THE UNIVERSITY OF WESTERN ONTARIO DEPARTMENT OF PHILOSOPHY GRADUATE COURSE OUTLINE

Philosophy XYZ: Empiricism in the Philosophy of Science

Spring Term 2018 Instructor: Stathis Psillos Email: spsillos@uwo.ca; psillos@phs.uoa.gr

Course outline

This intensive course will be on empiricism in the philosophy of science. We shall explore the varieties and limits of empiricism, viz., the philosophical position which takes it that experience is the sole source of substantive knowledge of the world. The focal points will be two: the relation between empiricism and scientific realism and the relation between empiricism and metaphysics.

Recently, empiricism in the philosophy of science has been taken to be antithetical to scientific realism. Within science itself too, especially towards the end of the nineteenth century, empiricist stances were taken to require or impose certain limits to the scope of scientific method and to favour an instrumentalist account of theories. But even then, the key concern was the avoidance of metaphysics and the generation of a scientific conception of the world which is free, as far as possible, from untestable and indefinite hypotheses. Part of the rationale for opposing empiricism to realism has been the claim that explanation—and especially explanation by postulation of unobservable entities—goes beyond the limits of experience and falls outside the scope of an empiricism-friendly account of scientific method. But many advocates of empiricism have aimed to develop a coherent *empiricist* position which leaves intact the world as this is described by our best science. There are genuine difficulties in this attempt, but they have mostly to do with the metaphysical implications (or presuppositions) of the scientific image of the world (especially when it comes to issues such as the status of laws of nature and the nature of properties) as well as with the more general epistemological issue of the character and the justification of scientific method.

In this course, we shall aim to describe the contours of a coherent and plausible version of empiricism which is friendly to scientific realism.

Emphasis will be given to the following issues:

The historical development of empiricism

The differences between empiricism and rationalism

Various forms of empiricism: Millian empiricism, Logical Empiricism, Quinean empiricism, Constructive empiricism

Empiricism and the limits of experience

Empiricism and scientific method

Experience and the knowledge of unobservables

The possibility of knowledge independently of experience

Knowledge of abstract entities

Empiricism and nominalism

Empiricist views of causation and laws of nature

TEXTS: Readings will be available through a dropbox folder.

COURSE REQUIREMENTS: This is an intensive course. There will be 8 sessions in the space of three weeks. Then there will be two or three more sessions over skype with student presentations. All those who take it for credit are required to write two essays. One short essay (about 2000 words) which will be delivered by the end of March and one standard size essay (about 4000 words) to be delivered by the end of April. They are also required to make a presentation of a paper.

The course will start on Monday the 5rd of March 2018.

Plan of the course (exact dates to be provided)

- 1. Introduction-Overview. What is Empiricism?
- 2. A brief history of empiricism
- 3. Empiricism and Scientific Realism I: Logical Empiricism
- 4. Empiricism and Scientific Realism II: Quine and Sellars
- 5. Constructive Empiricism
- 6. Empiricism and Method (experience, justification, a priori knowledge)
- 7. Empiricism and Metaphysics I: nominalism and abstract entities
- 8. Empiricism and Metaphysics II: causation and laws of nature

(Detail bibliography to follow)