

# CUMBERLAND COUNTY COLLEGE

## Course: PI 117 Astronomy Laboratory

**Credits: 1**

### **Prerequisites:**

None

### **Course Description**

A one credit-hour laboratory course to supplement PI 116, Introduction to Astronomy. Students will be exposed to some basic techniques to gather experimental astronomical data and analyze them. Measurement of angular position of Polaris and change in angle of ecliptic, in addition to observation and interpretation of the phases of the moon are among the planned lab activities.

### **Learning Outcomes**

At the completion of this course, students will be able to:

- Use basic measurement tools including rulers, protractors, and timers.
- Recognize Constellations
- Apply simple measurement techniques to obtain astronomical data.
- Experimentally verify the cycle and the phases of the moon.
- Experimentally determine the angular position of Polaris.
- Recognize planets and their motion.

### **Topical Outline:**

The topics discussed in this course include but are not limited to the following:

1. Spread sheet familiarization.
2. Measurements and tools of measurement
3. North Star and asterisms.
4. Planets
5. Phases and the cycle of the moon
6. Sun and ecliptic

### **Required Texts and Other Materials**

Instructor's hand-outs

### **Student Assessment:**

Course assessment is based on reports submitted by students for all activities planned during the semester in addition to a single final examination.

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| <b>Reports</b>    | ..... | <b>80%</b> |
| <b>Final Exam</b> | ..... | <b>20%</b> |

### **Academic Integrity**

Plagiarism is cheating. Plagiarism is presenting in written work, in public speaking, and in oral reports the ideas or exact words of someone else without proper documentation. Whether the act of plagiarism is deliberate or accidental [ignorance of the proper rules for handling material is no excuse], plagiarism is, indeed, a “criminal” offense. As such, a plagiarized paper or report automatically receives a grade of ZERO and the student may receive a grade of F for the semester at the discretion of the instructor.

### **Available Resources**

If you are having difficulty with work in this class, tutoring is available through the Success Center. If you think that you might have a learning disability, contact Project Assist at 856.691.8600, x1282 for information on assistance that can be provided to eligible students.

### **Before Withdrawing From This Course**

If a student experiences adverse circumstances while enrolled in this course and considers withdrawing, s/he should see an advisor (division or advisement center) BEFORE withdrawing from the class. A withdrawal may cause harmful repercussions to completion rate standards and overall GPA which can limit or eliminate future financial aid in addition to causing academic suspension.