



FOOTHILL COLLEGE
Institutional Research and Planning

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RE: Fall 2012 and Spring 2013 MATH 1A (Calculus) Enrollment

Overview

Students enrolled in Math 1A during Fall 2012 and Spring 2013 were identified to determine enrollment characteristics, such as international student status and course success. Table 1 shows Math 1A enrollment in Fall 2012 and Spring 2013, including those students repeating the course that term and those who would be identified as STEM students. At least one-quarter of Math 1A enrollment were students repeating the course (F12: 26%; S13: 31%); one-third enrolled in Math 1A and at least one additional science course within the past academic year (F12: 39%; S13: 32%).

Table 1. Math 1A + 1 STEM Course Enrollment, Fall 2012 and Spring 2013.

| | <u>Fall 2012</u> | | <u>Spring 2013</u> | |
|------------------|------------------|---------|--------------------|---------|
| | Enr | Percent | Enr | Percent |
| Math 1A | 297 | 100% | 256 | 100% |
| Course Repeaters | 76 | 26% | 79 | 31% |
| *STEM students | 117 | 39% | 83 | 32% |

*Fall 2012 STEM students were determined based on STEM course enrollment in 2011-12, Summer 2012, Fall 2012. Spring 2013 STEM students were determined based on STEM course enrollment in 2012-13.

International students compose roughly 40% of Math 1A enrollment in both Fall 2012 and Spring 2013 (Table 2).

Table 2. Math 1A Enrollment by Student Status, Fall 2012 and Spring 2013.

| Student Status | <u>Fall 2012</u> | | <u>Spring 2013</u> | |
|----------------|------------------|---------|--------------------|---------|
| | Enr | Percent | Enr | Percent |
| Domestic | 167 | 56% | 155 | 61% |
| International | 130 | 44% | 101 | 39% |
| Total | 297 | 100% | 256 | 100% |

In Fall 2012, international students successfully completed Math 1A at a higher percentage rate compared to domestic students (72% vs. 50%) (Table 3). This percentage rate difference is significant at the 99% level (two sample t-test between percents); suggesting that the higher success rate among international students is not simply due to chance.

Table 3. Math 1A Course Success Rates by Student Status, Fall 2012.

| Student Status | <u>Success</u> | | <u>Nonsuccess</u> | | <u>Withdraw</u> | | <u>Total</u> | |
|------------------|----------------|---------|-------------------|---------|-----------------|---------|--------------|---------|
| | Enr | Percent | Enr | Percent | Enr | Percent | Enr | Percent |
| Domestic student | 83 | 50% | 53 | 32% | 31 | 19% | 167 | 100% |
| Intl student | 93 | 72% | 29 | 22% | 8 | 6% | 130 | 100% |

Table 4 identifies the success rates among those Fall 2012 Math 1A students who enrolled in the course and were unsuccessful in their previous attempt(s). About half of these students were able to pass the course in Fall 2012 (46%).

Table 4. Math 1A Course Success Rates among Course Repeaters, Fall 2012.

| <u>Success</u> | | <u>Nonsuccess</u> | | <u>Withdraw</u> | | <u>Total</u> | |
|----------------|---------|-------------------|---------|-----------------|---------|--------------|---------|
| Enr | Percent | Enr | Percent | Enr | Percent | Enr | Percent |
| 39 | 46% | 29 | 39% | 8 | 16% | 76 | 100% |

Methodology

STEM students were determined based on enrollment (not course success) in BIOL 1A/B, CIS 15A/B/C, CIS 27A/B/C, CS 1A/B, CS 2A/B, CS 10, CS 50A, CHEM 1A/B/C, CHEM 2A/B, ENGR6, ENGR 10, ENGR 39, ENGR 40, ENGR 49, PHYS 2A/B.

Source

FHDA IR&P, ODS [Registration Analysis, Open Doors Report]