

ASTR 2.11 Introduction to Astronomy 2: Journeys into the Universe

Instructor: Earl F. Skelton, Adjunct Professor of Physics

CRN: 82626 Natural Sciences GCR

In **COR** 101, TR 2:00 to 2:50, and lab

Prerequisite: ASTR 1

Open to all students

When I behold the heavens, the work of thy fingers, what is man that thou art mindful of him? This question, recorded in the *Old Testament*, was asked by the ancient Hebrews as they contemplated the awesome heavens. From that time to the present, all peoples, and all religions, continue to ask: *Why are we here? What is the cosmos? Where does the universe begin and end?*

In modern times, we add some newer questions: *Are we alone? Can we travel backward or forward in time? What was there before there was time and space? When and how will the universe cease to exist?* All of these profound riddles about the cosmos will be addressed, as we journey together and learn what science presently knows and can answer.

This course will consider the breadth and scope of the known universe, and our place within it. In the first semester, our solar system will be studied: *How did it come into existence? How does the Sun generate the energy that is necessary for all life on Earth?* We will discuss the planets and how they differ from comets, and asteroids.

All of this fascinating subject matter will be presented in an easy to understand, fun, and engaging manner. There will be viewings of the popular Carl Sagan's *Cosmos* series and similar videos, student visits to astronomy shows, exhibits at the National Air and Space Museum, among other interesting web-based ways of gaining insights into the universe around us.

Earl Skelton is an Adjunct Professor in the Department of Physics. In 1999, he retired from research in order to pursue his true passion full time: *teaching*. Prior to teaching full-time, Dr. Skelton was a research physicist at the U.S. Naval Research Lab where he published over 300 papers and won many awards for his work. Dr. Skelton is the "Patch Adams" of academia. His teaching philosophy is that he will do anything, within the law, to make learning fun and pleasurable. At GW he was recently awarded the 2002 Bender Teaching Award for Teaching with Technology.