

# Physics Department

College of Science & Mathematics

## **ASTRONOMY MINOR**



The Astronomy Minor provides students an opportunity to learn about and analyze astronomical phenomena and processes. The Minor explores our current scientific understanding of the solar system, stars, galaxies, and cosmology. In addition, the Minor enhances familiarity and skills in observational astronomy, including telescope data collection, analysis, and interpretation. A Minor in Astronomy provides a background for graduate-level studies in astronomy or work in related fields. Interested students should see an Astronomy Minor Advisor.

Please see the back of this page for more information or contact the Astronomy Minor Advisor: David Mitchell(180-614) dsmitche@calpoly.edu.

### **Required Courses:**

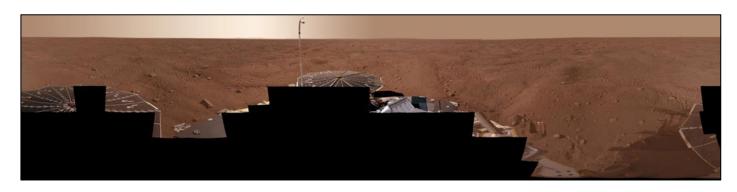
PHYS 132	General Physics II	4 units
PHYS 133	General Physics III	4 units
PHYS 211	Modern Physics I	4 units
ASTR 301	Planetary Systems	3 units
ASTR 302	Stars and Galaxies	3 units
ASTR 326	Cosmology	3 units
ASTR 444	Observational Astronomy	4 units

Select 3 or 4 units from the following: **AERO** 351; **ASTR** 400, 404, 470,

3 or 4 units

471; **GEOL** 415; **PHYS** 302/305, 303, 313, 317, 323, 410

Required Units (minimum): 28 units



#### WORKSHEET FOR THE ASTRONOMY MINOR

If you are interested in pursuing the astronomy minor, please keep in mind that most astronomy classes are only offered one quarter per year and some astronomy classes are only offered three out of four years. The astronomy minor advisors can help you in the planning.

Please fill in the worksheet (see the link on the Astronomy Minor webpage), either with the information on when (quarter/year) you \*took\* the required classes (if applicable) or when (quarter/year) you are \*planning\* on taking the required classes. To help you with the planning, we recommend filling in this worksheet as soon as possible. Email the worksheet to the astronomy minor (Dr. David Mitchell, dsmitche@calpoly.edu) who will start the process of declaring the astronomy minor for you. You will then receive an email by Adobe Sign (CSM Forms) to review and fill out the Astronomy Minor declaration. Under "Intending to" select "Apply/Declare". Fill in the yellow highlighted boxes with your information and sign the form. The form will then be routed for signatures by the Astronomy Minor Advisor and Department Chair and once completed, it will be automatically sent to the Office of the Registrar.

While you do not need to apply for an astronomy minor or declare it before taking any astronomy classes, we recommend that you complete this process as soon as possible and at the very latest a month before you are planning to graduate.

Please note that the Astronomy minor is not "degree applicable", so declaring it does not help with registration times.

# MINORS (GENERAL)

**Definition:** A minor is defined as a coherent group of courses, which stands alone and provides a student with broad knowledge of and competency, in an area outside the student's major.

### Majors/Minors

- A major and a minor may not be taken in the same degree program (e.g., a student majoring in history may not complete a minor in history, whereas a student majoring in crop science may complete a minor in plant protection).
- The minor will be completed along with the requirements for the bachelor's degree. Courses in the minor may be used to satisfy major, support and general education requirements.

#### Requirements

- Students who wish to complete a minor are to contact the department offering the academic minor as early as possible in the program and fill out the appropriate agreement form.
- A minor consists of 24 to 30 units with at least half of the units must be from upper-division courses (300- or 400-level) and at least half of the units must be taken at Cal Poly.
- Not more than one-third of the courses in a minor can be graded Credit/No Credit (CR/NC), except for courses which have mandatory CR/NC grading.
- A minimum 2.0 GPA is required in all units counted for completion of the minor (French, German and Spanish language minors must have a 2.75 GPA).

#### Minors/Graduation

 The minor is declared when the student requests a graduation evaluation in the Academic Records Office.

•	The completion of the minor will be noted on the student's transcript but will not be shown on diploma. In no case will a diploma be awarded for the minor.	