

COLLEGEWIDE COURSE OUTLINE OF RECORD

ASTR 101, SOLAR SYSTEM ASTRONOMY

COURSE TITLE: Solar System Astronomy

COURSE NUMBER: ASTR 101

PREREQUISITES: Demonstrated competency through appropriate assessment or earning a grade of "C" or better in ENGL 025 Introduction to College Writing II or ENGL 093 Introduction to College Writing and ENGL 032 Reading Strategies for College II or ENGL 083 Reading Strategies for College and MATH 015 Fundamentals of Algebra I or MATH 044 Mathematics

DIVISION: Liberal Arts and Sciences

PROGRAM: Liberal Arts

CREDIT HOURS: 3

CONTACT HOURS: Lecture: 2 Labs: 2

DATE OF REVISION: Fall, 2012

EFFECTIVE DATE OF THIS REVISION: Spring, 2013

CATALOG DESCRIPTION: Survey of the history of astronomy, astronomical cycles and phenomena, astronomical instruments, formation and evolution of the planets and their satellites, comparative planetology, asteroids, comets, meteors, the sun, origin of the solar system and its place in the galaxy and the universe.

MAJOR COURSE LEARNING OBJECTIVES: Upon successful completion of this course the student will be expected to:

1. Understand the general scale and distance units of the cosmos.
2. Describe the annual cycle of the sun, seasons, and cycles of the moon.
3. Provide examples of the historical development of modern astronomy from antiquity to the present.
4. Understand the functions and uses of astronomical instruments, including optical and radio telescopes and orbiting instruments.
5. Understand how information is obtained from spectra.
6. Describe the origin of the solar system and the earth.
7. Compare and contrast the properties of the Terrestrial planets.
8. Compare and contrast the properties of the Jovian planets.
9. Understand the origin of meteorites, asteroids and comets.
10. Describe the properties and composition of the sun as a star.
11. Understand the place of the solar system in relation to our galaxy and the extragalactic universe.
12. Understand the overview of cosmology and life in the universe.
13. Locate reliable sources of scientific evidence to construct arguments related to real-world issues.

COURSE CONTENT: Topical areas of study include --

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|------------------------------|----------------------------------|
| Astronomical units | Terrestrial planets |
| Astronomical cycles | Jovian planets |
| Historical discoveries | Meteorites, asteroids and comets |
| Solar and stellar properties | astronomical instrumentation |
| Spectral analysis | Milky Way and other galaxies |
| Solar system origin | Cosmology and life |

HOW TO ACCESS THE IVY TECH COMMUNITY COLLEGE LIBRARY:

The Ivy Tech Library is available to students' on- and off-campus, offering full text journals and books and other resources essential for course assignments. Go to <http://www.ivytech.edu/library/> and choose the link for your campus.

ACADEMIC HONESTY STATEMENT:

The College is committed to academic integrity in all its practices. The faculty value intellectual integrity and a high standard of academic conduct. Activities that violate academic integrity undermine the quality and diminish the value of educational achievement.

Cheating on papers, tests or other academic works is a violation of College rules. No student shall engage in behavior that, in the judgment of the instructor of the class, may be construed as cheating. This may include, but is not limited to, plagiarism or other forms of academic dishonesty such as the acquisition without permission of tests or other academic materials and/or distribution of these materials and other academic work. This includes students who aid and abet as well as those who attempt such behavior.

COPYRIGHT STATEMENT:

Students shall adhere to the laws governing the use of copyrighted materials. They must insure that their activities comply with fair use and in no way infringe on the copyright or other proprietary rights of others and that the materials used and developed at Ivy Tech Community College contain nothing unlawful, unethical, or libelous and do not constitute any violation of any right of privacy.

ADA STATEMENT:

Ivy Tech Community College seeks to provide reasonable accommodations for qualified individuals with documented disabilities. If you need an accommodation because of a documented disability, please contact the Office of Disability Support Services.

If you will require assistance during an emergency evacuation, notify your instructor immediately. Look for evacuation procedures posted in your classroom.

SYLLABUS FOR ASTR 101, SOLAR SYSTEM ASTRONOMY

The instructor will provide students with a course syllabus on the first scheduled class meeting. The syllabus should communicate clear and concise information to help the student understand the scope of the course and expectation for successful completion. The following information will appear on the syllabus and be identical to information on the Course Outline of Record (COR):

Required Syllabus Information from (COR)

- Course title
- Course prefix and number
- Prerequisite(s)
- Corequisite(s)
- Program
- Division
- Credit hours
- Contact hours
- Catalog description
- Major course learning objectives
- Course content
- Academic honesty statement
- ADA statement

Additional Required Syllabus Information

The syllabus must also contain the following additional information. The instructor may determine the content of this information.

- Instructor
- Course section number
- Additional course learning objectives (if required)
- Required text, or other instructional materials
- Required consumable materials and equipment supplied by student
- Instructor phone number
- Instructor e-mail address
- Instructor office location and hours
- Method(s) of instructional delivery
- Method(s) of evaluation
- Grading scale
- Make-up policy
- Attendance policy
- Activities schedule, including list of topics, assignment, test, etc.
- Last date to drop course without grade

- The name and location of the Disability Service Coordinator
- Right of revision statement

Optional Syllabus Information

Faculty are encouraged to provide additional information that will help the student understand in more detail how the class will be conducted.

- Extra credit work, if applicable
- Class/lab relationship
- References or reading that are optional but recommended
- Format for papers, projects, or other assignments
- Computer room/lab rules if applicable
- Withdrawal process and responsibility
- Other