



### Research Briefs from the Office of Institutional Research PHYSIC-110 and 200 Success, Retention, Persistence

**Purpose:** The purpose of this brief is to illustrate the success and retention of PHYSIC-110 (General Physics I), 111 (General Physics II), 200 (Physics I), and 201 (Physics II) CHC students from Fall 2004 to Spring 2009. In addition, CHC student persistence from PHYSIC-110 to 111 and from PHYSIC-200 to 201 (or 150B at Valley) is also examined.

**Methodology:** Grades on record (GOR) refer to one of the following grades: A, B, C, D, F, P, NP, I, or W. Success rate is a grade of A, B, C, or P divided by the number of GOR. Retention is the number of A, B, C, D, F, P, NP, or I grades divided by the number of GOR. Persistence rate tracks the number of students who successfully completed PHYSIC-110 and 200 to those who earned a GOR in PHYSIC-111 (or 150B at Valley) and 201 (also includes students who earned GOR in 201 at Valley) respectively.

**Findings:** Tables 1, 1A, and 1B illustrate the success and retention rates of PHYSIC-110 and 111 students as well as the persistence rate of students moving from PHYSIC-110 to 111. In the last five years 62 students have earned a GOR in PHYSIC-110 and 32 have earned a GOR in PHYSIC-111. In PHYSIC-110 the success rate has averaged 66% and the retention rate has averaged 79%. Moreover, the success rate in PHYSIC-111 has averaged 81% and the retention rate has averaged 91%. Of the 41 students who successfully completed PHYSIC-110 in the last five years, 26 or 63% have persisted to PHYSIC-111.

**Table 1: Success and Retention of PHYSIC-110 CHC Students from Fall 2004 to Fall 2008.**

PHYSIC-110	Success			Retention		
	#	GOR	%	#	GOR	%
2004/FA	3	7	42.9	5	7	71.4
2005/FA	6	13	69.2	12	13	92.3
2006/FA	7	15	46.7	9	15	60.0
2007/FA	11	13	84.6	11	13	84.6
2008/FA	11	14	78.6	12	14	85.7
Total	41	62	66.1	49	62	79.0

**Table 1A: Success and Retention of PHYSIC-111 CHC Students from Spring 2005 to Spring 2009.**

PHYSIC-111	Success			Retention		
	#	GOR	%	#	GOR	%
2005/SP	3	3	100.0	3	3	100.0
2006/SP	3	4	75.0	3	4	75.0
2007/SP	5	5	100.0	5	5	100.0
2008/SP	6	10	60.0	9	10	90.0
2009/SP	9	10	90.0	9	10	90.0
Total	26	32	81.3	29	32	90.6

**Table 1B: Persistence from PHYSIC-110 to PHYSIC-111 (or 150B at Valley) from Fall 2004 to Fall 2008.**

Successful in PHYSIC-110		PSYCH-111		PHYSIC-150B		Total	
Term	Success	#	%	#	%	#	%
2004/FA	3	2	66.7	0	0.0	2	66.7
2005/FA	6	3	50.0	0	0.0	3	50.0
2006/FA	7	4	57.1	0	0.0	4	57.1
2007/FA	11	8	72.7	1	9.1	9	81.8
2008/FA	11	8	72.7	0	0.0	8	72.7
Total	41	25	61.0	1	2.4	26	63.4

Note. “#” refers to the number of students who earned a GOR in the corresponding course. “%” is the number of students who earned a GOR divided by the number who successfully completed PHYSIC-110 multiplied by 100.

Tables 2, 2A, and 2B illustrate the success and retention rates of PHYSIC-200 and 201 students as well as the persistence rate of students moving from PHYSIC-200 to 201. In the last five years 85 students have earned a GOR in PHYSIC-200 and 42 have earned a GOR in PHYSIC-201. In PHYSIC-200 the success rate has averaged 62% and the retention rate has averaged 75%. Moreover, the success rate in PHYSIC-201 has averaged 71% and the retention rate has averaged 91%. Of the 53 students who successfully completed PHYSIC-200 in the last five years, 45 or 85% have persisted to PHYSIC-201.

**Table 2: Success and Retention of PHYSIC-200 CHC Students from Fall 2004 to Fall 2008.**

PHYSIC-200	Success			Retention		
	#	GOR	%	#	GOR	%
2004/FA	9	13	69.2	10	13	76.9
2005/FA	7	13	53.8	10	13	76.9
2006/FA	12	16	75.0	13	16	81.3
2007/FA	13	24	54.2	16	24	66.7
2008/FA	12	19	63.2	15	19	78.9
Total	53	85	62.4	64	85	75.3

**Table 2A: Success and Retention of PHYSIC-201 CHC Students from Spring 2005 to Spring 2009.**

PHYSIC-201	Success			Retention		
	#	GOR	%	#	GOR	%
2005/SP	5	6	83.3	5	6	83.3
2006/SP	6	8	75.0	8	8	100.0
2007/SP	7	7	100.0	7	7	100.0
2008/SP	5	11	45.5	9	11	81.8
2009/SP	7	10	70.0	9	10	90.0
Total	30	42	71.4	38	42	90.5

**Table 2B: Persistence from PHYSIC-200 to PHYSIC-201 from Fall 2004 to Fall 2008.**

Successful in PHYSIC-200		CHC		Valley		Total	
Term	Success	#	%	#	%	#	%
2004/FA	9	6	66.7	0	0.0	6	66.7
2005/FA	7	7	100.0	0	0.0	7	100.0
2006/FA	12	9	75.0	1	8.3	10	83.3
2007/FA	13	7	53.8	5	38.5	12	92.3
2008/FA	12	8	66.7	2	16.7	10	83.3
Total	53	37	69.8	8	15.1	45	84.9

Note. “#” refers to the number of students who earned a GOR in PHYSIC-200. “%” is the number of students who earned a GOR divided by the number who successfully completed PHYSIC-200 multiplied by 100.