

**LEARNING OBJECTIVES**

- 1) Describe two benefits to studying life and its beginnings on Earth, before searching for life elsewhere.
- 2) Provide three pieces of scientific evidence, one each from biology, astronomy and geology/planetary science, that when combined suggest life may exist elsewhere in the Universe.
- 3) Compare and contrast (how are they similar and how are they different) the goals and methods of Astrobiology versus SETI (Search for Extra Terrestrial Intelligence)

Textbook readings: p 1 – 12

Below are questions you should use to guide your reading, to prepare for the pre-class, on-line quiz and for discussion in class (if you can answer these, you should do fine on the on-line quiz).

1. What characteristics absolutely define life and non-living things?
2. Why has scientific interest in life beyond Earth exploded in the past few decades?
3. How does astronomy help us understand the possibility of ET life?
4. How does planetary science help us understand the possibility of ET life?
5. How does biology help us understand the possibility of ET life?
6. List several promising sites for life in the solar system (outside of Earth).
7. Explain how SETI's goals differ from those of typical astrobiologists.