UNIVERSITEIT VAN AMSTERDAM
INSTITUTE FOR LOGIC, LANGUAGE AND COMPUTATION

Core Logic
2005/2006; 1st Semester
dr Benedikt Löwe

Homework Set # 1   *Deadline:* September 13th, 2005

Homework can be handed in

(1) in class,
(2) *via* e-mail to `sbold@science.uva.nl`,
(3) or to Stefan Bold's mailbox (ground floor Euclides).

Exercise 1 (9 points).

In the lecture, we discussed six ways of classifying sciences: I. according to the ontological character of the subject matter, II. according to the character of the scientific statements, III. according to their epistemology, IV. pragmatic, V. sociological, and VI. historical.
Use these classification schemes to collect arguments for the following statements (even if you think they are not true):

- "Mathematics is not a natural science." (3 points)
- "Applied logic is a natural science." (3 points)
- "Logic is a social science." (3 points)

Exercise 2 (7 points).

Read the following texts (links can be found on the course webpage):

- Section 2 of Hofweber's article "Logic and Ontology" from the Stanford Encyclopedia of Philosophy
  `http://plato.stanford.edu/archives/sum2005/entries/logic-ontology/`
- The Wikipedia entry on "Logic"
  `http://en.wikipedia.org/wiki/Logic`

Describe in a few words (100-150 words each; 3½ points each) what Hofweber and the Wikipedia community consider to be the scope of logic (for this, it might be interesting to have a look at the discussion for the Wikipedia article).
Try to highlight the contrast between the two texts in the summaries.

Exercise 3 (6 points).

For each of the four ILLC "projects" (= research groups; ToI, CSIP, CIL, ACT) find one PhD student who is currently affiliated to this group and describe his or her work in three keywords going from the general to the specific ; for instance: "Ancient Philosophy, Plato's *Sophistes*, Byzantine Commentaries" or "Mathematics, Algebraic Number Theory, Class Field Theory" (1½ points each).

`http://staff.science.uva.nl/~bloewe/2005-I-CL.html`