Instructor: Richard Otte
Office: Cowell A-109   Office hours: M,W 1-2 and by appointment
Phone: 459-2819   email: otte@ucsc.edu

Texts:
Salmon, *The Foundations of Scientific Inference*
A reader will also be available online on eres

Evaluations for the course will be based on two exams, a quiz on the probability calculus, a take-home essay, class attendance and participation, and the final requirement.

**Tentative Schedule**

**Review of Deductive Logic:**

**Traditional Confirmation Theory**

*Hypothetico-Deductive method*
Earman and Salmon, The Confirmation of Scientific Hypotheses, pp. 42-55, from *Introduction to the Philosophy of Science*

*Hempel’s theory*
Hempel, “Studies in the Logic of Confirmation”

**Probability and Confirmation**

**Goodman’s New Riddle of Induction**

**The Probability Calculus:**

Salmon, pp. 63-65

**Interpretations of Probability**
The Classical Interpretation of Probability:
Salmon pp. 65-68
Hajek, http://plato.stanford.edu/entries/probability-interpret/ (recommended)

The Logical Interpretation of Probability:
Salmon pp. 68-79
Hajek, http://plato.stanford.edu/entries/probability-interpret/ (recommended)

The Frequency Interpretation of Probability:
Salmon pp. 83-108
Hajek, http://plato.stanford.edu/entries/probability-interpret/ (recommended)

The Propensity Interpretation of Probability:
Hajek, http://plato.stanford.edu/entries/probability-interpret/ (recommended)

The Subjective Interpretation of Probability:
Salmon pp. 79-83
Hajek, http://plato.stanford.edu/entries/probability-interpret/ (recommended)

The Epistemic Interpretation of Probability:
Warrant and Proper Function , chapters 8 and 9, by Plantinga
Otte, “Counterfactuals and Epistemic Probability”

Relation between Objective and Subjective Probability:
"A Subjectivist’s Guide to Objective Chance” (and postscript) by Lewis

Bayesianism:

Coherence:
Subjective Probability: The Real Thing by Richard Jeffrey, pp. 8-21,
Warrant: The Current Debate, chapters 6 & 7, by Plantinga
Bayes or Bust by John Earman, pp. 33-46.
Laws and Symmetry Chapter 7, pp. 151-160, by van Fraassen
"A Nonpragmatic Vindication of Probabilism,” Philosophy of Science 65 (December 1998) by Joyce

Conditionalization:
Talbot, “Dutch Book Arguments”
http://plato.stanford.edu/entries/epistemology-bayesian/supplement2.html
Subjective Probability: The Real Thing by Richard Jeffrey, pp. 55-57.
Laws and Symmetry, chapter 7, pp. 160-182, by van Fraassen
“Dutch-Book Arguments Depragmatized: Epistemic Consistency for Partial Believers” by David Christensen
“Conditionalization, Subjective Probability, and Rational Belief” by Richard Otte

Jeffrey Conditionalization:

Reflection:
"Belief and the Will” by van Fraassen (Journal of Philosophy 81, 5, pp. 235-256, May 1984)
"Clever Bookies and Coherent Beliefs” by David Christensen (Philosophical Review 100 (1991): 229-47.)
"Belief and the Problem of Ulysses and the Sirens” by van Fraassen (Philosophical Studies 77: pp. 7-37, 1995)

Old Evidence:
“Old Evidence and Logical Omniscence” by Daniel Garber
“Probability Reparation: The Problem of New Explanation” by Richard Jeffrey
'2.5 Old News Explained’ in Subjective Probability: The Real Thing by Richard Jeffrey, pp. 49-52.
'Old Evidence and New Theories” by Lyle Zynda (Philosophical Studies 77:67-95, 1995)
"The Problem of Old Evidence” chapter 5, in Bayes or Bust? by John Earman, pp. 119-135

New Hypotheses:
“Some Problems for Bayesian Confirmation Theory” by Chihara (British Journal for the Philosophy of Science, 38, pp. 551-60)
"A Solution to a Problem for Bayesian Confirmation Theory” by Otte (British Journal for the Philosophy of Science 45, 1994, pp. 764-769)

Bayesian Response to the Raven paradox
Bayesian Response to the New Riddle of Induction
Likelihoods vs. Bayesianism:
“Likelihoodism, Bayesianism, and Relational Confirmation,” by Branden Fitelson, Synthese

Bayesianism and self-locating beliefs (Sleeping Beauty)
"Self-locating belief and the Sleeping Beauty Problem” by Adam Elga (Analysis Vol 60, Num 266, 2000, pp. 143-146)
"Sleeping Beauty: reply to Elga” by David Lewis (Analysis Vol 61, Num 271, 2001, pp. 171-175)
"Reflections on Sleeping Beauty" by Frank Arntzenius (Analysis Vol 62, Num 273, 2002, pp. 53-62)

**The Cable Guy**

"The Cable Guy Paradox" by Alan Hajek Analysis 65.2 April 2005, pp. 112-119.

**Conditional Probability**

"What Conditional Probability Cannot Be" by Alan Hajak (Synthese Vol. 137: 3, December 2003, pp. 273-323.)

**The Doomsday Argument**

"Time and the Anthropic Principle" by John Leslie

"The Doomsday Argument Without Knowledge of Birth Rank" by Brad Monton