

# ASTR 1000 Descriptive Astronomy

## Part I Project

### Purpose

Demonstrate your understanding of the fundamental ideas and development of astronomy.

### What it is

Your project is a formal way to demonstrate that you understand the content covered in Unit I of the course. It should thoroughly fulfill one of the unit objectives.

### Part I learning objectives

- Rank the sizes of planets, stars, galaxies, and the universe. Qualitatively relate the size and separations of the Sun and planets in the Solar system.
- Describe and explain how the sky changes throughout the day, month, and year. Also includes differences between different places on Earth.
- Describe the ways that Earth changes position and orientation over time.
- Identify the characteristics of, and conditions creating, Solar and Lunar eclipses, planetary transits, and occultations.
- Identify key advances in Western astronomy from Babylonian foundations until the Copernican revolution.
- Identify and interpret the contributions of Copernicus, Galileo, Brahe, Kepler, and Newton to astronomical thought.

### Possible projects

These are some ideas for a project. You are free to suggest others. I will approve of projects that demonstrate your mastery of the required unit objectives.

- A concept map describing astronomical time cycles and their orbital origins.
- A model demonstrating solar and lunar eclipses.
- A poster about an ancient or Renaissance astronomer's contributions.
- Multiple choice quiz questions quiz covering the unit objectives (homework questions are excluded).

### Components

**Sign up:** Select a project. Describe succinctly what form your project will take, and which of the unit objectives it will cover.

**Rough Draft:** Your project itself. The more complete it is, the more useful feedback your classmates and instructor can provide.

**Rough draft feedback:** Feedback to your classmates on how you see the project addressing the objectives.

**Final Project:** The completed project.

**Final project feedback:** Summarize what the project teaches about its objectives.

## Dates and Deadlines

Jan 26	Project assigned
Feb 6	Rough drafts due
Feb 11	Rough draft feedback due
Feb 13	Project due
Feb 18	Final project feedback

## Scoring

### Rough Draft (10 points)

This is the full project, but not polished.

10	Contains all parts of the project, addressing all of the specified objective.
6	Submission lacks substantial portions of the project.

### Rough Draft feedback (10 points)

For each draft that you review, explain how the project addresses its learning objectives.

10	Summarizes how each draft covers its learning objective.
proportional	Misses assigned drafts or associated objective.

### Final Report (30 points)

This is graded by the student, with the instructor having veto power.

Is it easy to understand? Does it communicate the objective clearly, correctly, and completely?

### Final report feedback (10 points)

Summarize what each project that you review teaches about its learning objectives.

10	Summarizes what each project teaches about its learning objective.
proportional	Misses assigned projects or associated objectives.