

**INTRODUCTORY ASTRONOMY**  
**SCI 201-03 - Fall 2010**

**Instructor:** Dr. Veronique Lankar, Physics Dept.

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**webiste of the course:** <http://onlinephys.com/astromony.html>

I post office hours, announcements, lectures notes, assignments on the website

**virtual office :** doc lankar on facebook.com. please create a facebook account just for this class.

No personal account.

**textbook:** Astronomy 6e - authors =Seeds/Backman - publisher= Brooks/Cole

You are required to read the relevant chapters before coming to class and after.

**Labs:** lab book available in 308 for \$5 . Please read the lab before coming the class.

**Course:** Provides a qualitative introduction to the nature of the solar system and beyond. The topics include: the tools of Astronomy, a brief tour of the solar system, the lives, evolution and death of stars. Supernovae, neutron stars and black holes. This course is intended as a broad-based introduction to Astrophysics for students who are not majoring in science. Three hours of lecture and one and a half hours of lab per week.

**Attendance policy:** Attendance is expected at all class meetings. Valid excuses for non-attendance must be presented to the instructor, and it is the student responsibility to make up material that was missed. Excessive lateness or absenteeism will lower the final grade assigned. Tests **missed without a valid excuse or without prior approval of the instructor will be graded zero.** The laboratory grade will be determined by performance on the assigned lab exercises. This will normally be carried out by instructor during the individual lab periods. **Unexcused absence from a lab period will result in a 5% decrease in lab grade** (out of 20% total. See below).

**Methods of Evaluation:**

The final grade is a weighted average of participation, labs, assignments, tests and the final.

**Relative weight will be assigned as follow:**

participation	10%
Laboratory	20%
Assignments	20%
Midterm/tests	25%
Final	25%

**Learning objectives:**

1. To investigate the basic facts, principles, theories, and methods of modern science as practiced in astrophysics.
2. Describe the life cycle of stars from birth to death and beyond.
3. Understand the formation of the Solar system
4. Apprehend the time and distance scales in the Universe.
5. To learn important events in the history of astronomy, particularly the discovery of the physical laws that govern the Universe, and the formation, history, and evolution of stars and galaxies.

**Topics covered:**

week1: Introduction, tour of the Cosmos on the shoulders of giants, a brief history	week7 overview of the solar system catastrophic collisions
week2: distance in the Universe	week8: extra solar planets
week3: Light the great informant	week9: The closest star, our Sun
week4: more about light, fingerprints of atoms.	week 10: characteristics of stars
week5: Doppler shift, blackbody spectrum	week11: formation and evolution of stars
week6: telescopes: tools of the trade.	week12: fate of our Sun, white dwarfs
	week13: supernovae, neutron stars and black holes