

Introduction to the Planets

COURSE: Astronomy 102-1 (3 credits)

TIME: Spring 2009, 10:00 A.M. - 10:50 A.M. M, W, F

PLACE: Wissink Hall 289

INSTRUCTOR: Steve Kipp **OFFICE:** Wissink Hall 345 **PHONE:** 389-5912 (Office) 389-2691 (Andreas Observatory) **E-MAIL:** steven.kipp@mnsu.edu **WEB ADDRESS:** <http://mavdisk.mnsu.edu/stars/>

TEXT: *The Solar System*, Michael Seeds, 6th edition

COURSE CONTENT: Introduction to the Planets is a broad survey of modern planetary astronomy. We will concentrate on the information gathered about the solar system by advanced ground-based telescopes and space probes; however we will begin with a review of the history of solar system astronomy. The general topics to be covered include: our place in the universe, early understanding of motions in the sky; cycles of the moon; origins of modern astronomy; gravity; light and telescopes; stars and atoms; the sun; the origin of the solar system; the Earth; the Moon and Mercury; Venus and Mars; Jupiter and Saturn; Uranus, Neptune and Pluto and meteorites, asteroids, comets and life on other worlds. This material is covered in chapters 1-8 and 19-26 of our text plus the appendices. The text will be supplemented by images, videos, computer simulations and Web information. The class may make a trip to Andreas Observatory to view the planets, moon, comets and meteors directly.

COURSE SCHEDULE:

Week #	Date(s)	Topic/Activity
1	Jan. 12, 14, 16	Video, Chapters 1, 2
2	Jan. 21, 23	Chapters 2, 3
3	26, 28, 30	Chapters 3, 4
4	Feb. 2, 4, 6	Chapters 4, 5
5	Feb. 9, 11, 13	Chapter 5, Hour test 1, Feb. 11, Chapter 6
6	Feb. 16, 18, 20	Chapters 6, 7
7	Feb. 23, 25, 27	Chapters 8, 19
8	Mar. 2, 4, 6	Chapters 19, 20
9	Mar. 16, 18, 20	Chapters 20, 21
10	Mar. 23, 25, 27	Chapters 21, 22
11	Mar. 30, Apr. 1, 3	Chapter 22, Hour test 2, April 3
12	Apr. 6, 8, 10	Chapters 23, 24
13	Apr. 13, 15, 17	Chapters 24, 25
14	Apr. 20, 22, 24	Chapters 25, 26
15	Apr. 27, 29, May 1	Chapter 26, Review
16	May 6(Wed.)	Final Exam 8:00 A.M. - 10:00 A.M.

The course schedule is approximate and is subject to change. Changes will be announced in class.

GRADING: There will be two hour tests, five pop quizzes, and a final exam in this course. The first hour test will be given after covering chapters 1-5. The second hour test will be given after covering chapters 6-8 and 19 - 22. The exam will be comprehensive but will emphasize

the material on the planets, their satellites and the small bodies of the solar system, particularly chapters 19-26. The tests and exam will be worth 50 points each. The pop quizzes will be worth 5 points each. **Pop quizzes will be given without announcement and may not be made up! However your lowest quiz score will be dropped without penalty.** Please don't ask if a quiz is going to be given on a particular day and don't ask to make-up quizzes. Tests may be made up if the student has a legitimate excuse however the make-up tests may be essay tests. Students may earn up to 10 points in an extra credit project described elsewhere. The total possible points is 170. Your final score will be the percentage of this total you receive. The final grading scale, based on past performance in this course, is as follows:

Percentage Score	Grade
[85 -100]	A
[73 - 85)	B
[60 - 73)	C
[48 - 60)	D
< 48	F

All the material presented in the text and during lectures is potential hour test, final exam and pop quiz material. This includes pictures, diagrams, tables, demonstrations, videos and slides as well as written text. The hour tests, final exam and pop quizzes are designed to test both your memory and understanding of course material. Some questions will ask you to reason beyond what you know directly and make educated guesses like a scientist. The final exam, hour tests and pop quizzes will consist mostly of multiple choice and/or matching questions. The final exam is comprehensive but emphasizes material on the planets, their satellites and the small bodies of the solar system. The pop quizzes will cover material recently discussed in class. No electronic devices may be used during the hour tests, quizzes and exam. Students are expected to be honest and responsible in the accomplishment of their academic work. All the work you turn-in must be solely your own and not the result of collaboration with anyone else. Dishonest work will receive no credit. Although attendance will not be taken, regular class attendance is expected consistent with the University's attendance policy. Course grades of incomplete will be given according to University policy. In order to keep track of student business, I ask that you put requests for making up an hour test, getting an incomplete and similar matters in writing including your name and Tech Id number. (All students should know their Tech Id numbers.)

STUDY SKILLS: Introduction to the Planets is a more difficult than average general education course. In order to do well it is suggested that you read the text in advance of the lecture, listen to the lecture, asking questions and taking notes, and review the book after the lecture. Before each lecture review your notes for a general review and in preparation for a possible quiz. To prepare for a test it is very helpful to study with a classmate. Pay special attention to the chapter key words. To help prepare students for astronomy tests, I have assembled a sample question booklet called the **Student's Manual of Astronomy Questions**. The booklet is appropriate for my sections of Astronomy 101 and Astronomy 102. It is available from the Wissink copy shop.

OFFICE HOURS: Regular office hours are posted at my office. They will also be announced in class. I will also be glad to meet with students by appointment. Feel free to drop by.