

Los Medanos College
Program Review Data for
Astronomy

Prepared by the Office of Institutional Research

August 2006

Background

This report provides the department with three-year trends on indicators on the following areas:

- Enrollment
- Productivity
- Student Success

For Vocational Education programs, data on VTEA core indicators are provided.

I. Enrollment: This section provides a three-year trend on student enrollment by headcount as of first census. Because our demographic make up is rapidly changing, figures by ethnicity are also provided.

II. Productivity: In this section, three-year trends are provided for: FTEF/FTES, FTES, Part-time FTEF, full-time FTEF, and full-time Staff. For most measures, college figures are provided for comparison purposes.

III. Student Success. This section consists of: Retention Rates, Success rates, number of students with declared major who completed 18 units or more, and number of degrees and certificates awarded. In this section, statistics by ethnicity are also provided.

Note: ALL DATA is for the academic year (Fall and Spring only).

Definitions for each measure are provided in the footnotes.

Data Sources: The two main sources of information are: 1. DataTel and the Research Data Warehouse. Productivity figures were provided by the Business Office.

STATISTICS

HEADCOUNT ENROLLMENT (Unduplicated at Census): Student headcount in Astronomy has increased from 619 in 2002-2003 to 729 in 2004-2005, an increase of 110 students.

When examined by ethnicity, it is observed that the proportion of Asians increased by 3%, African-Americans by 1% and Hispanics by 3%; White students have decreased by 6% in the last three years. The ethnic composition of students in the program has generally reflected the ethnic composition of the students in the institution for the last three years, except for African-Americans. African-Americans have been slightly underrepresented.

Headcount Enrollment: Astronomy

	2002-2003		2003-2004		2004-2005		3-Year Change	
	Program	College	Program	College	Program	College	Program	College
	N=619	N=12946	N=731	N=11527	N=729	N=12808	+110	-138
							+18%	-1%
Asian	3%	5%	5%	6%	6%	6%	3%	1%
African American (non-Hispanic)	10%	13%	11%	13%	11%	14%	1%	1%
Filipino	5%	6%	5%	6%	5%	6%	0%	0%
Hispanic	24%	21%	25%	23%	27%	24%	3%	3%
American Indian/Alaskan Native	0%	1%	1%	1%	1%	1%	0%	0%
Other Non-White	3%	3%	2%	3%	3%	2%	0%	-1%
Pacific Islander	1%	1%	1%	1%	0%	1%	-1%	0%
White non-Hispanic	51%	44%	46%	43%	45%	43%	-6%	-1%
Unknown	4%	7%	6%	5%	2%	3%	-2%	-4%
All Students	100%	100%	100%	100%	100%	100%	-	-

NOTE: Percentages may not add up to 100% due to rounding.

SEATCOUNT ENROLLMENT (Duplicated at Census): Seatcount enrollment increased from 654 in 2002-2003 to 791 in 2004-2005, an increase of 137 students for the last three years. When examined by ethnicity, seatcount enrollment increased for Asians and Hispanics by 3% and for African-Americans and Filipinos by 1%. Seatcount enrollment decreased for Pacific Islanders by 1% and for Whites by 6%. The program's seatcount ethnic composition enrollment generally reflects the college's seatcount ethnic enrollment, except for African-Americans. African-Americans have been slightly underrepresented.

Seatcount Enrollment: Astronomy

	2002-2003		2003-2004		2004-2005		3-Year Change	
	Program	College	Program	College	Program	College	Program	College
	N=654	N=43127	N=790	N=40792	N=791	N=42549	+137	-578
							+21%	-1%
Asian	3%	5%	4%	6%	6%	6%	3%	1%
African American (non-Hispanic)	10%	14%	11%	14%	11%	15%	1%	1%
Filipino	4%	6%	4%	6%	5%	6%	1%	0%
Hispanic	24%	20%	24%	22%	27%	24%	3%	4%
American Indian/Alaskan Native	0%	1%	1%	1%	1%	1%	1%	0%
Other Non-White	3%	3%	2%	3%	3%	3%	0%	0%
Pacific Islander	1%	1%	1%	1%	0%	1%	-1%	0%
White non-Hispanic	51%	43%	47%	43%	45%	43%	-6%	0%
Unknown	4%	7%	6%	5%	2%	2%	-2%	-5%
All Students	100%	100%	100%	100%	100%	100%	-	-

NOTE: Percentages may not add up to 100% due to rounding.

PRODUCTIVITY: Productivity (FTES/FTEF) for LMC's Astronomy program has stayed relatively high at about 27.6, higher than the sister colleges at the District. There was a three-year increase of .6 in the last three years.

There was no data available to determine full-, part-time FTEF.

FTES/FTEF: Astronomy

	2002-2003	2003-2004	2004-2005	Change
LMC Program	27.0	27.9	27.6	+.6
CCC*	19.6	22.3	19.2	-.4
DVC*	21.1	20.6	18.3	-2.8
State Average				

Productivity (FTES/FTEF) is defined as the average number of FTES earned per full-time equivalent instructor. FTES is defined as 525 student contact hours, based on a 15 hour weekly course load for 2 semester at 17.5 weeks per semester (15x2x17.5=525).

*Data obtained from COGNOS.

FTEF: Astronomy

	2002-2003	2003-2004	2004-2005	Change
FT FTEF	n/a	n/a	n/a	
PT FTEF	n/a	n/a	n/a	
Classified FTEF	n/a	n/a	n/a	

RETENTION RATES: Retention Rate for students in the program has decreased from 87% in 2002-2003 to 84% in 2004-2005, a decrease of 3%. Although the programs retention rate has decreased, it is still higher than the college average (for 2004-2005, the retention rate was 84% and the college average was 82%). The retention rate for Asians has decreased by 12%, for Filipinos by 6%, for Hispanics by 2% and for Whites by 6%. The retention rate for African-Americans has increased by 2%.

Retention Rates: Astronomy

	2002-2003		2003-2004		2004-2005		3-Year Change	
	Program	College	Program	College	Program	College	Program	College
	875	47,311	790	41,959	796	42,937	-79	-4,374
Asian	96%	84%	86%	84%	84%	87%	-12%	3%
African American (non-Hispanic)	77%	73%	78%	73%	79%	72%	2%	-1%
Filipino	87%	84%	91%	84%	81%	82%	-6%	-2%
Hispanic	87%	82%	84%	81%	85%	82%	-2%	0%
American Indian/Alaskan Native	0%	80%	100%	84%	80%	81%	80%	1%
Other Non-White	84%	81%	80%	80%	83%	79%	-1%	-2%
Pacific Islander	89%	81%	71%	82%	67%	80%	-22%	-1%
White Non-Hispanic	90%	84%	89%	85%	84%	84%	-6%	0%
Unknown	90%	84%	85%	81%	94%	83%	4%	-1%
All LMC Students	87%	82%	86%	82%	84%	82%	-3%	0%
State Average		83%		83%		83%		0%

DEFINITION: Student is retained in the course to end of term. A, B, C, D, F, CR, NC, I grade notations.

MEASUREMENT: Percent of students retained in courses out of total enrolled in courses. The retention rate is calculated by dividing the numerator (number of students with A, B, C, D, F, CR, NC, I) by the denominator (number of students with A, B, C, D, F, CR, NC, W, I).

SUCCESS RATES: Although the success rate for the program has decreased from 75% in 2002-2003 to 73% in 2003-2004, the success rate for the program is higher by 6% than the college average (2004-2005). When examining success rate by ethnicity, success rate for African-Americans increased by 11%, Filipinos by 7% and Hispanics by 4%. Success rates for Asians decreased by 15% and for Whites by 7%. One interesting observation is that, for the most part, success rate for all ethnic groups is higher than the average of their respective college average group.

Success Rate: Astronomy

	2002-2003		2003-2004		2004-2005		3-Year Change	
	Program	College	Program	College	Program	College	Program	College
	875	47,311	790	41,959	796	42,937	-79	-4,374
Asian	92%	71%	69%	72%	77%	74%	-15%	3%
African American (non-Hispanic)	58%	51%	56%	51%	69%	50%	11%	-1%
Filipino	68%	70%	74%	71%	75%	70%	7%	0%
Hispanic	70%	65%	70%	66%	74%	66%	4%	1%
American Indian/Alaskan Native	0%	69%	83%	70%	60%	64%	60%	-5%
Other Non-White	60%	61%	53%	65%	71%	65%	11%	4%
Pacific Islander	56%	63%	57%	61%	67%	61%	11%	-2%
White Non-Hispanic	81%	72%	82%	74%	74%	72%	-7%	0%
Unknown	83%	69%	68%	66%	63%	67%	-20%	-2%
All Students	75%	67%	74%	68%	73%	67%	-2%	0%
State Average		67%		67%		67%		0%

DEFINITION: Student succeeds in the course to end of term. A, B, C, CR grade notations.

MEASUREMENT: Percent of students successful in courses out of total enrolled in courses. The success rate is calculated by dividing the numerator (number of students with A, B, C, CR) by the denominator (number of students with A, B, C, D, F, CR, NC, W, I).

NUMBER OF STUDENTS WITH DELCARED MAJOR WHO COMPLETED 18 UNTS OR MORE:

No major in astronomy is offered at LMC.

**Number of Students with Declared Major who Completed 18 Units or More:
Astronomy**

	2002-2003	2003-2004	2004-2005	3-Year Change
Asian				
African American (non-Hispanic)				
Filipino				
Hispanic				
American Indian/Alaskan Native		No Major		
Other Non-White				
Pacific Islander				
White Non-Hispanic				
Unknown				
All Students				

NOTE: Percentages may not add up to 100% due to rounding.

Number of Degrees and Certificates: Astronomy

	2002-2003	2003-2004	2004-2005	Percent Change
Degrees				
Certificates				