Phil 125: Philosophy of Science  
Fall, 2020

Tuesday and Thursday, 1:30–3:05pm

Contact Information

Professor: Abe Stone (abestone@ucsc.edu)  
Push notification: Notify Abe (http://notifyabel.appspot.com)  
Website: https://people.ucsc.edu/~abestone/courses  
Office hours (via Zoom): T.B.D.  
Zoom class meeting: https://ucsc.zoom.us/j/95933159203

Course Description

We will read some of the classic texts which created and set the stage for later developments within the subdiscipline now known as philosophy of science. The course will be divided into two halves, corresponding to two fundamentally different views about what makes science distinctively rational (due to Rudolf Carnap and Karl Popper, respectively). In each case we will also read important later works which were taken to undermine the view in question.

Course Requirements

A midterm assignment (your choice of a take-home exam or a 4–6 page paper) due Thursday, November 12, and a final assignment (your choice of a take-home exam or a 4–6 page paper), due Wednesday, December 16. Each of the two assignments is worth 50% of the course grade.

All paper assignments will be available on-line, and there are be links to them from this syllabus as well as from my main course page. I will discuss the assignments in class when the due date draws near. You can find answers to some commonly asked questions about my assignments and grading in my FAQ (https://people.ucsc.edu/~abestone/courses/faq.html).

Papers are to be handed in, as attachments, via the “Assignments” tool on Canvas. Please submit in PDF or in a format easily convertible to PDF.
(e.g., MSWord). The system will accept late submissions, but late papers may not receive full credit. The system is not set up to allow resubmissions: once you press the “submit” button, it will not let you change your response. If, however, you mistakenly submit something and want to change it, please contact me and I can make an exception.

I understand that conditions may be difficult and will be flexible about due dates, etc., if necessary. But please try to hand in work on time if you possibly can.

There be live Zoom lectures at the scheduled course time. Live attendance at these is not required (in general, I never require attendance at my lectures), but I highly advise you to attend if possible. It will be difficult for me to teach if there is no live audience at all. However, all lectures will also be recorded and made available for viewing later (on YouTube). Links to the recorded lectures will appear on this syllabus as they are put up.

Texts

(This book is generally known as “the Aufbau,” following its original German title, Der logische Aufbau der Welt.)


These texts can be ordered through the Bay Tree Bookstore. Readings not from these texts will be available on Canvas.
Readings
Thursday, October 1: (no reading, first class).

Part I: Carnap/Goodman/Quine

Tuesday, October 6: Carnap, *Aufbau*, Preface to 1st Edition (pp. xv–xviii); §§1–5 (pp. 5–10); §§17–25 (pp. 31–43).

Thursday, October 8: Carnap, *Aufbau*, §§26–41 (pp. 47–70); §§46–60 (pp. 78–97).

Tuesday, October 13: Carnap, *Aufbau*, §67 (pp. 107–9); §§95–6 (pp. 152–4); §§98–103 (pp. 156–63); §§125–8 (pp. 194–9); §157 (p. 246); §§160–61 (pp. 254–7); §§165–9 (pp. 263–72).


Thursday, October 22: Carnap, “The Methodological Character of Theoretical Concepts,” §§1–6, beginning of §7 (through the paragraph that ends on top of p. 54), and §§8–10; Putnam, “What Theories Are Not.”

Tuesday, October 27: Goodman, *Fact, Fiction, and Forecast*, ch. 2 (pp. 31–58).

Thursday, October 29: Goodman, *Fact, Fiction, and Forecast*, ch. 3 and beginning of ch. 4 (pp. 59–99).

Tuesday, November 3: Quine, “Epistemology Naturalized.”

Part II: Popper/Kuhn

1The symbol § means “section.” §§ means “sections.”
Thursday, November 5: Popper, *LSD*, ch. 1 and 2 (pp. 3–34).

Tuesday, November 10: Popper, *LSD* ch. 3 (pp. 37–56).

Thursday, November 12: Popper, *LSD*, ch. 4 (pp. 57–73) (and Midterm assignment — exam or paper — due).

Tuesday, November 17: Popper, *LSD*, ch. 5 (pp. 74–94).

Thursday, November 19: Popper, *LSD*, ch. 10 beginning and §79 (pp. 248–52); §82 (pp. 264–7); §84 through end (including Addendum), pp. 273–82.

Tuesday, November 24: Neurath, “Pseudorationalism of Falsification”; Putnam “The ‘Corroboration’ of Theories”; Lakatos, “Popper on Demarcation and Induction,” through end of part I (pp. 241–52).

Thursday, November 26: No class (Thanksgiving)

Tuesday, December 1: Kuhn, *SSR*, ch. 1–5, pp. 1–51.

Thursday, December 3: Kuhn, *SSR*, ch. 6–8, pp. 52–91.

Tuesday, December 8: Kuhn, *SSR*, ch. 9–10, pp. 92–135.

Thursday, December 10: Kuhn, *SSR*, ch. 11–13, pp. 136–73.

Wednesday, December 16: Final assignment (exam or paper) due.