

## Annual Program Review Update Form - Spring 2010

### I. General Information

Date:	4-Jun-10
Program/Department:	PSM&E/Astronomy
Authors of Report:	Sherwood Harrington

### II. Status Since Previous Program Review

What significant changes have occurred since the last complete program review? Were those changes based on SLO assessments? How have these changes affected your program? You may also address how these changes affect the following: strategic initiatives, "main areas for improvement", mission statements, or physical/organizational restructuring.

The most significant change in the Astronomy Department has been that Marek Cichanski has now begun teaching Astronomy 4, having taught one section in the Winter quarter. He has also begun work on the development of a laboratory course for Astronomy, our highest priority in our last complete program review (see sections II and III of that review, "Retention and Growth" and "Student Equity.") The infusion of more "hands-on" experiences for our students has been recognized as a need for longer than the SLO process has existed at DeAnza, so we can't say that the SLO cycle had anything to do with this change, but we believe that it ultimately will benefit all aspects of our program, including achieving our officially-desired outcomes.

### III. SLO Information

Courses in Program	Total courses offered 2010 to Spring 2011	SLOs Written	Committed to assess in '09-'10	Committed to assess in '10-'11	SLOAC Completed for at least one SLO	SLOAC Cycle Completed for all SLOs
<b>Courses in Program</b>	2	2	1	2	0	0
<i>Percent</i>		100%	50%	100%	0%	0%
<b>Full-time Faculty in Program</b>	3	3	2	3	3	3
<i>Percent</i>		100%	67%	100%	100%	100%
<b>Part-time Faculty in Program</b>	1	0	0	1	1	1
<i>Percent</i>		0%	0%	100%	100%	100%

assessment reflection and enhancement phase.

**SLOAC Discussion and Analysis:** Summarize the discussions and analyses of your program/departments' SLOAC results. The discussions and analyses need not be limited to the information shown in Sections I and II above.

Two large-enrollment (>100 students) sections of Astronomy 4 were selected to provide a first baseline for assessment, one in the Fall term and the other in Spring. Each had a number of questions on a midterm exam that were identified as relating to Astronomy 4's Outcome #2 ("Compare and contrast the development of planetary systems and of the major planet types, including those factors that have led to Earth's unique characteristics.") In the Fall, four questions relating to why Venus and the Earth developed so differently despite having nearly identical initial conditions were used. In the Spring, six questions relating to differences between Terrestrial and Jovian planets were used. The success rate for the four questions in the Fall test was 75%; for the six Spring questions it was 77%. Discussion of these first trial assessments has been fairly intense, and we need to do a lot more thinking about it before incorporating assessments into all classes in the next academic year. Questions still being debated include whether a 75% success rate on multiple-choice questions is meaningful in any way, whether we should also analyze "control" questions not directly related to SLOs, whether we should exclude "outliers" (students with very high exam scores overall who will probably learn very well no matter what we do in class -- and those who do extremely poorly who may be similarly immune to what we do in class), and what the nature of our goals as concerns success rates on test questions should be (a specific percentage, or some difference between performance on SLO questions and non-SLO questions, for example.) There has also been some discussion about how relevant in-class assessment really is -- given what we interpret the objective of SLOs to be, it might be better to survey students a number of years after they take one of our courses, but we have no idea how that would be done.

### Suggestions for the SLOAC Discussion & Analysis:

Detailed data supporting some or all of the statistics shown above.

Patterns that emerge or are confirmed when SLO data are viewed, either alone or in combination with other data (such as student ESL placement test results) at the program level.

What your goals were for any of the percentages above, and whether you achieved that goal.

Evidence of value derived from the SLOAC process within your program.

Some of the challenges your faculty continue to face in attempting to hit your program goals with respect to SLOs.

*If enhancements/improvements to your program can be implemented within the division's currently existing structures and allocated resources, then consider this update form complete and submit to your division dean. If enhancements/improvements are identified that require ADDITIONAL resources through the Instructional Planning and Budgeting process, then complete Section IV. (see next page).*

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#### IV. Resource Requests: (Use this section ONLY if you have a NEW resource request)

Program/Department:

PSM&E/Astronomy

Please submit your top three (or less) choices below in ranked order:

Item Name:	Cost estimate
Division Contribution to the Planetarium Technical Director's Salary	50% of salary

What SLO Assessment findings, if any, support and guide the resource request?	The department relies heavily on DeAnza's state-of-the-art planetarium facility for instruction in all of our courses, so it impacts all aspects of our efforts, including SLOs.
How will the resource allocation specifically enhance your program's services, activities, processes, etc. to improve student learning and achievement?	Before the latest round of budget cuts, PSM&E shared responsibility for the planetarium director's salary with Community Education approximately in proportion to the two divisions' use of the facility. PSM&E's contribution is now zero, which puts us in a very disadvantageous position if Community Education proposes to cut back on the time that Astronomy classes can use the Planetarium.
How will the resource enhance your program with respect to the College mission or Strategic initiatives and/or your program's goals for improvement as stated in your last program review?	Part V of our previous program review says "The Astronomy program at DeAnza College is privileged to work in what is arguably one of the finest, most advanced planetarium facilities in the nation. This allows us to provide DeAnza students with learning opportunities in astronomy that have little parallel elsewhere, and we are excited to be able to do so, and are grateful to the people of our district who made this facility possible by their generosity. We are also grateful to Community Education, under the capable direction of Dean Caron Blinick, for working so closely and productively with us in our shared venue for the past two decades." We cannot reasonably expect Community Education to continue to share the
Other information that may be important to support your request?	
If applicable, please describe why you do not have enough funding within your current budget allocation for this request.	