



## SC 120 Introduction to Astronomy Winter 2009

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**Instructor: Dr. Leonid Braverman**

**E-mail: lbraverman@ambrose.edu**

**Office: G 2202**

**Office Hours: Wed 12:30 – 13:30 or by appointment**

**Class Location: A 1085-1**

**Class Time: Tue 6:30-9:30 pm**

**Credits: 3**

**Pre-Requisites: No**

**Text:** N. Comins, W. Kaufmann III “Discovering the Universe”, 7<sup>th</sup> 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.

*This course has an existing transfer credit agreement through Alberta Council on Admissions and Transfer. Visit <http://www.transferalberta.ca> for details.*

### Evaluation

Attendance	5%
Midterm	35%
Essay	20%
Final Exam	40%
Total	100%

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

**Grade Scale**

<u>Letter Grade</u>	<u>Description</u>
A+	
A	Excellent
A-	
B+	
B	Good
B-	
C+	
C	Satisfactory
C-	
D+	
D	Minimal Pass
F	Failure

**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)

**Essay**

Students will be asked to present one essay (topics will be announced later).

**Midterm**

A one hour and a half closed book test

**Final Exam**

A cumulative two-hour test.

**The Course Material is divided into 10 Units:**

1. Discovery Night Sky
2. Gravitation and Planets
3. Light and Telescope
4. The Earth
5. Moon and other Terrestrial Planets
6. Outer Planets
7. Light and Matter; The Sun
8. Stars – Introduction
9. Stars – Lifecycles
10. Black Holes, Galaxies, Cosmology

**Course Requirements**

While students are encouraged to assist each other, each student must create her or his own original solution to assignments and exams. Duplicate submissions will result in students involved receiving a zero for the submission. Further penalties may be mandated.

**Assistance**

Your instructor will be available in class, during office hours, and other times by appointment.