Astr 450 Assignment 4: Some biochemistry
due Thu Feb 12, 2009

The following questions will require that you do some research. Reference all your sources. Use of the textbook and of wikipedia is ok. Adhere to the word limit (300). All questions are weighted equally. Try to print on both sides of the paper and thus reduce waste.

1. What were the reactants, physical conditions, and products of the Miller-Urey experiment (1952)?

2. In the context of life in the Milky Way Galaxy, why is it significant that some meteorites, like the Murchison meteorite, contain amino acids?

3. Define “codon”, and briefly describe how the order of nucleotides on the DNA molecule represent the recipe for the amino acids that build proteins.

Requirements for a good assignment

- The assignment will be graded strictly, as expected for a 400-level course. The assignment is graded out of 30 points.
- Have your name, SID, and a word count at the top of the paper. Use question-and-answer format when writing your assignment, do NOT hand in a run-on paragraph (50% penalty).
- Be typed, double-spaced, of maximum length 300 words. Assignments longer than 300 words will receive zero credit.
- Reference all sources of information you use.
- Use quotations only to illustrate your point, not to make it. If you are unclear about this requirement, then speak with the instructor.
- Show completeness of information, conciseness of expression, have a logical development of ideas, and evidence of thought regarding the content.
- Be professional of presentation, e.g., no ragged ends, creases, or ink blobs on the paper.
- In all ways, the author should show pride in his/her work.