FALL 2014 Course SLO Assessment Report - 4-Column

El Camino College

El Camino: Course SLOs (NSC) - Astronomy

Course SLOs 1 and ctu.unitid = 763	Assessment Methods & Standard and Target for Success / Tasks	Results	Action & Follow-Up
ECC: ASTR 20 - The Solar System - SLO #3 Planet Origins - Students will be able to describe the modern theory of the origin of the planets and discuss the evidence that supports the theory. **Course SLO Assessment Cycle:** 2014-15 (Fall 2014) **Input Date:** 11/12/2013 **Course SLO Status:** Active	**Assessment Method Description:** In a short essay, describe the nebular theory of the formation of the planets. Discuss the evidence that supports the theory. **Assessment Method:** Essay/Written Assignment **Standard and Target for Success:** 4 points: The student's explanation includes a description of the collapse of a molecular cloud, formation of a proto-star, condensation, accretion, and collisions. The motions of the planets and the composition of terrestrial vs. giant planets is discussed. 3 points: The process of planet formation is well-described, but the discussion of the evidence is incomplete. 2 points. The process of planet formation is fairly -well described, but no supporting evidence is mentioned. 1 point. The process of collapse is mentioned, but several steps are omitted. No supporting evidence is presented. Target 80% of students will score 3 or 4.	04/10/2015 - Points Instructor A Instructor B 0 6 (25%) 19 (33%) 1 0 (0%) 36 (62%) 2 2 (8%) 1 (2%) 3 5 (20%) 1 (2%) 4 11 (44%) 1 (2%) Analysis The two instructors got strikingly different results. One reason could be that Instructor A did the assessment as a take-home assignment while Instructor B put it on an in-class exam. Based on this result, it appears that students benefit from doing a written assignment before taking an exam. **Standard Met? :** No **Semester and Year Assessment Conducted:** 2014-15 (Fall 2014) **Faculty Assessment Leader:** Vincent Lloyd **Faculty Contributing to Assessment:** R. Shirvanian **Reviewer's Comments:** It is not entirely surprising that students score better on a take-home assessment where they can use references than in an in class exam. For a teaching strategy action, you need information about why they scored poorly. Your highest level of achievement is: "The student's explanation includes a description of the collapse of a molecular cloud, formation of a proto-star, condensation, accretion, and collisions. The motions of the planets and the composition of terrestrial vs. giant planets is discussed." Do you have any data about why students achieved the level they did? For example: Did they forget to discuss the collapse of the molecular clouds, the formation of the proto-star, condensation, etc.? Which one did they almost always remember to mention? You can then identify where they are doing fine and then develop a teaching strategy to address	12/01/2015 - Administer the assessment in a consistent way. Give the students a written assignment. **Action Category:** SLO/PLO Assessment Process

Course SLOs 1 and ctu.unitid = 763	Assessment Methods & Standard and Target for Success / Tasks	Results	Action & Follow-Up
		the stages they forget to mention or have difficulty describing. Other possible reasons for a lower score: Did they forget to discuss or distinguish between both terrestrial and giant planets? Was it a lack of discussion of evidence? What was the most common piece of evidence that they mentioned? What was the piece of evidence they forgot to mention? Was there evidence that they did not describe accurately? Was there evidence that they described, but they did a poor job of showing how or why it supports the hypothesis? If you have this kind of data, I recommend that you discuss the one area where students did worst, and suggest a teaching strategy for addressing it. If you do NOT have this kind of data, then I suggest that your action is to record and keep this kind of data during the next assessment of this SLO so that you'll be able to develop a "teaching strategy" action next time.	