

Course Outcomes Guide

Course/Program Title: PHS105 - Descriptive Astronomy
Course/Program Team: Rodney Martin

Date: Spring 2017

Expected Learning Outcomes

1. identify constellations in the sky,
2. locate planets in the sky,
3. use coordinate systems to locate objects,
4. demonstrate use of an astronomical telescope,
5. describe forms of electromagnetic radiation and their roles in astronomy,
6. identify characteristics of celestial objects in our solar system,
7. identify characteristics of celestial objects in deep space,
8. explain motions of celestial objects,
9. review theories of star formation and cosmology and access,
10. process, analyze and synthesize scientific information.

Assessment (How do or will students demonstrate achievement of each outcome? Please attach a copy of your assessment electronically.)

1. In-class exams and quizzes with combination of multiple-choice, short answer, and essay.
2. Group project
3. Various homework assignments.
4. Comprehensive final exam.

Validation (What methods have you used or will you use to validate your assessment?)

We offer only one section of this course so we have only been using our standard exams.

Results (What do your assessment data show? If you have not yet assessed student achievement of your learning outcomes, when is assessment planned?)

This is the first time we are reporting any data for this course. We are still working on the process. Instructor has noted that students are weakest in understanding reactions and reaction mechanisms.

Follow-up (How have you used or how will you use the data to improve student learning?)

Instructors will use the detailed analysis of the exams to help improve their teaching styles and content delivery for the course.

Budget Justification (What resources are necessary to improve student learning?)

We will need resources to purchase any standardized exams we decided to use.

Course: PHS 105

SLOA Data

Faculty Team: Adjunct

	SP 2015	SP 2016	SP 2017	FA 2017	
# Active students	37	42	45		
%W	10.8	2.4	6.7		
*% walk-away Fs No final exam/grade = F	8.1	4.8	11.1		
% Success (A,B,C)	78.4	83.3	82.2		
Common Comprehensive Final Exam Score					
Mean course grade	2.94	2.8	2.69		
Item Analysis Weakest Content Areas					

*% Walk-away Fs = Did not take the final exam and received a grade of F.