

Philosophy 240: Symbolic Logic
Fall 2009
Mondays, Wednesdays, Fridays: 9am - 9:50am

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Course Bibliography

Required texts:

Patrick Hurley, Selections from *A Concise Introduction to Logic*, 10th edition, Wadsworth, 2008.
Jennifer Fisher, *On the Philosophy of Logic*, Wadsworth, 2008. See Fisher's "Further Readings" section for more suggestions on just about all of the topics below.

Other useful logic and philosophy of logic texts and readers:

Hughes, R.I.G. *A Philosophical Companion to First-Order Logic*. Hackett, 1992. A good selection of very good, advanced papers.
Hunter, Geoffrey. *Metalogic: An Introduction to the Metatheory of Standard First-Order Logic*. University of California Press, 1973. An excellent introduction to advanced logic, useful especially for the adequacy topic.
Jacquette, Dale. *Philosophy of Logic: An Anthology*. Blackwell, 2002. Includes many of the most important papers in the philosophy of logic over the last 100 years.
Mendelson, Elliott. *Introduction to Mathematical Logic*. Chapman & Hall, 1997. The classic text in advanced mathematical logic.
Priest, Graham. *An Introduction to Non-Classical Logic: From Ifs to Is*, volume 2. Cambridge University Press, 2008.
Quine, W.V. *From a Logical Point of View*. Harvard University Press, 1980. Abbreviated below as FLPV.
Quine, W.V. *Philosophy of Logic*, 2nd edition. Harvard University Press, 1986
Read, Stephen. *Thinking about Logic*. Oxford, 1995. A wide-ranging text on the philosophy of logic.
Shapiro, Stewart, editor. *The Oxford Handbook of Philosophy of Mathematics and Logic*. Oxford, 2007. A survey of the contemporary scene.
Smith, Peter. *An Introduction to Gödel's Theorems*. Cambridge University Press, 2007. A technically sophisticated but readable introduction to incompleteness and undecidability.
Van Heijenoort, Jean. *From Frege to Gödel: A Source Book in Mathematical Logic, 1879-1931*. Harvard University Press, 1967.

Below are readings for specific topics which we will cover on Philosophy Fridays. Some of the listings refer to the readings above. Some of the readings are available on the course website.

Philosophy Friday #1: Conditionals

Bennett, Jonathan. *A Philosophical Guide to Conditionals*. Oxford University Press, 2003.
Carroll, Lewis. "A Logical Paradox." *Mind* 3:436-8, 1894.
Goodman, Nelson. "The Problem of Counterfactual Conditionals." In *Fact Fiction and Forecast*, Harvard University Press, 1983.
Harper, William, Robert Stalnaker, and Glenn Pearce. *Ifs*. Reidel, 1981. Lots of advanced papers, some quite technical.
Jackson, Frank. *Conditionals*. Oxford University Press, 1987.
Lewis, David. *Counterfactuals*. Blackwell, 1973.
Priest, Chapters 1, 4, and 5.
Read, Chapter 3.

Philosophy Friday #2: Syntax and Semantics

- Block, Ned. "Troubles with Functionalism." In *Readings in the Philosophy of Psychology*, vol. 1, Ned Block ed., Harvard University Press, 1980.
- Boolos, George, John Burgess and Richard Jeffrey. *Computability and Logic*, 5th ed. Cambridge University Press, 2007.
- Searle, John. "Can Computers Think?" In *Philosophy of Mind: Classical and Contemporary Readings*, David Chalmers ed., Oxford University Press, 2002.
- Searle, John. "Minds, Brains, and Programs." In *The Nature of Mind*, David Rosenthal ed., Oxford University Press, 1991. Includes responses and counter-responses from Jerry Fodor and Searle.

Philosophy Friday #3: Three-Valued Logics

- Aristotle, *De Interpretatione*. In *The Complete Works of Aristotle*, vol. 1, Jonathan Barnes, ed. Princeton University Press, 1984.
- Bochvar, D.A. "On a three-Valued Logical Calculus and Its Application to the Analysis of the Paradoxes of the Classical Extended Functional Calculus." *History and Philosophy of Logic* 2: 87-112, 1981.
- Dummett, Michael. "The philosophical basis of intuitionist logic". In *Philosophy of Mathematics: Selected Readings*, 2nd ed., Paul Benacerraf and Hilary Putnam, eds. Cambridge University Press, 1983. See also the selections by Heyting and Brouwer in the same volume.
- Kleene, Stephen. "On Notation for Ordinal Numbers." *The Journal of Symbolic Logic* 3.4: 150-5, 1938.
- Prior, A.N. "Three-Valued Logic and Future Contingents." *The Philosophical Quarterly* 3.13: 317-26, 1953.
- Priest, Chapter 7.
- Putnam, Hilary. "Three-valued logic" and "The logic of quantum mechanics", in *Mathematics, Matter and Method: Philosophical Papers*, vol. 1. Cambridge University Press, 1975.
- Quine, W.V. *Philosophy of Logic*, 2nd ed. Harvard University Press, 1986.
- Quine, W.V. "The Ways of Paradox." In *the Ways of Paradox*, Harvard University Press, 1976.
- Read, Chapters 6 and 7.
- Russell, Bertrand. "On Denoting." *Mind* 56: 479-493, 1905.
- Russell, Bertrand. *Introduction to Mathematical Philosophy*. Routledge, 1993. Chapter 16: "Descriptions".
- Williamson, Timothy. *Vagueness*. Routledge, 1994.

Philosophy Friday #4: Adequacy

- Hunter, Chapter 21.
- Mendelson, §1.3.
- Emil Post, "Introduction to a General Theory of Elementary Propositions." In van Heijenoort.

Philosophy Friday #5: Truth and Liars

- Beall, JC. *Liars and Heaps: New Essays on Paradox*. Oxford: Clarendon Press, 2003.
- Field, Hartry. *Saving Truth from Paradox*. Oxford, 2008. Field is astoundingly good, but only accessible to the most ambitious readers.
- Field, Hartry. "Tarski's Theory of Truth." In his *Truth and the Absence of Fact*, Oxford, 2001.
- Horwich, Paul. *Truth*. Oxford University Press, 1999.
- Kirkham, Richard. *Theories of Truth: A Critical Introduction*. The MIT Press, 1995.
- Künne, Wolfgang. *Conceptions of Truth*. Oxford: The Clarendon Press, 2003.

- Lynch, Michael. *The Nature of Truth: Classic and Contemporary Readings*. The MIT Press, 2005. A great collection.
- Lynch, Michael. *True to Life: Why Truth Matters*. The MIT Press, 2005. A fairly simple introduction.
- Priest, Graham, JC Beall and Bradley Armour-Garb. *The Law of Non-Contradiction: New Philosophical Essays*. Oxford: Clarendon Press, 2004. See especially the introduction, and Essays 1, 7, and 12, among others.
- Tarski, Alfred. "The Semantic Conception of Truth and the Foundations of Semantics." *Philosophy and Phenomenological Research* 4.3: March 1944, pp 341-376.

Philosophy Friday #6: Quine and Ontological Commitment

- Azzouni, Jody. "On 'On What There Is'." *Pacific Philosophical Quarterly* 79: 1-18, 1998.
- Quine, W.V. "Designation and Existence."
- Quine, W.V. "Existence and Quantification." In *Ontological Relativity and Other Essays*, Columbia University Press, 1969.
- Quine, W.V. "Logic and the Reification of Universals." In FLPV.
- Quine, W.V. "On What There Is." In FLPV.
- Quine, W.V. "Quantifiers and Propositional Attitudes." In Jacquette.

Philosophy Friday #7: Modal Logic

- Binkley, Robert. "The Surprise Examination in Modal Logic." *The Journal of Philosophy* 65.5: 127-136, 1968.
- Chellas, Brian. *Modal Logic*. Cambridge, 1980.
- Fitting, Melvin and Richard Mendelsohn. *First-Order Modal Logic*. Kluwer, 1999.
- Garson, James. *Modal Logic for Philosophers*. Cambridge, 2006.
- Lewis, David. "Counterpart Theory and Propositional Attitudes." In Jacquette.
- Nolt, John. *Logics*. Wadsworth, 1997.
- Nolt, John. "What are Possible Worlds?" In Jacquette.
- Priest, Graham. *An Introduction to Non-Classical Logic: From Ifs to Is*, volume 2. Cambridge University Press, 2008.
- Quine, W.V. "Reference and Modality." In FLPV.

Philosophy Friday #8: The Right Logic

- Hacking, Ian. "What is Logic?" In Hughes.
- Hintikka, Jaakko. "Quantifiers vs Quantification Theory." *Dialectica* 27.3: 329-358, 1973.
- Popper, Karl. "What Can Logic Do for Philosophy?" In Jacquette.
- Prior, A.N. "The Runabout Inference Ticket." *Analysis* 21: 38-9, 1960.
- Quine, W.V. *Philosophy of Logic*, 2nd ed. Harvard University Press, 1986.
- Quine, W.V. *Methods of Logic*, 4th ed. Harvard University Press, 1982.
- Shapiro, Stewart. *Foundations without Foundationalism: A Case for Second-Order Logic*. Oxford University Press, 1991.
- Sher, Gila. "Ways of Branching Quantifiers." *Linguistics and Philosophy* 13: 393-422, 1990.
- Tharp, Leslie. "Which Logic is the Right Logic?" In Jacquette.