Philosophy 240: Symbolic Logic Fall 2010

Russell Marcus Mondays, Wednesdays, Fridays: 9am - 9:50am rmarcus1@hamilton.edu

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Course Bibliography

Required text:

Patrick Hurley, Selections from A Concise Introduction to Logic, 10th edition, Wadsworth, 2008.

History and philosophy of logic texts and readers:

- Fisher, Jennifer. On the Philosophy of Logic, Wadsworth, 2008. An introductory text. See Fisher's "Further Readings" section for more suggestions on just about all of the topics below.
- Gabbay, Dov, Dale Jacquette, Paul Thagard, and John Woods, eds. Philosophy of Logic. Elsevier, 2006. A wide range of advanced papers.
- Gabbay, Dov and John Woods. Handbook of the History of Logic. Elsevier, 2004-2009. Nine amazing volumes on the history of logic, from ancient to contemporary times.
- Haack, Susan. Philosophy of Logics. Cambridge, 1978.
- Haack, Susan. Deviant Logic, Fuzzy Logic: Beyond the Formalism. University of Chicago, 1996. This volume combines Haack's earlier book on deviant logic with some newer papers.
- Hughes, R.I.G. A Philosophical Companion to First-Order Logic. Hackett, 1992. A selection of very good, advanced papers.
- Jacquette, Dale. A Companion to Philosophical Logic. Blackwell, 2002. New papers in the philosophy of logic.
- 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.
- 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, more focused on the philosophy of mathematics.

Advanced logic books, mainly technical:

- 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.
- 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, 2nd edition. Cambridge University Press, 2008. An intermediate textbook covering the state of the art in nonclassical work.
- Quine, W.V. Methods of Logic, 4th edition. Harvard University Press, 1982. A classic introductory text, though covering many topic we will not discuss in the course.
- 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. The original papers from the logic renaissance.

Below are readings for specific topics which we will cover on Philosophy Fridays. Some listings refer to the collections above. Some readings are available on ereserve or 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.

Edgington, Dorothy. "Do Conditionals Have Truth Conditions?" In Hughes.

Fisher, Chapter 8.

Goodman, Nelson. "The Problem of Counterfactual Conditionals." In *Fact Fiction and Forecast*, Harvard University Press, 1983.

Grice, H.P. "Logic and Conversation." Reprinted in Jackson 1991.

Harper, William, Robert Stalnaker, and Glenn Pearce. *Ifs*. Reidel, 1981. Lots of advanced papers, some quite technical.

Jackson, Frank. Conditionals. Oxford University Press, 1991.

Lewis, David. Counterfactuals. Blackwell, 1973.

Lewis, C.I., and Langford, C.H. *Symbolic Logic*. New York: Century Company, 1932. Reprinted by Dover Publications (New York), 1959.

Priest, Chapters 1, 4, and 5.

Read, Chapter 3.

Weiner, Joan. "Counterfactual Conundrum." Nous 13.4: 499-509, 1979.

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.

Churchland, Paul M. Matter and Consciousness, revised edition. MIT Press, 1988.

Dennett, Daniel. Brainstorms: Philosophical Essays on Mind and Psychology. MIT Press, 1990.

Frege, Gottlob. Begriffsschrift. In van Heijenoort.

Searle, John. "Can Computers Think?" In *Philosophy of Mind: Classical and Contemporary Readings*, David Chalmers ed., Oxford University Pres, 2002.

Searle, John. "Minds, Brains, and Programs." In *The Nature of Mind*, David Rosenthal ed., Oxford University Press, 1991.

Philosophy Friday #3: Adequacy

Haack, Chapter 3.

Hunter, Chapter 21.

Mendelson, §1.3.

Post, Emil. "Introduction to a General Theory of Elementary Propositions." In van Heijenoort.

Quine, "Grammar." In his *Philosophy of Logic*.

Philosophy Friday #4: 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.

Chomsky, Noam. Syntactic Structures, 2nd ed. De Gruyter, 2002.

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.

Fisher, Jennifer. On the Philosophy of Logic. Chapters 7 and 9.

Haack, Susan. *Deviant Logic, Fuzzy Logic: Beyond the Formalism*. University of Chicago, 1996. Chapter 4.

Haack, Susan. Philosophy of Logics. Cambridge, 1978. Chapters 9 and 11.

Kleene, Stephen. "On Notation for Ordinal Numbers." *The Journal of Symbolic Logic* 3.4: 150-5, 1938

Leibniz, G.W. *Discourse on Metaphysics*. The early sections, especially §6-§13.

Prior, A.N. "Three-Valued Logic and Future Contingents." *The Philosophical Quarterly* 3.13: 317-26, 1953.

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, Willard van Orman. *Philosophy of Logic*, 2nd ed. Harvard University Press, 1986.

Quine, Willard van Orman. The Ways of Paradox. Harvard University Press, 1976.

Read, Stephen. Thinking about Logic. Oxford, 1995. Chapters 6 and 7.

Russell, Bertrand. "On Denoting." In *The Philosophy of Language*, 5th ed., A.P. Martinich, ed. Oxford University Press, 2008.

Russell, Bertrand. *Introduction to Mathematical Philosophy*. Routledge, 1993. Chapter 16: "Descriptions".

Strawson, P.F. "On Referring." In *The Philosophy of Language*, 5th ed., A.P. Martinich, ed. Oxford University Press, 2008.

Unger, Peter. "Why There Are No People." Midwest Studies in Philosophy, 1979.

Williamson, Timothy. Vagueness. Routledge, 1994.

Philosophy Friday #5: Truth and Liars

Aristotle. *Metaphysics*. In *The Complete Works of Aristotle, vol.2*, Jonathan Barnes, ed. Princeton University Press, 1984.

Beall, JC. Liars and Heaps: New Essays on Paradox. Oxford: Clarendon Press, 2003.

Field, Hartry. Saving Truth from Paradox. Oxford, 2008.

Field, Hartry. "Tarski's Theory of Truth." In his Truth and the Absence of Fact, Oxford, 2001.

Fisher, Chapter 3.

Haack, Susan. Philosophy of Logics. Chapters 7 and 8.

Horwich, Paul. Truth. Oxford University Press, 1999.

Kirkham, Richard. Theories of Truth: A Critical Introduction. The MIT Press, 1995.

Kripke, Saul. "Outline of a Theory of Truth." In Jacquette, Philosophy of Logic.

Künne, Wolfgang. Conceptions of Truth. Oxford: The Clarendon Press, 2003.

Lynch, Michael. The Nature of Truth: Classic and Contemporary Readings. The MIT Press, 2005.

Lynch, Michael. True to Life: Why Truth Matters. The MIT Press, 2005.

Priest, Graham. In Contradiction. Dordrecht: M. Nijhoff, 1987.

Priest, Graham. Beyond the Limits of Thought. Oxford: Oxford University Press, 2002.

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.

Quine, Willard van Orman. "The Ways of Paradox." Harvard University Press, 1976.

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: Quantification and Ontological Commitment

Azzouni, Jody. "On 'On What There Is'." *Pacific Philosophical Quarterly* 79: 1-18, 1998. Haack, Chapter 4.

Lejewski, Czeslaw. "Logic and Existence." In Jacquette, Philosophy of Logic.

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 his *From a Logical Point of View*. Harvard University Press, 1980.

Quine, W.V. "On What There Is." In his *From a Logical Point of View*. Harvard University Press, 1980.

Quine, W.V. "Quantifiers and Propositional Attitudes." In Jacquette, *Philosophy of Logic*.

Philosophy Friday #7: Color Incompatibility

Allaire, Edwin. "Tractatus 6.3751." Analysis 19.5: 100-5, 1959.

Austin, James. "Wittgenstein's Solutions to the Color Exclusion Problem." *Philosophy and Phenomenological Research* 41.1/2: 142-9, 1980.

Ayer, A.J. Language, Truth, and Logic.

Carnap, Rudolph. *Meaning and Necessity: A Study in Semantics and Modal Logic*. The University of Chicago Press, 1956 (Midway Reprint, 1988). See especially the paper on meaning postulates, at p 222 ff.

Chisholm, "The Myth of the Given" in Ernest Sosa and Jaegwon Kim, editors, *Epistemology: A Foundation*, Blackwell, 2000.

Chisholm, "The Problem of the Criterion" in Steven M. Cahn, editor, *Philosophy for the 21st Century*, Oxford, 2003.

Hempel, "Empiricist Criteria of Cognitive Significance: Problems and Changes." In Richard Boyd, Philip Gasper, and J.D. Trout, eds., *The Philosophy of Science*, MIT: 1995.

Katz, Jerrold. "The Problem in Twentieth-Century Philosophy." *Journal of Philosophy* 95.11: 547-575, 1998.

Katz, Jerrold. Semantic Theory. Harper and Row, 1972.

Melchert, Norman. "Analysis." In The Great Conversation, Oxford University Press.

Pietroski, Paul. "Logical Form." The Stanford Encyclopedia of Philosophy (Fall 2009 Edition), Edward N. Zalta (ed.), URL =

http://plato.stanford.edu/archives/fall2009/entries/logical-form/>.

Quine, W.V. "Two Dogmas of Empiricism." In his *From a Logical Point of View*, Harvard University Press, 1980.

Sellars, Wilfrid. "Does Empirical Knowledge Have a Foundation?" In Ernest Sosa and Jaegwon Kim, editors, *Epistemology: A Foundation*, Blackwell, 2000.

Sosa, Ernest. "The Raft and the Pyramid." Midwest Studies in Philosophy 5.1: 3-26, 1980.

Wittgenstein, Ludwig. Tractatus Logico-Philosophicus. Routledge, 1981.

Wittgenstein, Ludwig. "Some Remarks on Logical Form." *Proceedings of the Aristotelian Society, Supplemental Volume*: 9.162-171, 1929.