

PORTLAND STATE UNIVERSITY
GENERAL ASTRONOMY
Physics 121, Winter 1999
CRN 42358
Tu and Th, 16:40 - 18:30
SB2, Rm 101

Instructor: Pieter Rol

Office: SB 1, Rm 33

Teleph.: 725-3812 (messages only)

Hours: Tuesday, 15:30 - 16:30

E-mail: rolp@pdx.edu

Thursday, 18:30 - 19:30

Text: Michael A. Seeds: "Astronomy, The Solar System and Beyond",
Wadsworth Publ. Co., 1999.

Exams: Five quizzes and Final (all multiple choice, ten or more questions each).

Final Exam: Tuesday, March 16, 5:30 pm.(multiple choice, 100 questions).

Grading: Quizzes 10% each (drop lowest grade), **no make-ups**. Final 60%.

We will study the foundation and the history of astronomy. Major instruments used for obtaining astronomical data and the physics involved in the operation of these instruments will be discussed. We will also study some aspects of physics, that are important for an understanding of the solar system. Then we will study the planets and their satellites, comets, meteorites and asteroids. All these topics are described in the first 9 chapters of our text-book.

Since this is the first time this course is being taught from this text, we will decide which topics to cover as we go along.

If weather permits, we will observe some celestial objects: moon, planets, double stars, clusters, nebulas and galaxies from the roof of Science Building 1. Because of the severe light-pollution the selection of objects is very limited.

If appropriate for the course we will discuss articles that appear in "Sky and Telescope".

Library resources: "Sky and Telescope" (5th floor of the library).

Tentative syllabus:

Week 1: Introduction and Chapter 1 The scale of the cosmos, and The view from Earth

Week 2: Rest of Chapter 1, The view from Earth

Week 3: Chapter 2. The origin of modern astronomy

Week 4: Chapter 3, Astronomical tools

Week 5: Chapter 4, Atoms and starlight

Week 6: Chapter 5, The origin of the solar system

Week 7: Chapter 6, The Earth and Moon

Week 8: Chapter 7, Mercury, Venus, and Mars

Week 9: Chapter 8, Worlds of the outer solar system

Week 10: Chapter 9, Meteorites, asteroids, and comets