

Savannah Christian Preparatory School Syllabus

Course: Astronomy

Term: 1 Semester -- 4 lectures and 1 lab per week

Text: *Astronomy Today*, Chaisson, E., and McMillan, S., Third Edition, Prentice-Hall, 1999

Goal: To develop an appreciation for the universe in which we live, its composition, structure, and the laws that govern its motion. The solar system and each of the planets will be studied, with substantial time spent learning the importance of the Sun and our reliance upon it for energy. The absence of sophisticated mathematics allows substantial discussion of the important concepts and phenomena occurring in the marvelous universe around us.

Requirements:

The course is offered primarily to seniors who desire an additional elective in the field of science. There is a minimum of mathematics required, with scientific concepts considered more important than complex problem solving.

- Objectives:**
1. To become familiar with the Earth and the Moon as the initial planetary models.
 2. To discuss the formation of the solar system and the nature of the other planets in our system.
 3. To study the importance of the Sun, the benefits derived from the energy received, and the role of our atmosphere in protecting us from its harmful effects.
 4. Using the Sun as a model star, to discuss the stars in general, their properties, their evolutionary histories, and their varied fates.
 5. To discuss our knowledge of the Milky Way Galaxy, and the other galaxies in the universe.
 6. To reach the subject of cosmology and the large-scale structure and dynamics of the universe as a whole.