Philosophy of Science
Supplementary Subject

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Tutorials are on **Thursdays at 5pm** in weeks 3, 4, 5, 7 and 8. There is **no tutorial in week 6**. Tutorials are on Teams – I will send you invitations.

**PRESENTATIONS**

Each of you will give one presentation (approximately 15-30 min) during this term. This is an opportunity to practice presentation skills in an informal setting. You can choose to present your essay or give a general presentation of that week’s tutorial topic. You can prepare slides if you want to, but you don’t have to. You can also just read your paper aloud if you prefer that. Let me know if you prefer not presenting (instead, we can read your paper beforehand and discuss it together).

**ESSAYS**

You should write **4 essays in total**, so you can skip the essay for one tutorial.

Please email me your essays by **noon on the day before our meeting**.

Your essays should be **1,000-1,500 words** in length. Don’t tackle everything in a single essay and be selective about your readings. Most of the readings are available online via SOLO. The reading lists below are quite extensive, so that you can follow up on the issues you find interesting. Pick one interesting aspect of the topic, pick an argument/view that you like or dislike, and try to come up with interesting arguments. Try to have a clear structure and write in a simple and concise manner.

Useful resources:

https://philpapers.org
https://plato.stanford.edu

YouTube:
https://www.youtube.com/watch?v=Zop6eVSXUH0&list=PLXKKIUdnOESGj2Gjea3vAlsYwNNzJwP9 (Philosophy of Science)
https://www.youtube.com/watch?v=a0UxFhKOiFg&list=PLXKKIUdnOESHcJwaBl2--vHSR5tWwji-nh (Scientific Realism)

Podcasts:
http://www.philosophybites.com

Advice on writing philosophy essays:
http://www.jimpryor.net/teaching/guidelines/writing.html
http://oyc.yale.edu/sites/default/files/philosophy-paper.pdf

**Week 3**

*The Riddle(s) of Induction*

**Suggested Essay Question:** Can Induction be justified? Does that pose a problem for our empirical knowledge?

**Reading (the more *'s, the more important it is)**

To understand Hume's view better, it is a good idea to see how the discussion of induction fits into his general empiricist project. (Chapters I - III of *An Enquiry Concerning Human Understanding* lay this out.)

**B. Russell, *The Problems of Philosophy* (OUP 1912), Ch. 6.
*P. F. Strawson, *Introduction to Logical Theory* (Methuen 1952), Ch. 9.


For help with Hume:


**On the new problem of induction** (optional, for now)

***Nelson Goodman, *Fact, Fiction and Forecast* (Ch iii , ‘The new riddle of induction’)

***Donald Davidson, ‘Emeroses by other names’ Appendix to Ch. 11 in his *Actions and Events*. 
**Week 4**

*Confirmation and Explanation*

**Suggested Essay Question:**

1) Does the covering law model provide a plausible account of explanation in science?

OR:

2) What is the ‘Old Evidence’ problem, and is there a good response to it?

OR:

3) What is the paradox of the ravens, and is there a good response to it?

**Reading (the more *s, the more important it is, but select according to which question you’re trying to answer)**


**Samir Okasha, Philosophy of Science: A Very Short Introduction, Oxford University Press 2002. Ch3**

**Ruben, David-Hillel. (Ed.) Explanation. Especially the papers by David Lewis (‘Causal Explanation’) and Wesley Salmon.**

*Ruben, David-Hillel. Explaining Explanation.*

**On Bayesianism**

**Colin Howson and Peter Urbach, Scientific Reasoning: The Bayesian Approach, Open Court 1993.***

On the Raven Paradox


**The Problem of Induction


**Week 5**

**Verification and Falsification: Empiricism and its Limitations**

Suggested Essay Questions (choose one):

1) Is Popper’s falsifiability criterion any better than the logical positivists’ verifiability criterion?

2) How successful is falsificationism as an account of science?

3) How well does Popper’s distinction between science and pseudo-science work?

**Reading:** (The more *’s, the more important it is)


Week 7

**Incommensurability and Scientific Revolutions**

**Suggested Essay Questions:** What is Kuhn’s account of science and how does it affect the notion of science as a rational, truth-seeking enterprise?

**Reading:**

***Thomas Kuhn. The Structure of Scientific Revolutions.** (As much as you can manage.)

**Hilary Putnam. The ‘Corroboration’ of Theories.** In Honderich and Burnyeat (eds.), *Philosophy as it is.*


***There is a collection, Ian Hacking’s *Scientific Revolutions*, which might help with this, especially the article by Shapere (it also contains the Putnam article.)

**Week 8**

**Scientific Realism: Structural Realism**

**Suggested Essay Question:** Is a version structural realism the most plausible defence of scientific realism?

**Reading:**


