PHIL 122 - Theory of Knowledge

Prof. Wes Holliday  
UC Berkeley, Spring 2019

Syllabus version of Jan. 22 2019

Description
An upper-division course in the philosophical theory of knowledge. Not a general survey of the field, but an investigation of fundamental epistemological issues raised by science: the underdetermination of theory by data; the problem of induction; and attempts to give an account of how hypotheses are confirmed by evidence.

Prerequisites
Students enrolling in Phil 122 should have previously completed at least 8 units in philosophy.

Readings
All readings are included in a Phil 122 course reader sold by Copy Central. Many of the readings are drawn from the epistemological sections of Philosophy of Science: The Central Issues, 1st edition by M. Curd and J. A. Cover (abbreviated ‘C&C’ below) and 2nd edition by M. Curd, J. A. Cover, and C. Pincock (abbreviated ‘CC&P’ below).

Requirements
- Section participation (10% of grade)
- 5 page paper due on bCourses by Sunday, February 24, 5pm (30% of grade)
- 5 page paper due on bCourses by Sunday, March 31, 5pm (30% of grade)
- 5 page paper due on bCourses by Sunday, May 12, 5pm (30% of grade)

In-class participation will be taken into account in cases of borderline grades. (CDC recommendation: if you are sick, stay home until 24 hours after symptoms stop.)

Sections
All enrolled students must attend a weekly discussion section.

Contact
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Schedule
Jan. 22 (Tu) Course Introduction
Reading: none
Part I – Underdetermination

Jan. 24 (Th)  Underdetermination of Scientific Theory  
Reading: “Physical Theory and Experiment” by Pierre Duhem and §3.1 of C&C

Feb. 29 (Tu)  Underdetermination of Scientific Theory  
Reading: “Physical Theory and Experiment” by Pierre Duhem and §3.1 of C&C

Jan. 31 (Th)  General Underdetermination  
Reading: “Two Dogmas of Empiricism” by W. V. O. Quine and §3.2 of C&C

Jan. 5 (Tu)  General Underdetermination  
Reading: “Two Dogmas of Empiricism” by W. V. O. Quine and §3.2 of C&C

Feb. 7 (Th)  Theoretical Virtues and Underdetermination  
Reading: “Objectivity, Value Judgment, and Theory Choice” by Thomas Kuhn and §§2.2-2.4 of C&C

Feb. 12 (Tu)  Responses to Underdetermination  
Reading: “Demystifying Underdetermination” by Larry Laudan and §3.4 of C&C

Feb. 14 (Th)  Responses to Underdetermination  
Reading: “Demystifying Underdetermination” by Larry Laudan and §3.4 of C&C

Feb. 19 (Tu)  Values and Underdetermination  
Reading: “Feminism, Underdetermination, and Values in Science” by Kristen Intemann

Feb. 21 (Th)  Discussion of How to Write Philosophy Papers

Part II – Induction, Prediction, and Evidence

Feb. 26 (Tu)  Hume on Induction  
Reading: Section 4 of Hume’s Enquiry (on bCourses) and Book 1, Part 3, Section 6 of Hume’s Treatise

Feb. 28 (Th)  Hume on Induction  
Reading: Section 4 of Hume’s Enquiry (on bCourses) and Book 1, Part 3, Section 6 of Hume’s Treatise

Mar. 5 (Tu)  The New Riddle of Induction  
Reading: “The New Riddle of Induction” by Nelson Goodman

Mar. 7 (Th)  Description and Justification of Induction  
Reading: “Induction” by Peter Lipton and §4.1 of C&C

Mar. 12 (Tu)  Popper on Induction  
Reading: “The Problem of Induction” by Karl Popper and §4.2 of C&C

Mar. 14 (Th)  Response to Popper  
Reading: “Rational Prediction” by Wesley Salmon and §4.3 of C&C

Mar. 19 (Tu)  Comparing Theories I  
Reading: “Criteria of Confirmation and Acceptability” by Carl Hempel and §4.4 of C&C

Mar. 21 (Th)  Comparing Theories II  
Reading: “Criteria of Confirmation and Acceptability” by Carl Hempel and §4.4 of C&C

Mar. 26-28  Spring Break

Apr. 2 (Tu)  Prediction and Explanation I  
Reading: “Is Evidence Historical?” by Laura Snyder and §4.5 of C&C

Apr. 4 (Th)  Prediction and Explanation II  
Reading: “Is Evidence Historical?” by Laura Snyder and §4.5 of C&C
Part III – Confirmation: Bayesian Approaches

Apr. 9 (Tu)  **Basic Bayesian Reasoning I**  
Reading: §5.1 of C&C

Apr. 11 (Th)  **Basic Bayesian Reasoning II**  
Reading: §5.1 of C&C

Apr. 16 (Tu)  **Salmon on Bayesianism I**  
Reading: “Rationality and Objectivity in Science or Tom Kuhn Meets Tom Bayes” by Wesley Salmon and §5.2 of C&C

Apr. 18 (Th)  **Salmon on Bayesianism II**  
Reading: “Rationality and Objectivity in Science or Tom Kuhn Meets Tom Bayes” by Wesley Salmon and §5.2 of C&C

Apr. 23 (Tu)  **Response to Salmon I**  
Reading: “A Critique of Salmon’s Bayesian Way” by Deborah G. Mayo and §5.3 of 2nd edition of *Philosophy of Science: The Central Issues* by M. Curd, J. A. Cover, and C. Pincock (CC&P)

Apr. 25 (Th)  **Response to Salmon II**  
Reading: “A Critique of Salmon’s Bayesian Way” by Deborah G. Mayo and §5.3 of CC&P

Apr. 30 (Tu)  **Therapeutic Bayesianism I**  
Reading: “Wittgensteinian Bayesianism” by Paul Horwich and §5.4 of C&C

May 2 (Th)  **Therapeutic Bayesianism II**  
Reading: “Wittgensteinian Bayesianism” by Paul Horwich and §§5.4-5 of C&C

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**Resources**

- For advice on writing, see Jim Pryor’s “Guidlines on Writing a Philosophy Paper.”
- For advice on analyzing arguments, see Jim Pryor’s “Philosophical Terms and Methods.”
- UCB Library maintains a page on Citation Styles, Styles Guides, and Avoiding Plagiarism.

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**Course Policies**

**Academic Integrity**

“Any test, paper or report submitted by you and that bears your name is presumed to be your own original work that has not previously been submitted for credit in another course unless you obtain prior written approval to do so from your instructor.

In all of your assignments, including your homework or drafts of papers, you may use words or ideas written by other individuals in publications, web sites, or other sources, but only with proper attribution. “Proper attribution” means that you have fully identified the original source and extent of your use of the words or ideas of others that you reproduce in your work for this course, usually in the form of a footnote or parenthesis.”

—Report of the UCB Academic Dishonesty and Plagiarism Subcommittee, June 18, 2004

- Students who are found to have plagiarized or cheated in the course will receive an F.
Extensions and Late Work

- Extensions will be granted only in case of medical and family emergencies.
- Late work without prior notification of an emergency will not be accepted.
- Your lowest score on a quiz in section during the semester will be dropped.
- Term papers submitted after the deadline will immediately lose one grade step (e.g., from B+ to B) and an additional step every 24 hours thereafter.

Accommodations for Students with Disabilities

If you have a letter of accommodation from the Disabled Students Program, please let us know as soon as possible so that we can do whatever we can to help you in the course.