האוניברסיטה העברית בירושלים The Hebrew University of Jerusalem

The Language, Logic and Cognition Center is pleased to announce a series of 6 lectures to be held on **April 24, 29 and May 1, 6, 13** at **16:30-20:00** (6th date to be announced) The meetings will take place in **room 200**, The Australian Research and Graduate Studies Complex School of Education, Mount Scopus Campus

Logical Relativism and the Continuum

Prof. Stewart Shapiro (Ohio State University, St. Andrews University)

<u>Syllabus</u>

This course will explore two closely related topics, continuity and relativism (or pluralism) concerning logic. We will start with some senses in which one can be (or should be) a pluralist or relativist concerning logic. These include the nature of logical consequence, the logical/non-logical boundary, and vagueness. Then we will turn to a particular kind of relativism, one that is based on the Hilbertian idea that, in mathematics, consistency is the only formal, or mathematical requirement on a theory. The key observation is that when the logic is non-classical, more things become "consistent", and thus legitimate. Then we will explore issues that arise from this relativism, matters concerning the logical terminology and the role of meta-theory.

For the other topic, we focus on two contrasts, one between the finite and the infinite, and the other between the continuous and the discrete. Aristotle insisted that the actual infinite is incoherent, and that the only sensible notion is that of the potentially infinite, a process that can be continued indefinitely. Today, thanks to the pioneering work of Dedekind and Cantor, the prevailing (but not universal) attitude is almost the diametric opposite, that the potentially infinite only makes sense if there is an actual infinity underlying it. But there are dissenting voices, from the traditional mathematical intuitionists and others.

Students can earn 2 point credit for participating in the series. Please register to course $\frac{\# 36856}{1.000}$. For further questions write to <u>llcc@mail.huji.ac.il</u>.

If you would like to be notified about similar events in the future, please write to <u>llcc@mail.huji.ac.il</u> to be added to the Language, Logic and Cognition Center mailing list.