

To: Jerry Rosenberg, PSME Dean

From: Mallory Newell, De Anza Researcher

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Subject: Progression to Chemistry1A – CHEM30A or CHEM50

The Chemistry Department is looking to explore the success rates of students in CHEM1A (General Chemistry) based on whether they took CHEM30A or CHEM50. Prerequisites for CHEM1A are CHEM25 (Preparation Course for General Chemistry; a new course offered in 2015-16) or CHEM30A (Introduction to General, Organic and Biochemistry) or via placement test AND MATH114 or equivalent.

Students who enrolled in CHEM1A AND CHEM50 or CHEM30A were tracked between 2010-11 and 2014-15 (five years). The highest grade in all courses was included. Only students who passed either CHEM50 or CHEM30A were included. Over the time period, 2,610 students received a grade in CHEM1A. Students that took CHEM50 and CHEM30A were excluded from the analysis.

Table 1. Success in CHEM1A for Students who Took CHEM30A

Success		Non Success		Withdraw		Total	
Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent
29	56%	9	17%	14	27%	52	100%

- Students who passed CHEM30A and enrolled in CHEM1A exhibited a success rate of 56% in CHEM1A.
- Only 52 students took CHEM30A and CHEM1A over the past five years which results in a sample size too small to make any generalizations about this population. The small sample may be an indication that the majority of students who enroll in CHEM30 do not intend to progress to CHEM1A.

Table 2. Success in CHEM1A for Students who Took CHEM50

Success		Non Success		Withdraw		Total	
Grades	Percent	Grades	Percent	Grades	Percent	Grades	Percent
734	67%	117	11%	250	23%	1,101	100%

- Students who passed CHEM50 and enrolled in CHEM1A exhibited a success rate of 67% in CHEM1A.
- 1,101 students took CHEM50 and CHEM1A over the past five years.

Students can enroll in CHEM1A via the placement test. An analysis conducted in 2014 found that students who placed into CHEM1A had varying success rates depending on their score. For example, students who scored a 22 (low end) had a success rate of 55%, while students who scored between 42-44 (high end) had a success rate of 95%. Overall success rates for all students placed via the test were 81%.

<http://www.deanza.edu/ir/deanza-research-projects/2013-14/Chemistry%20Progression.pdf>