



Annual Program Review 2012-2013 - INSTRUCTIONAL REPORT

Division - Program

ASTRONOMY

Authorization

After the document is complete, it must be reviewed and submitted to the Program Review Committee by the Division Chair.

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1.0. Trend Analysis

For each program within the division, use the data provided to indicate trends (e.g., steady, increasing, decreasing, etc.) for each of the following measures.

Program	Academic Year	FTEs Trend	FTEF Trend	WSCH / FTEF Trend	Full-Time % Trend	Fill Rate Trend	Success Rate Trend	Awards Trend
Astronomy	2008-2009	63	3	630	50.0%	104.2%	64.8%	0
	2009-2010	65	3	651	37.5%	100.4%	64.7%	0
	2010-2011	52	4	439	57.9%	98.8%	63.4%	0
	2011-2012	58	3	545	47.1%	98.2%	61.0%	0
	% Change	-8.0%	+6.2%	-13.5%	-2.9%	-6.0%	-3.8%	--
	Four-Year Trend	stable	stable	decreasing	stable	stable	stable	--

1.1 Describe how these trends have affected student achievement and student learning:

With the exception of the WSCH/FTEF trend, all other trends are stable, which speaks well of the continued success of our student achievement and student learning.

1.2 Please explain any other relevant quantitative/qualitative information that affects the evaluation of your program?

No other data is needed.

2.0. Student Learning and Curriculum

Course Level

Year	SLOAC Course Count		% of Courses Assessed
2010-2011	3	100.0%	33.3%
2011-2012	3	100.0%	100%
% Change		+0.0%	+0.0%
Four-Year Trend		stable	stable

Provide the following information on each department and program within the division.

List each program within the division	Active Courses with Identified SLOs		Active Courses Assessed		Course Sections Assessed	
	N / N	%	N / N	%	N / N	%
Astronomy	3/3	100	1/3	33	1/4	25
Chemistry	7/7	100	7/7	100	1/3	33
Geology and Oceanography	4/4	100	3/4	75	1/4	25
Physics	7/7	100	6/7	85.7	9/10	90

2.1 Please comment on the percentages above.

The one full time astronomer is working with all the adjunct astronomers to complete timely SLO assessments. A schedule of SLO assessments has been drawn up, and the astronomers are on task to complete the SLO assessments in a timely fashion.

2.2 Using the results from your division/departments recent assessment reports, please summarize any pedagogical or curricular changes that have been made as a result of your course assessments.

Once a semester, all astronomers meet to discuss the pedagogical methods that are used to teach the various subjects covered in each SLO. Collaboration and sharing of ideas has been implemented in order to help those faculty whose students are lagging in specific areas. Further discussions are planned, as is the attendance of the full time astronomer at the January 2013 AAS (American Astronomical Society) meeting in Long Beach, CA. The AAS meeting has sessions on Astronomy Education Research, and any pertinent information learned will be disseminated to the rest of the department to help improve student learning and achievement.

2.3 Please list all courses which have been reviewed in the last academic year. *Note: Curriculum Review is required by the Chancellors Office every 6 years.*

Astronomy 110 (Fall 2011, SLO #1) and Astronomy 120 (Spring 2012, SLO #1)

Degree, Certificate, Program Level

List each degree and certificate, or other program* within the division	AA/AS Degree PLO Identified		AA/AS Degree Assessment Cycles Completed		Certificate PLO Identified		Certificate Assessment Cycles Completed	
	YES	NO	YES	NO	YES	NO	YES	NO
Physical Sciences AA	X			X		X		X

2.4 Please comment on the percentages above.

The only degree./certificate program in the division is the Physical sciences AA . The PIO for that has just been updated but the program has not been reviewed or assessed . The program began in the Spring of 12 and so it is too new to assess. The first part of the assessment will be at the end of Spring 13..

2.5 Using the results from your division/departments recent assessment reports, please summarize any changes that have been made as a result of your program level assessments. Your summary should include a summation of the results of all degrees, certificates, and other programs which were recently assessed.

N/A

2.6 Please list all degree/certificate programs within the division that were reviewed in the last academic year.

The Physical Science AA was created and SIO'd but not reviewed in the last year.

2.7 What recent activities, dialogues, discussions, etc. have occurred to promote student learning or improved program/division processes in the last year?

Mark an "X" in front of all that apply.

	Curricular development/revisions of courses
	Curricular development/revision of programs
	Increased improved SLO/PLOs in a number of courses and programs
X	Other dialog focused on improvements in student learning
	Documented improvements in student learning
	Increased/improved SLO/PLOs in a number of courses and programs

	New degree or certificate development
X	Best Practices Workshops
Jan 2013	Conference Attendance geared towards maintaining or improving student success
X	Division Retreat in 2011-2012
X	Division or department attendance at Staff Development activity geared towards maintaining or improving student learning
	Division Meeting Minutes
X	Reorganization

Please comment on the activities, dialogues, and discussions above

The astronomy department meets every semester to discuss ways to improve our teaching. As there is only one full time faculty and three or more adjuncts, meeting as a whole group more frequently is difficult. The need for adjuncts to continue to dwell upon and improve their pedagogical techniques is stressed at these meetings.

3.0 Reflection and Action Plans

3.1 Based on your data and analysis presented above, as well as on issues or items that you were unable to discuss above, comment on the Strengths and Weaknesses of the Program

Strengths: List the current strengths of your program

1. The pool of applicants for the astronomy positions is always very strong, as JPL, Carnegie and Caltech nearby bring many well qualified astronomers to our neighborhood to teach our students.
2. The planetarium is a draw for adjunct faculty, and more and more adjuncts are learning how to use the dome. Currently there are two adjuncts that should be qualified to teach in the planetarium in the Spring of 2013, allowing more students to have access to this world class facility.

3.2 Weaknesses: List the current weaknesses of your program

1. While JPL, Carnegie and Caltech are close by and provide many qualified applicants for our adjunct positions, these astronomers are often only in town for two or three years. Often our adjuncts are only able to teach for a short time before they move out of southern California. This constant change of faculty does not provide for continuity of quality in the astronomy department.
2. While there are some good classroom demonstrations, there is no convenient place to store these (though numerous places have been discussed, none has proved sufficient for all adjuncts), and often adjuncts make do without the demos. This is a shame as they bring life to the lectures and provide excellent visuals for the students.

- 3.3** Using the weaknesses, trends and assessment outcomes as a basis for your comments, please briefly describe any future plans and/or modifications for program/division improvements. Any plans for reorganization should also be included, along with a resource request if applicable.

Plans or Modifications	Anticipated Changes/ Improvements	Link to EMP, Plans, SLOs, PLOs, ILOs
A storage facility/cabinet, convenient to all astronomy faculty and not within a specific classroom will be obtained to house the astronomy demonstrations.	Procurement, from facilities, of a cabinet for the purpose of demo storage is anticipated. Placement of the cabinet will be need further discussion with all faculty in the division.	Accessible demonstrations will allow for better student visualization of topics and better overall comprehension by students of those topics.