

SC 120 Introduction to Astronomy Winter 2012

Instructor: Dr. Leonid Braverman

E-mail: Ibraverman@ambrose.edu Office: TBA Office Hours: TBA Class Location: 2133 Class Time: M 6:30-9:30 pm Credits: 3 Pre-Requisites: No

Text: N. Comins, W. Kaufmann III "Discovering the Universe", 7^t to 9th edition, W. H. Freeman & Company.

Course Description: A comprehensive, descriptive survey of modern astronomy including elements of the history of astronomy. Topics include: solar system; the birth and death of stars; the Milky Way and other galaxies; cosmic rays, pulsars and supernovae; the concept of a black hole; exploding galaxies and quasars; the beginning and end of the universe; the possibilities of extraterrestrial life and interstellar communication. This course is not recommended for natural science majors.

The Course material is divided into 10 Units:

- 1. Discovery the Night Sky
- 2. Gravitation and Kepler's Laws
- 3. Light and Telescope
- 4. Earth
- 5. Moon and Other Terrestrial Planets
- 6. Outer Planets

- 7. Physical Properties of Light; Sun
- 8. Stars Introduction
- 9. Stars Lifecycle
- 10. Black Holes, Galaxies, Cosmology

Evaluation

Attendance	5%
Quizzes (2)	25% each
Final Exam	45%
Total	100%

Note: Students must complete all components in order to complete the course.

Attendance

At Ambrose University College, students are expected to attend all classes or notify the instructor of a necessary absence (see regulations in the Academic Calendar)

Quizzes

Two fifty-minute quizzes that will test students' knowledge of materials covered to that point.

Final Exam

A cumulative two-hour test will be held on Monday, April 16, 2012 in 2133. There is a 2 hour test: 6:30 – 8:30 pm.