

## **ASTRO 011 , Section 001: ELEM ASTRO LAB**

Instructor	Dr. Kristen Miller
Title	Adjunct instructor of Astronomy & Astrophysics, the Pennsylvania State University
Home Phone	281-292-1909; calls by appt only
Office Hours	by appointment only; via skype or phone.
E-mail	<b>through Canvas email only</b> ; I generally check email several times a day.
Homepage	<a href="https://psu.instructure.com/">https://psu.instructure.com/</a>
Location	online
Start Date	August 21, 2017 - Dec. 8, 2017
Course Credits	1
Notes	The information in the syllabus is subject to change at any time. Please check back frequently.

### **Required Text**

None. All materials required for the course are contained within the Angel course website.

### **Course Description**

Weekly lab activities are designed to take approximately 2 hours per week. In addition, there are discussion board activities most weeks; these should take no more than 10 minutes per week.

All weekly labs are designed to be done completely online, using materials on the class Angel website as well as other supplementary websites (listed in the labs). The labs may be completed at any time during the week, but must be submitted by the deadline (normally at the end of each week). Participation activities normally consist of an original post (due midweek) and responses to your classmates posts (due by the end of the week).

In addition to the weekly lab and discussion assignments, you are also required to complete a semester observatory project. This project is to be completed outside of the weekly class activities, and is due near the end of the semester. The project requires a series of nighttime and/or daytime observations of the sky, as well as additional online component.

### **Course Objectives**

The goals for this course are for you to

1. develop skills of recognizing and asking answerable research

- questions
2. design and write clear step-by-step procedures
  3. systematically collect data
  4. perform and document analysis of those data
  5. construct and articulate arguments from evidence
  6. presenting data visually

To achieve these goals, we will use simple observations, software simulations, and online astronomical data sets and images to explore a number of astronomical phenomena.

## **Course Requirements**

You are required to:

- login to the class weekly to check email and assignment due dates
- turn all assignments in (via Angel) by the weekly deadlines
- inform me as soon as possible if there is a university approved reason for not meeting the assignment deadlines
- use complete sentences and correct punctuation in all assignment work
- be courteous and respectful in all discussion board posts
- begin the labs early in the week so that you have time to ask for help or clarification, if needed
- contact me when you need help!

I encourage you to work in partners or groups as you complete the labs. They are designed to be done in small groups, and it will increase your understanding of the material, decrease the time you spend on the labs, increase your grade, and greatly decrease your frustration level if you work in groups!

## **Course Prerequisites**

Astronomy 001 OR Astronomy 010. (may be taken concurrently).

## **Course Links**

This term I will be using a virtual office discussion forum for class discussion/office hours; it is entitled "Student Cafe". The forum can be found under the "modules/get started" link on the course homepage. This forum will not affect your grades in any way! It is my hope that this will be a place where you can find quick answers to common questions.

## **Grading Policy**

Determination of Grade:

65% Weekly Labs\*

25% Semester Project

10% Class Participation (including weekly discussion board assignments)\*

*\*Your lowest grade in each of these two categories will be automatically dropped, no questions asked, even if it is a zero.*

## **Exam Policy**

There are no exams in this course. The semester project takes the place of a final exam.

## **Academic Integrity**

Academic integrity — scholarship free of fraud and deception — is an important educational objective of Penn State. Academic dishonesty can lead to a failing grade or referral to the Office of Student Conduct.

Academic dishonesty includes, but is not limited to:

- cheating
- plagiarism, including plagiarism of material found on the internet
- fabrication of information or citations
- facilitating acts of academic dishonesty by others
- submitting the work of another person or work previously used without informing the instructor and securing written approval
- tampering with the academic work of other students

Academic dishonesty of any kind will not be tolerated in this course. Instances of academic dishonesty will result in an automatic grade of "XF" in the course, and may also result in disciplinary action by the department and/or the university. Please note that there is no distinction between the person who cheats and the person who allows cheating to occur.

## **Disability Policy**

Penn State welcomes students with disabilities into the University's educational programs. If you have a disability-related need for reasonable academic adjustments in this course, contact the Office for Disability Services (ODS) at 814-863-1807 (V/TTY). For further information regarding ODS, please visit the Office for Disability Services Web site. In

order to receive consideration for course accommodations, you must contact ODS and provide documentation (see the documentation guidelines). If the documentation supports the need for academic adjustments, ODS will provide a letter identifying appropriate academic adjustments. Please share this letter and discuss the adjustments with your instructor as early in the course as possible. You must contact ODS and request academic adjustment letters at the beginning of each semester.

If you have any questions, please contact [Canvas Support](#)