## Philosophy 128, Philosophy of Science Spring, 1999 <u>Third Paper Assignment</u> Due in Class Monday, May 3

(Note: No late papers will be accepted under any circumstances. Plan accordingly.).

Please write a short paper (five to eight typed, double-spaced pages) on one of the topics below. While, as before, your paper will be evaluated primarily on the quality of the arguments and supporting evidence it presents, the following additional guidelines also apply:

--Standards for crediting sources of quoted or paraphrased material will be enforced *very* strictly this time. If you have any questions about those standards, it is your responsibility to contact me before risking misunderstanding.

--Do not use *any* non-authoritative or unauthenticated web-based materials. The easiest way to avoid this is not to use any web-based materials at all. If you must, however, you may want to consult with me regarding the suitability of whatever sources you find. On the other hand, you are encouraged to use on-line indexes to library materials, as well as electronic journals. Guides to these resources may be found at www.lib.lehigh.edu.

1. In what senses can scientific progress be said to occur, and in what senses can it be said not to occur? In responding to this question, please be careful to articulate *very precisely* what you mean by "progress." Please use appropriate examples, and take account of relevant philosophical literature.

2. Is there such a thing as the scientific method? If so, what is it? If not, why do the leading candidates fail? In responding to this question, please make sure to take relevant literature into account. Your primary task is not only to articulate your response, but to defend it with arguments and examples.

3. What results in the philosophy of science would, if properly appreciated, allow scientists to do their jobs better? Provide a thorough argument in support of your response, illustrated by concrete examples. Defend your response against the claim that the philosophy of science is of no scientific interest.