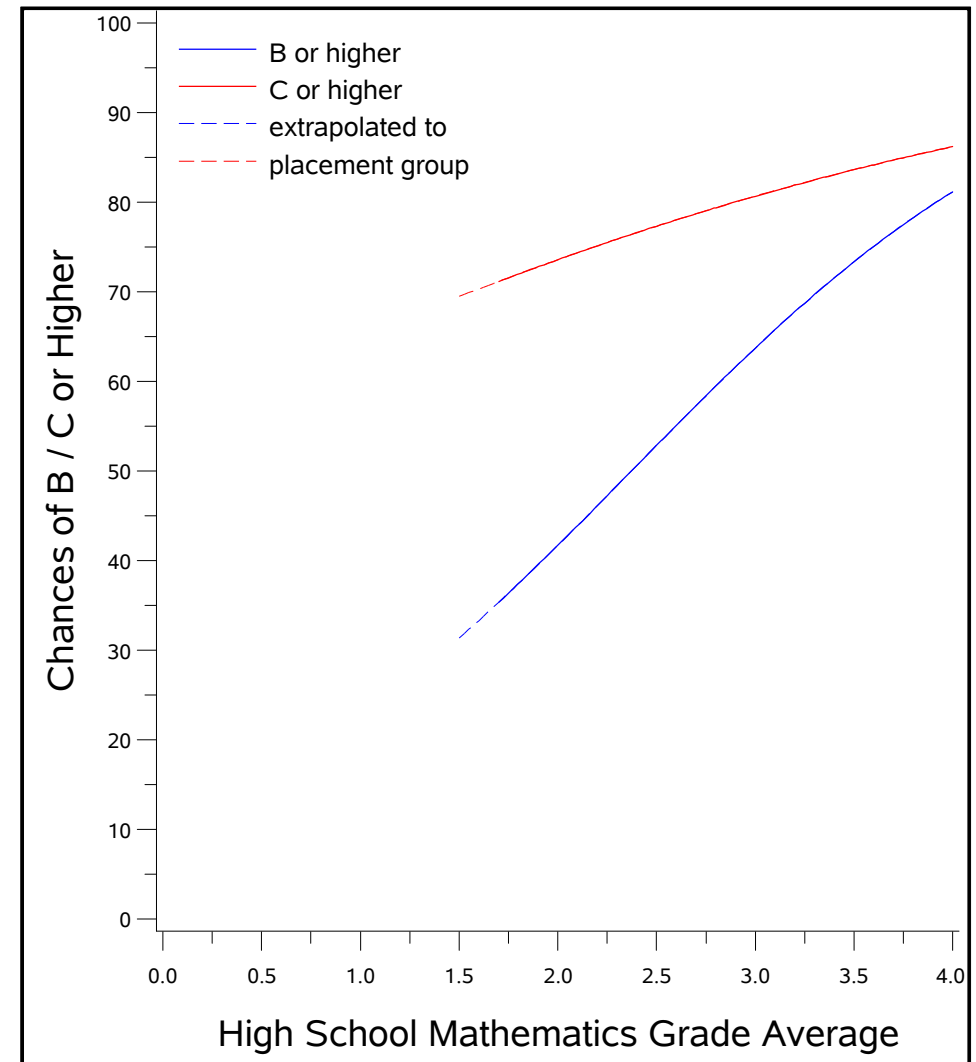
This table and graph report students' chances of achieving a B / C or higher in CLG ALG/MTH LIT, given their High School Mathematics Grade Average. For example, the chance that a student with a High School Mathematics Grade Average of 2.8 would obtain a B or higher in CLG ALG/MTH LIT is 59%.

If present, the boldface scores labeled as Opt. B and Opt. C in the table show the cutoff scores that are associated with the maximum accuracy rate. The information in the table and graph can be used to advise students about their chances of success in CLG ALG/MTH LIT.

**Chance of Success in CLG ALG/MTH LIT,
Given High School Mathematics Grade Average**

High School Mathematics Grade Average		Chance of success (B or higher)	Chance of success (C or higher)
Opt. B	4.0	81	86
	3.8	78	85
	3.7	77	85
	3.6	75	84
	3.5	73	84
	3.3	70	83
	3.2	68	82
	3.0	64	81
	2.8	59	79
	2.7	57	79
	2.5	53	77
	2.3	48	76
	2.0	42	74
	1.7	35	71
	1.5	31	69

**Chance of Success in CLG ALG/MTH LIT,
Given High School Mathematics Grade Average**



Note: The chances of success for one or both criteria are all above or below 50%. No optimal cutoff score exists.

Placement Information for CLG ALG/MTH LIT Using High School Mathematics Grade Average

This table shows the effects of using different High School Mathematics Grade Average cutoffs in CLG ALG/MTH LIT. For example, if you were to require students to have a High School Mathematics Grade Average of at least 2.8 to be placed into CLG ALG/MTH LIT, then you would expect:

- about 22% of your students would be placed in a lower-level course
- about 68% of your placement decisions would be correct
- about 72% of those placed in CLG ALG/MTH LIT would obtain a B or higher

High School Mathematics Grade Average			B or higher		C or higher	
		Percent placed in lower-level course	Accuracy rate	Success rate	Accuracy rate	Success rate
Opt. B	4.0	84	43	81	30	86
	3.8	77	47	80	35	86
	3.7	65	53	79	43	86
	3.6	63	55	79	45	85
	3.5	59	57	78	48	85
	3.3	49	61	77	54	85
	3.2	45	62	76	56	85
	3.0	27	67	73	68	84
	2.8	22	68	72	70	83
	2.7	19	68	72	72	83
	2.5	15	68	71	74	83
	2.3	6	68	69	79	82
	2.0	2	67	68	81	82
	1.7	1	67	67	81	82
	1.5		67	67	82	82

If present, the shaded rows highlight the optimal cutoff scores (i.e., those that lead to the highest percentage of correct placement decisions).

Chance of a B or Higher in CLG ALG/MTH LIT, Given ACT Mathematics Score and High School Mathematics Grade Average

The matrix reports students' chances of achieving a B or higher in CLG ALG/MTH LIT, given their ACT Mathematics Score and High School Mathematics Grade Average. For example, the chance that a student with an ACT Mathematics Score of 17 and a High School Mathematics Grade Average of 2.2 would obtain a B or higher in CLG ALG/MTH LIT is 45%.

If present, the dark gold area shows the combinations of ACT Mathematics Score and High School Mathematics Grade Average values that are at or near a 50% chance level. The combinations that maximize the percentage of correct placement decisions (accuracy rate) always correspond to a chance of 50%.

High School Mathematics Grade Average

4.0	59	60	62	63	64	65	67	68	69	70	71	72	74	75	76	77	78	79	79	80	81	82	83	84	84	85	86	86	87	88	88	89	89	90	90	91
3.9	57	58	60	61	62	64	65	66	67	68	70	71	72	73	74	75	76	77	78	79	80	81	82	82	83	84	85	85	86	87	87	88	89	89	90	90
3.8	55	56	58	59	60	62	63	64	65	67	68	69	70	71	73	74	75	76	77	78	79	80	80	81	82	83	84	84	85	86	86	87	88	88	89	89
3.7	53	54	56	57	58	60	61	62	64	65	66	67	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	83	84	85	85	86	87	87	88	89
3.6	51	52	54	55	56	58	59	60	62	63	64	66	67	68	69	70	71	73	74	75	76	77	78	79	80	80	81	82	83	84	84	85	86	87	87	88
3.5	49	50	52	53	54	56	57	58	60	61	62	64	65	66	67	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	83	84	85	86	86	87
3.4	47	48	50	51	52	54	55	56	58	59	61	62	63	64	66	67	68	69	70	72	73	74	75	76	77	78	79	80	81	81	82	83	84	85	85	86
3.3	45	46	48	49	50	52	53	54	56	57	59	60	61	63	64	65	66	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	83	84	85
3.2	43	44	46	47	48	50	51	52	54	55	57	58	59	61	62	63	64	66	67	68	69	71	72	73	74	75	76	77	78	79	80	81	81	82	83	84
3.1	41	42	44	45	46	48	49	50	52	53	55	56	57	59	60	61	63	64	65	66	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83
3.0	39	40	42	43	44	46	47	48	50	51	53	54	55	57	58	59	61	62	63	65	66	67	68	69	71	72	73	74	75	76	77	78	79	80	81	82
2.9	37	38	40	41	42	44	45	46	48	49	51	52	53	55	56	57	59	60	61	63	64	65	67	68	69	70	71	72	73	75	76	77	78	78	79	80
2.8	35	36	38	39	40	42	43	44	46	47	49	50	51	53	54	55	57	58	59	61	62	63	65	66	67	68	70	71	72	73	74	75	76	77	78	79
2.7	33	35	36	37	38	40	41	42	44	45	47	48	49	51	52	53	55	56	58	59	60	62	63	64	65	67	68	69	70	71	72	74	75	76	77	78
2.6	32	33	34	35	37	38	39	41	42	43	45	46	47	49	50	51	53	54	56	57	58	60	61	62	64	65	66	67	68	70	71	72	73	74	75	76
2.5	30	31	32	33	35	36	37	39	40	41	43	44	45	47	48	49	51	52	54	55	56	58	59	60	62	63	64	65	67	68	69	70	71	73	74	75
2.4	28	29	31	32	33	34	35	37	38	39	41	42	43	45	46	47	49	50	52	53	54	56	57	58	60	61	62	64	65	66	67	69	70	71	72	73
2.3	27	28	29	30	31	32	34	35	36	37	39	40	41	43	44	45	47	48	50	51	52	54	55	56	58	59	60	62	63	64	66	67	68	69	70	71
2.2	25	26	27	28	29	31	32	33	34	36	37	38	39	41	42	43	45	46	48	49	50	52	53	54	56	57	58	60	61	62	64	65	66	67	69	70
2.1	24	25	26	27	28	29	30	31	32	34	35	36	37	39	40	41	43	44	45	47	48	50	51	52	54	55	56	58	59	61	62	63	64	66	67	68
2.0	22	23	24	25	26	27	28	30	31	32	33	34	36	37	38	39	41	42	44	45	46	48	49	50	52	53	54	56	57	59	60	61	63	64	65	66
1.9	21	22	23	24	25	26	27	28	29	30	31	33	34	35	36	38	39	40	42	43	44	46	47	48	50	51	52	54	55	57	58	59	61	62	63	64
1.8	20	20	21	22	23	24	25	26	27	29	30	31	32	33	34	36	37	38	40	41	42	44	45	46	48	49	50	52	53	55	56	57	59	60	61	63
1.7	18	19	20	21	22	23	24	25	26	27	28	29	30	31	33	34	35	36	38	39	40	42	43	44	46	47	48	50	51	53	54	55	57	58	59	61
1.6	17	18	19	20	21	22	23	24	25	26	27	29	30	31	32	33	35	36	37	38	40	41	42	44	45	46	48	49	51	52	53	55	56	57	59	
1.5	16	17	18	18	19	20	21	22	23	24	25	26	27	28	29	30	32	33	34	35	36	38	39	40	42	43	44	46	47	49	50	51	53	54	55	57
1.4	15	16	16	17	18	19	20	21	21	22	23	24	25	26	28	29	30	31	32	33	35	36	37	38	40	41	42	44	45	47	48	49	51	52	53	55
1.3	14	15	15	16	17	18	18	19	20	21	22	23	24	25	26	27	28	29	30	32	33	34	35	37	38	39	41	42	43	45	46	47	49	50	51	53
1.2	13	14	14	15	16	16	17	18	19	20	21	22	22	23	24	25	27	28	29	30	31	32	33	35	36	37	39	40	41	43	44	45	47	48	49	51
1.1	12	13	13	14	15	15	16	17	18	18	19	20	21	22	23	24	25	26	27	28	29	31	32	33	34	35	37	38	39	41	42	43	45	46	47	49
1.0	11	12	12	13	14	14	15	16	17	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	34	35	36	37	39	40	41	43	44	45	47
0.9	10	11	12	12	13	13	14	15	15	16	17	18	19	19	20	21	22	23	24	25	26	27	28	29	31	32	33	34	36	37	38	39	41	42	43	45
0.8	10	10	11	11	12	12	13	14	14	15	16	17	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	34	35	36	37	39	40	41	43
0.7	9	10	10	11	11	12	12	13	13	14	15	15	16	17	18	19	19	20	21	22	23	24	25	26	27	28	30	31	32	33	34	36	37	38	39	41
0.6	8	9	9	10	10	11	11	12	13	13	14	14	15	16	17	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	33	34	35	36	38	39
0.5	8	8	9	9	10	10	11	11	12	12	13	13	14	15	16	16	17	18	19	20	20	21	22	23	24	25	26	27	29	30	31	32	33	34	36	37
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36

ACT Mathematics Score

The matrix reports students' chances of achieving a C or higher in CLG ALG/MTH LIT, given their ACT Mathematics Score and High School Mathematics Grade Average. For example, the chance that a student with an ACT Mathematics Score of 17 and a High School Mathematics Grade Average of 2.2 would obtain a C or higher in CLG ALG/MTH LIT is 75%.

If present, the dark gold area shows the combinations of ACT Mathematics Score and High School Mathematics Grade Average values that are at or near a 50% chance level. The combinations that maximize the percentage of correct placement decisions (accuracy rate) always correspond to a chance of 50%.

Note: One or both of the statistics

ACT Mathematics Score

Placement Information for CLG ALG/MTH LIT Using ACT Mathematics Score and High School Mathematics Grade Average

This table shows the impact of using different combinations of ACT Mathematics Scores and High School Mathematics Grade Averages as cutoff scores in CLG ALG/MTH LIT. For example, if you were to require students to have at least a 50% chance of a B or higher based on their ACT Mathematics Scores and High School Mathematics Grade Averages to be placed into CLG ALG/MTH LIT (see page 9), then you would expect:

- about 15% of your students would be placed in a lower-level course
- about 69% of your placement decisions would be correct
- about 71% of those placed in CLG ALG/MTH LIT would obtain a B or higher

	B or higher			C or higher		
Chance range	Percent below	Accuracy rate	Success rate	Percent below	Accuracy rate	Success rate
91 - 99				Note: Statistics are not reported for negative relationships.		
85 - 90	97	35	86			
82 - 84	90	41	85			
79 - 81	83	45	83			
76 - 78	72	51	81			
73 - 75	61	57	80			
70 - 72	55	60	79			
67 - 69	49	62	78			
64 - 66	43	64	77			
61 - 63	37	65	75			
58 - 60	26	67	73			
55 - 57	21	68	72			
52 - 54	17	69	71			
49 - 51	15	69	71			
46 - 48	11	68	69			
43 - 45	6	68	68			
40 - 42	3	67	68			
37 - 39	3	67	67			
34 - 36	1	67	67			
31 - 33	1	67	67			
28 - 30	0	66	66			
25 - 27						
22 - 24						
19 - 21						
16 - 18						
10 - 15						
1 - 9						

If present, the shaded rows highlight the optimal cutoff combinations (i.e., those that lead to the highest percentage of correct placement decisions).

Logistic Regression Weights and Correlations

This table contains the estimated logistic regression weights used to calculate the chances of success in each course. The weights associated with each set of placement variables are shown with the corresponding significance level (p-value). This information can be used to calculate the chances of success for a given student.

A p-value is an estimate of the probability that a regression weight of magnitude equal to that reported in the table would occur by chance if the true regression weight were 0; the smaller the p-value, the more highly "statistically significant" the regression weight is. The correlation between the placement variables and course grades also is listed.

		B or higher		C or higher		
Course	Placement variable(s)	Logistic regression weight	P-value	Logistic regression weight	P-value	Correlation
CLG ALG/MTH LIT	Intercept	-1.46		0.82		
	ACT Mathematics Score	0.11	0.1802	0.03	0.771	0.21
	Intercept	-2.13		0.22		
	High School Mathematics Grade Average	0.90	0.0422	0.40	0.4208	0.22
	Intercept	-2.92		0.44		
	ACT Mathematics Score and High School Mathematics Grade Average	0.06 0.81	0.5695 0.084	-0.02 0.43	0.8857 0.4261	0.25