

Biology 3316 / Geology 3316 / Physics 3316

Astrobiology

Spring 2008

M W 5:30-6:50 pm Science Hall 103

- INSTRUCTOR: Dr. M. Cuntz, Associate Professor
OFFICE: Chemistry and Physics Bldg. (New Planetarium), Rm 330
PHONE and E-MAIL: (817) 272-2467 and cuntz@uta.edu
OFFICE HOURS: TBA
- TEXTBOOK: **Life in the Universe, 2nd Edition**
by J. Bennett & S. Shostak
Supplementary Material will be provided, including papers published in *Science* and *Nature*
- COURSE CONTENT: A Universe of Life? (Chapter 1)
The Science of Life in the Universe (Chapter 2)
The Universal Context of Life (Chapter 3)
The Habitability of Earth (Chapter 4)
The Nature of Life on Earth (Chapter 5)
The Origin and Evolution of Life on Earth (Chapter 6)
Searching for Life in Our Solar System (Chapter 7)
Mars (Chapter 8)
Life on Jovian Moons (Chapter 9)
The Nature and Evolution of Habitability (Chapter 10)
Habitability Outside the Solar System (Chapter 11)
The Search for Extraterrestrial Intelligence (Chapter 12)
Interstellar Travel and the Fermi Paradox (Chapter 13)
Selected papers published in *Nature*, *Science*, and *other sources*
- OBJECTIVES: Learn about astronomical aspects of the evolution of life on Earth. Learn about evidence of life in the Solar System. Understand the physical constraints for life around different types of stars. Contemplate the inherent problems of SETI. Learn about the Drake equation and its implications.
- EXAMINATIONS: TBA
- GRADING POLICY: TBA

No make-up for the mid-term exam, unless arranged in advance and depending on circumstances. Even if agreed on, a make-up mid-term exam will have a **lesser number of extra-credit questions**.

There will be a two-week time frame for each homework.