|  |  |
| --- | --- |
| Instructional Planning Yearly Update – 2018 | Date**:** March 22, 2018 |
| Department: Astronomy | Division**:** NAS |

# SLO Assessment Results

List SLO assessments, dialogues, and priorities identified as a result of your assessment below. **Attach Departmental** **Assessment Analysis Forms completed in the last two semesters**. (Do **NOT** attach your individual assessment forms.)

|  |  |  |
| --- | --- | --- |
| **Core Competency, Course SLO, or CTE Program SLO Assessed.** Example: all course SLOs for English 1A, 1B and 2 | **Date of meeting where analysis / dialogue took place.** Example: Department Meeting 8/27/15 | **Priorities identified for program as a result of assessment.** Example: Develop strategies for teaching research and documentation skills; share rubrics for research papers; provide more instructional support outside of class. |
| All course SLO’s for Astro 7 | 9/1/17 | * Students request the key lectures on current Earth Climate Change be made available on video for review before exams and the final. Also, public presentation lectures involve a great deal of work and are valuable for the wider audience beyond the college, and should be video-recorded. Solution is to buy video recording gear and learn enough videography to begin recording and uploading select lectures. * Identify and locate material on how critical thinking challenges relate to current climate change policy agenda, and build/link into a new additional course PowerPoint. * Begin dialog with researchers in the field of the Thermodynamics of Civilization, which has profound implications for limiting useful policies to address climate change * Research and assemble PowerPoint for public talk on Civilization and Energy policy, for extra-credit for students and to enlarge outreach to the community on climate change, use gathered material to update **“Chap 43: Strategies: Policy”** existing PowerPoint in course. * Research and assemble Powerpoint and give public lecture on “Post-IPCC Climate Science”, to highlight the latest discoveries in climate change science, as extra-credit for students and as outreach to help encourage future enrollment in Astro 7. Use this material to update existing **PowerPoint “Chap 42: Future Climate”** * Seek lab equipment for future development of Astro 7L lab accompaniment. In particular, CO2 monitoring units and data analysis. |
| All SLO’s for Astro 8A | Sept 1, 2017 | * Student comfort (cold!) at the observatory needs further addressing. The most popular lab by far, for Astro 8A and 9ABC is using the domed telescope with indoor computer for imaging and other projects. But only ~2-3 students at a time can be accommodated as a team. We need a second identical structure next to the existing one. The telescope, computer-controlled mount have already been donated. We just need the building structure, concrete pier and foundation, dome. * Expand ability of students to use modern astronomy techniques (CCD camera on computer-controlled domed telescope), by building a second domed wooden structure as was done in 2008 with help from the CEM students under Chuck Mornard. This continues to be in the Astronomy Program Plan and updates. * Need extra hands-on help at portable telescopes and in locating/identifying binocular project objects, and explaining outdoor labs. Student assistant needed in addition to I.A. * Expand education on how dimension and units are part of the mathematics of real world science. Devote new special lecture reviewing (or introducing?) dimensions and units in Astronomy data. * Improve student skill at locating variable stars using binoculars, and in magnitude estimation. * Refurbish the planetarium projectors. Planet, moon, celestial coordinate frame, meteor shower projectors are badly out of alignment or dysfunctional. |
| All SLO’s for Astro 25 | Mar 19, 2018 | * Re-assess student preferences for venues for this field class. Specifically, how far a drive is acceptable and how does that rate vs the interest/value of the venue for the specific goals of the offering of a particular Astro 25 section? * Re-assess weather challenges for Astro 25, consider offering Spring sections later in the semester to avoid danger of late winter wet weather. * Refurbish the planetarium projectors. Planet, moon, celestial coordinate frame, meteor shower projectors are badly out of alignment or dysfunctional. * Get extra help from a student assistant for camp tasks, freeing instructor time for teaching and at-the-telescope presentations. Too much time spent in clean-up and meal-prep when volunteers are not available. |
| Core Competence #2 (Critical Thinking) for Astro 3, 4, 7, 25 | Mar 19, 2018 | * For Astro 3,4, 7: Modify Chapter 0 (Principles of Clear Thinking and Scientific Method) which is taught in Astro 3, 4, 7 the first week, in order to better clarify confusion on application of thinking to pseudo-sciences, and exert more care in responding to student concerns here. * In Astro 7, clarify climate change policy options in light of new science, and how students can weigh how they might engage in meaningful change actions. * In Astro 4, improve exposition of final chapter material on how the nature of the Inflationary universe has profound implications for the existence of life on our planet and in this universe. * For Astro 3 (Astro 25 in pre-trip planetary origins lecture) expand PowerPoint(s) on planet formation to highlight new science on the “Rare Earth” paradigm emerging. |
| Click here to enter text. | Click here to enter text. | Click here to enter text. |

# SLO Commentary

Use the box below to add any additional information. If you have not completed SLO assessment, state reason.

|  |
| --- |
| Click here to enter text. |

# Progress on Goals and Recommendations from Most Recent Program Plan

List the **top five** Goals and Recommendations from the last Program Plan and indicate whether they have been met.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Goal/Recommendation | Status | Type  (select all that apply) | | Funding Source (general fund, grants, one-time, categorical, etc.) |
| **Obtain MatLab license for Astronomy, for use in designing lab exercises in Astro 7L as it develops, and Astro 8A** | Goal Met |  | No Cost  One-time cost  On-going cost | General Fund, one time |
| **Buy dedicated video camera and sound equipment for taping lectures, especially public lectures, for posting on YouTube and in general to help my students review important climate science.** | Goal Met |  | No Cost  One-time cost  On-going cost | General Fund, one time |
| **Student assistant for lab courses. 3 hrs/week for 33 weeks** | Goal Not Met |  | No Cost  One-time cost  On-going cost | General Fund. |
| **Build new 350 sqft building with dome, very similar to the existing Observatory Dome building, with connecting doorway, to house existing telescope, QIY900 CCD camera, IDL software/MacBook computer for general photometry, imaging, occultations, and other projects** | Goal Not Met |  | No Cost  One-time cost  On-going cost | Requires ~$32,000, college has not supported this as of yet. |
| **Identify and hire a tutor for regular hours at the STEM Center. 3 hrs/week** | Goal Not Met |  | No Cost  One-time cost  On-going cost | General fund |

New or Unmet Goals and RecommendationsGo to the link below to submit any new or unmet goals and recommendations (resource requests) identified by the department, in priority order:

**Link for Resource Requests 2018:** [**https://www.surveymonkey.com/r/ResourceRequests2018**](https://www.surveymonkey.com/r/ResourceRequests2018)