

FOOTHILL COLLEGE

Institutional Research and Planning

DATE: July 12, 2012

TO: Peter Murray, Dean, Physical Sciences, Math & Engineering

FROM: Elaine Kuo, College Researcher

RE: CHEM 1A, CIS 15A, CIS 27A, MATH 1A

Overview

Students enrolled in CHEM 1A, CIS 15A, CIS 27A and MATH 1A during Fall 2011 were identified and examined based on demographic and financial aid characteristics. Enrollment in these four courses was 960, with 886 unique individuals. The following tables are included in this memo:

- Student enrollment by gender and ethnicity at course level
- Student enrollment by individual ethnic groups at course level
- Student enrollment by time status and gender at course level
- Student enrollment by time status, gender and ethnicity at course level
- Financial aid recipients by ethnicity
- Student enrollment by financial aid, gender and ethnicity at course level
- Student enrollment by financial aid and time status at course level
- Underrepresented student enrollment with no financial aid by gender and time status

Women continue to be underrepresented in the CIS 15A/27A and MATH 1A courses, making up between 23-35% of class enrollment. More underrepresented students are enrolled in CHEM 1A than the other three courses (22% compared to mid-teens). More full-time students can be found in MATH 1A (66%) and CHEM 1A (45%) than the CIS courses. Additionally, more underrepresented students in these two courses were attending part-time compared to their peers. Out of the 886 students enrolled in the four courses, 64 or 7% received a Federal Pell Grant in Fall 2011. Underrepresented students were roughly one-third of those Pell recipients (31%).

Table 1. CHEM 1A, CIS 15A/27A and MATH 1A by Gender and Ethnicity, Fall 2011.

		<u>CHEMF</u>	CHEMF001A		CISF015A		CISF027A		-001A
Gender	Ethnicity	Students	Percent	Students	Percent	Students	Percent	Students	Percent
Female	Targeted Groups	23	11%	6	3%	11	5%	17	5%
	Nontargeted Grps	72	34%	35	20%	48	21%	104	30%
	Female Total	95	45%	41	23%	59	26%	121	35%
Male	Targeted Groups	23	11%	23	13%	26	12%	29	8%
	Nontargeted Grps	94	44%	108	62%	135	60%	197	57%
	Male Total	117	55%	131	75%	161	72%	226	65%
Unknown	Nontargeted Grps	1	0%	3	2%	4	2%	1	0%
	Unknown Total	1	0%	3	2%	4	2%	1	0%
Total		213	100%	175	100%	224	100%	348	100%

Table 2. CHEM 1A, CIS 15A/27A and MATH 1A by Ethnicity, Fall 2011.

	<u>CHEMI</u>	CHEMF001A CISF015A		15 <u>A</u>	<u>CISFO</u>	27 <u>A</u>	MATHF001A	
Ethnicity	Students	Percent	Students	Percent	Students	Percent	Students	Percent
African American	4	2%	8	5%	6	3%	2	1%
Asian	81	38%	68	39%	86	38%	216	62%
Filipino	13	6%	4	2%	4	2%	12	3%
Hispanic	29	14%	16	9%	24	11%	29	8%
Native American					2	1%	1	0%
Pacific Islander			1	1%	1	0%	2	1%
White	72	34%	63	36%	91	41%	54	16%
Decline to state/Unk	14	7%	15	9%	10	4%	32	9%
Total	213	100%	175	100%	224	100%	348	100%

Table 3. CHEM 1A, CIS 15A/27A and MATH 1A by Time Status and Gender, Fall 2011.

		<u>CHEMI</u>	-001A	<u>CISF015A</u> <u>CISF027A</u>		<u>27A</u>	MATHF001A		
Time Status	Gender	Students	Percent	Students	Percent	Students	Percent	Students	Percent
Full-time	Female	37	17%	11	6%	7	3%	81	23%
	Male	59	28%	43	25%	29	13%	150	43%
	Unknown	1	0%					1	0%
	FT Total	97	45%	54	31%	36	16%	232	66%
Part-time	Female	52	24%	25	14%	49	22%	34	10%
	Male	53	25%	77	44%	120	54%	65	19%
	Unknown			3	2%	4	2%		
	PT Total	105	49%	105	60%	173	78%	99	29%
Withdrawn	Female	6	3%	5	3%	3	1%	6	2%
	Male Withdrawn	5	2%	11	6%	12	5%	11	3%
	Total	11	5%	16	9%	15	6%	17	5%
Total		213	100%	175	100%	224	100%	348	100%

Table 4. CHEM 1A, CIS 15A/27A and MATH 1A by Time Status, Gender and Ethnicity, Fall 2011.

			<u>Full-time</u> <u>Part-time</u>		<u>time</u>	Witho	lrawn_	<u>Total</u>		
Course	Gender	Ethnicity	Students	Percent	Students	Percent	Students	Percent	Students	Percent
CHEMF001A	Female	Targeted Groups	9	2%	11	2%	3	5%	23	2%
		Nontargeted Grps	28	7%	41	9%	3	5%	72	8%
	Male	Targeted Groups	8	2%	13	3%	2	3%	23	2%
		Nontargeted Grps	51	12%	40	8%	3	5%	94	10%
	Unknown	Nontargeted Grps	1	0%					1	0%
		CHEM 1A Total	97	23%	105	22%	11	19%	213	22%
CISF015A	Female	Targeted Groups	2	0%	3	1%	1	2%	6	1%
		Nontargeted Grps	9	2%	22	5%	4	7%	35	4%
	Male	Targeted Groups	6	1%	14	3%	3	5%	23	2%
		Nontargeted Grps	37	9%	63	13%	8	14%	108	11%
	Unknown	Nontargeted Grps			3	1%			3	0%
		CIS 15A Total	54	13%	105	22%	16	27%	175	18%
CISF027A	Female	Targeted Groups	1	0%	8	2%	2	3%	11	1%
		Nontargeted Grps	6	1%	41	9%	1	2%	48	5%
	Male	Targeted Groups	7	2%	16	3%	3	5%	26	3%
		Nontargeted Grps	22	5%	104	22%	9	15%	135	14%
	Unknown	Nontargeted Grps			4	1%			4	0%
		CIS 27A Total	36	9%	173	36%	15	25%	224	23%
MATHF001A	Female	Targeted Groups	8	2%	7	1%	2	3%	17	2%
		Nontargeted Grps	73	17%	27	6%	4	7%	104	11%
	Male	Targeted Groups	17	4%	10	2%	2	3%	29	3%
		Nontargeted Grps	133	32%	55	11%	9	15%	197	21%
	Unknown	Nontargeted Grps	1	0%					1	0%
		MATH 1A Total	232	55%	99	21%	17	29%	348	36%

Table 5. Financial Aid Recipients by Ethnicity, Fall 2011.

	Federal Pell Grant					
	Students	Percent				
Targeted Groups	19	31%				
Nontargeted Grps	45	69%				
Total	64	100%				

Table 6. CHEM 1A, CIS 15A/27A and MATH 1A by Financial Aid and Ethnicity, Fall 2011.

	Federal Pell Grant									
	<u>Targeted</u>	<u>Groups</u>	Nontargete	ed Groups	<u>Total</u>					
Course	Students	Percent	Students	Percent	Students	Percent				
CHEMF001A	8	36%	15	31%	23	32%				
CISF015A	4	18%	9	18%	13	18%				
CISF027A	4	18%	8	16%	12	17%				
MATHF001A	6	27%	17	35%	23	32%				
Total	22	100%	49	100%	71	100%				

Table 7. CHEM 1A, CIS 15A/27A and MATH 1A by Financial Aid, Gender and Ethnicity, Fall 2011.

			CHEMF001A CISF015A		<u>CISFO</u>	CISF027A		F001A		
Award	Gender	Ethnicity	Students	Percent	Students	Percent	Students	Percent	Students	Percent
Federal Pell										
Grant	Female	Targeted Groups	4	2%			1	0%	3	1%
		Nontargeted Grps	7	3%	1	1%	3	1%	5	1%
	Male	Targeted Groups	4	2%	4	2%	3	1%	3	1%
		Nontargeted Grps	8	4%	8	5%	5	2%	12	3%
	Pell Total		23	11%	13	7%	12	5%	23	7%
No FA	Female	Targeted Groups	19	9%	6	3%	10	4%	14	4%
		Nontargeted Grps	65	31%	34	19%	45	20%	99	28%
	Male	Targeted Groups	19	9%	19	11%	23	10%	26	7%
		Nontargeted Grps	86	40%	100	57%	130	58%	185	53%
	Unknown No FA	Nontargeted Grps	1	0%	3	2%	4	2%	1	0%
	Total		190	89%	162	93%	212	95%	325	93%
Total			213	100%	175	100%	224	100%	348	100%

Table 8. CHEM 1A, CIS 15A/27A and MATH 1A by Financial Aid and Time Status, Fall 2011.

			CHEMF001A		CISF015A		CISF027A		MATHF001A	
Award	Time Status	Students	Percent	Students	Percent	Students	Percent	Students	Percent	
Federal Pell	Full-time	13	6%	6	3%	5	2%	17	5%	
Grant	Part-time	10	5%	6	3%	7	3%	6	2%	
	Withdrawn			1	1%					
No FA	Full-time	84	39%	48	27%	31	14%	215	62%	
	Part-time	95	45%	99	57%	166	74%	93	27%	
	Withdrawn	11	5%	15	9%	15	7%	17	5%	
Total		213	100%	175	100%	224	100%	348	100%	

Table 9. CHEM 1A, CIS 15A/27A and MATH 1A Underrepresented Students with No Financial Aid by Gender and Time Status, Fall 2011.

		Received No Financial Aid								
		<u>Full-time</u>		<u>Part-time</u>		<u>Withdrawn</u>		<u>Total</u>		
Course	Gender	Students	Percent	Students	Percent	Students	Percent	Students	Percent	
CHEMF001A	Female	7	15%	9	13%	3	18%	19	14%	
	Male	6	13%	11	15%	2	12%	19	14%	
CISF015A	Female	2	4%	3	4%	1	6%	6	4%	
	Male	4	9%	13	18%	2	12%	19	14%	
CISF027A	Female	1	2%	7	10%	2	12%	10	7%	
	Male	6	13%	14	19%	3	18%	23	17%	
MATHF001A	Female	6	13%	6	8%	2	12%	14	10%	
	Male	15	32%	9	13%	2	12%	26	19%	
Total		47	100%	72	100%	17	100%	136	100%	

Methodology

Students enrolled in Fall 2011 and received a final grade were included in these findings. This group of students was then matched with a secondary analysis of students who received financial aid (specifically the Pell grant) in Fall 2011 to determine which of the STEM students also received financial aid.

Targeted groups include African American, Filipino, Hispanic, Native American and Pacific Islander. Nontargeted groups include Asian, White, Decline to State and Unknown/Unreported. The total amount of financial aid recipients in Tables 5 and 6 do not match because Table 5 represents an unduplicated count while Table 6 shows a duplicated number based on course enrollment.

FHDA IR&P ODS [Student Course, Government Student, LaManque Ethnicity Final, Government Financial Aid