General Education Annual Course Assessment Form

Course Number/Title: ASTR101
GE Area: R

Results reported for AY: 2013-14
# of sections: 6
# of instructors: 2

Course Coordinator: Olenka Hubickyj
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Department Chair: Michael Kaufman
College: Science

Instructions: Each year, the department will prepare a brief (two page maximum) report that documents the assessment of the course during the year. This report will be electronically submitted to <curriculum@sjsu.edu>, by the department chair, to the Office of Undergraduate Studies, with an electronic copy to the home college by October 1 of the following academic year.

Part 1

To be completed by the course coordinator:

1. What SLO(s) were assessed for the course during the AY?

SLO 1: Students will demonstrate an understanding of the methods of science;

2. What were the results of the assessment of this course? What were the lessons learned from the assessment?

   97 (96%) of 101 students met this objective; 9 (10%) of the 89 who handed in their projects went beyond the basic requirements of the project.

The semester projects are always a highlight of the students’ experience in Astro 101. Each student is assigned a unique topic on which to do his or her semester project. The project counts for a fraction of the grade equivalent to an exam (i.e. 20% of the total course grade). Of the 89 (88%) out of 101 students that handed in projects, 9 students (10%) went above the requirements set for this project. These students decided to do so because they wanted to learn more about their topic. It should be noted that all students handed in excellent reports. These topics include any aspect of astronomy that pertains to the course, including NASA/ESA/JAXA missions, observatories, historical events in astronomy, historical figures (e.g. Galileo, Kepler) currently-living astronomers, women and minorities in astronomy, and social issues involving astronomy. The project is carried out in stages through the entire term, with weekly updates that include extensive writing combined with illustrations, physical models, power point, musical compositions, etc. The students each do a short oral presentation at the end of the course. The students really appreciate the flexibility and their own control over the project.

In addition, there are extensive discussions, homework and class work pertaining to the modern theories for the origin of the universe (Big Bang theory) and the formation of stars and planets, vs. non-scientific explanation for our origins, including creationism and intelligent design. One important issue is that some students are very wedded to religious explanations, but they seem very open to the distinction. Observational data and scientific methodology is described and explored to support the scientific theories of the Universe.

All of these components experienced in the course and classroom enhanced the student’s understanding of the methods of science.
(3) What modifications to the course, or its assessment activities or schedule, are planned for the upcoming year? (If no modifications are planned, the course coordinator should indicate this.)

The semester projects are working well. The class discussions and debates add to the student understanding. Updates of observations and theories are presented. Any other modification is not necessary.

Part 2

To be completed by the department chair (with input from course coordinator as appropriate):

(4) Are all sections of the course still aligned with the area Goals, Student Learning Objectives (SLOs), Content, Support, and Assessment? If they are not, what actions are planned?

All sections of the course still aligned with the area Goals, Student Learning Objectives (SLOs), Content, Support, and Assessment