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
Hours: Tuesday, 15:30 - 16:30
Thursday, 18:30 - 19:30

Teleph.: 725-3812 (messages only)
E-mail: rolp@pdx.edu


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, nebulae 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