## ASTRONOMY 294 Life in the Universe

How this course meets the GEC goals for Category 3, Natural Science (BA)

Astronomy 294 is a GEC Physical Science course in the Natural Science category. The general goal for courses in the natural sciences is to foster an understanding of the principles, theories, and the methods of modern science; the relationship between science and technology, and the effects of science and technology on the environment. The more specific goals of Astronomy 294 are:

- Understanding current theories of star and planet formation and evolution and how these constrain the possibilities for the development of life in different environments.
- Understanding the principles of life as we know it and the interface among the disciplines of astronomy, chemistry, biology, geology, and earth and planetary sciences.
- Understanding the conditions necessary for life to develop and flourish, and understanding the consequences of physical changes to environments for life (e.g., global warming).
- Understanding the history of human views of life in the Universe.
- Understanding the enabling technologies, from the first telescopes through modern space probes and sophisticated techniques for planet finding, that have played key roles in the evolution of our understanding of the possibility of life elsewhere in the Universe.
- Understanding the potential societal and philosophical implications of discovery of life elsewhere in the Universe.

BMP 23 October 2007