

UNIVERSITY CORE CURRICULUM

SECTION II. INTEGRATIVE STUDIES - INTERDISCIPLINARY

1. COURSE NUMBER: **GEOL 330i**

SEMESTER HOURS: **3**

COURSE TITLE: **The Planets**

Start Date: Fall 2001

2. COURSE FORMAT: Lecture and discussion. Average class size: 25.

3. STUDENT LEARNING OBJECTIVES: Student will be able to: (a) understand the origin and make up of the solar system; (b) understand the geological processes acting on the various planets and moons in the solar system; (c) demonstrate communication skills and critical thinking; and (d) look up at the planets in the night sky and appreciate the wonder and diversity that we are still discovering about them.

4. DETAILED COURSE DESCRIPTION: The geology of the planets and moons of the solar system, their origin and history, the origin of the universe and the solar system and the search for other planetary systems and life in the universe. The geologic processes of vulcanism, tectonism, weathering, and meteorite impact on the various planets will be examined and compared. A main focus of the course will be examining the methods of discovering information about the solar system involving the interdisciplinary application of the pertinent basic scientific concepts of geology, geochemistry, geophysics, meteorology, and cosmology.

This course is intended for general, science, and geoscience students. The only prerequisite is a serious or long-standing interest in the solar system. There are no technical prerequisites. Appropriate scientific background will be provided as necessary during the course.

5. REQUIRED READING: Morrison and Owen, *The Planetary System*, 2nd edition 1996.

6. COURSE REQUIREMENTS AND GRADING:

- Hour Exam #1 (20%)
- Hour Exam #2 (20%)
- Hour Exam #3 (20%)
- Term Paper #1 (5 pgs) (10%)
- Term Paper #2 (10-15 pgs) (20%)
- Oral Presentation (10%)

Each exam question will have at least one essay question worth 20% of grade

7. ADVANCED UCC COURSE(S): None

6/15/04