

**Syllabus for Intelligent Life in the Universe (GEOL 0871)
Summer 2012 (2127)**

General Information:

Prerequisites: none
 Class Times: MW 6:00 to 7:30 pm, plus two recitation sections per week
 Lecture Location: Thaw Hall 203
 Recitation Locations: Thaw Hall 203 (Enter SRCC, elevator to 5, go right through double doors.)
 Website: Lecture and recitation materials will be available on CourseWeb:
<http://courseweb.pitt.edu>

Instructors:

Dr. Charles E. Jones Phone: 412-624-6347 Office: 503 SRCC
 Office Hours: MTWTh 4-6 pm or call to make an appointment
 Email: cejones@pitt.edu **NOTE: I get so much e-mail that while I read it all, I often do not get time to answer it all. Thus, if you need an answer, do not be shy about talking to me after class!**
 Bobby Karimi (TA): e-mail = bok10@pitt.edu (see the recitation syllabus for full contact information)

Course Overview:

This course evaluates the likelihood that intelligent life exists elsewhere in the Universe. To do this we focus on the one case-study we've got: The Earth. We survey the history of the Universe, the Solar System, and the Earth, with a focus on the processes responsible for producing the Earth and keeping it habitable. We then survey the history of life to see the factors that affects its origin, diversification, and path to intelligent life. Finally, we look at the likelihood of finding life on other planets in our Solar System and across the galaxy.

Grading:

The course grade will be based on two midterm exams, a final, recitations, and homework. The midterms and final exam will focus on the lecture notes. The overall grading breakdown will be as follows:

First Exam:	Wednesday, July 11	15 %
Second Exam:	Monday, July 23	25 %
Final Exam:	Wednesday, August 1	35 %
Recitations and Homeworks:		25 %

Be sure to mark on your calendar the exam dates so that you do not make travel plans that overlap with the exams! It will *not* be possible to make up a missed exam unless you have a note from (1) a doctor or a dean, and (2) clearance from Dr. Jones. If you anticipate a schedule conflict, please see your me ahead of time to make arrangements. **E-mail or call me *immediately* if some emergency (e.g., a car crash) keeps you away from an exam.**

A = 90-100%, B = 80-90%, C = 70-80%, D = 60-70%, F = 0-60%. Plus and minus grades are assigned as follows (using B grades as an example): B- = 80-83%, B = 83-87%, B+ = 87-90%.

Learning Disabilities or Non-Native Speakers:

If you need extra time or other accommodations during exams, contact Disability Resources and Service to find out what you need to do! Here is their web page: www.dr.s.pitt.edu. If you are not fluent in English and think it may slow you down on exams, please let Dr. Jones know in advance of the first exam!

Advice: "I find that the harder I work, the more luck I seem to have." -- Thomas Jefferson (1743-1826)

Extra Credit:

The extra credit allows people whose final course average ends up near a grade boundary to bump themselves up into the next grade category (e.g., from 89.5% to 92.5%). The total amount of extra credit cannot lift you more than one-third of a letter grade! The extra credit opportunities are explained on the GEOL 0871 Courseweb page.

If you find yourself doing poorly in the class, there is only one strategy to improve your grade: Study more effectively. Extra credit cannot do the job. You will have review guides to help focus your study for the exams, so if you are unclear about certain review topics, **come see the instructor!** If you are surprised at a poor exam grade, **please come see the instructor ASAP!** To encourage improvement throughout the course, know that if each of your exam grades improves by at least 3%, I will bump your final class average up by 3%.

Cheating

Cheating will not be tolerated on the exams or in any part of the recitations. Cheating means getting any unauthorized assistance from any source during an exam or in preparation of a homework or recitation. You cannot copy from another person, refer to hidden notes of any type, or receive information via electronic or other means. Most recitation exercises will be run in small groups to facilitate discussion and to make covering the material a bit more fun. However, you are not allowed to be a parasite, copying down what the others in your group produce. You must intellectually participate!

Class Outline

Week	Lecture Topics	Recitation
1	Origin of the Universe, Origin of the Elements, Origin of the Solar System and Its Planets	Composition of the Universe The Miracle Planet (DVD)
2	Geologic Time, Plate Tectonics, Long-Term Habitability of the Earth, The Origin of Oxygen	Plate Tectonics
3	The Nature of Science, The Theory of Evolution, Darwin's Evidence for Evolution, The Origin of Species	Geologic Time, Exam 1
4	Creationism and Intelligent Design, The Origin of Life, The First Fossil Life, Eukaryotes and Multicellular Life, Origin of Vertebrates, Mammals, and Primates/Humans	Evidence for Evolution, Natural Selection, Creationism and Intelligent Design
5	Life on the Inner Planets, Life on the Outer Planets, Planetary Habitability, Galactic Habitability	Exam 2, Hominid Evolution (DVD)
6	Exoplanets, Conclusions	Final exam