PHILOSOPH 9225A: Scientific Realism (Philosophy of Science)
Fall Term 2016 Instructor: Stathis Psillos
Location: STVH 2150H
Email: spsillos@uwo.ca; psillos@phs.uoa.gr

Course outline
This course will be on scientific realism. We will use my books Scientific Realism: How Science Tracks Truth (Routledge 1999) (SRhSTT) and Knowing the Structure of Nature (Palgrave 2009) (KtSoN) as the basis for a thorough and detailed examination of the various aspects of the scientific realism debate, looking into epistemological, metaphysical and semantic issues. The focus will be recent developments and arguments.

Emphasis will be given to the following issues:
The historical development of the scientific realism debate in the twentieth century
The explanationist defence of realism and the various criticisms.
The structuralist turns in the early and late twentieth century
Various forms of empiricism and their attitude towards scientific realism
The role of the history of science in the scientific realism debate
The atomism debate in the late nineteenth century

TEXTS: Readings will be available through a dropbox folder.

COURSE REQUIREMENTS: This is an intensive course. There will be nine 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 October and one standard size essay (about 4000 words) to be delivered by the end of November. They are also required to make a presentation of a paper.
The course will start on Monday the 3rd of October.

PLAN OF THE COURSE

Session Dates (updated September 29th):
- Mon. Oct. 3rd 9 a.m.
- Tues. Oct. 4th 10:30 a.m.
- Fri. Oct. 7th 11:30 a.m.
- Tues. Oct. 11th 10:30 a.m.
- Wed. Oct. 12th 9 a.m.
- Fri. Oct. 14th 11:30 a.m.
- Mon. Oct. 17th 9 a.m.
- Tues. Oct. 18th 10:30 a.m.
- Fri. Oct. 21st 11:30 a.m.

1. Introduction-Overview. What is Scientific Realism?
SRhSTT, introduction
KtSoN, Introduction, chapter 1
S. Psillos The Realist Turn in the Philosophy of Science (forthcoming)

2. Realism and the Atomism Debate: a conceptual geography
Peter Achinstein (2002) Is there a valid experimental argument for scientific realism?
Journal of Philosophy 99: 470-495

3. Empiricism and Scientific Realism
SRhSTT, chapter 2

4. The No Miracles Argument
SRhSTT chapter 4

5. Realism and the History of Science I
SRhSTT, chapter 5
Poincare, H. (1902) Science & Hypothesis, chapter 10

6. Realism and the History of Science II
Various recent articles on the Pessimistic Induction

7. Structuralism and Realism
SRhSTT, chapter 7
KtSoN, chapters 7, 9

8. Ontic Structural Realism
KtSoN, chapter 8
French Steven (2014) the structure of the World, chapters 1, 7, 8, 9, 10

9. Current forms of Anti-Realism
KtSoN, chapter 4
P. Kyle Stanford (2006) Exceeding our Grasp, Oxford University Press, chapters 1, 2, 3