

THE NATURE OF REASON

Course 80-150, Fall 2001

This syllabus is tentative, and the number of lectures allocated to each part of the course is only approximate. You will be reading excerpts from the works indicated below. I will provide precise reading assignments in weekly handouts.

Introduction (5 lectures)

- Overview
- Ancient Philosophy

Reading: *Thinking Things Through*, preface, Chapters 1 and 2; Russell, *The Problems of Philosophy*; Plato, *Meno*, and *The Republic*; Aristotle, *Categories*, *Physics*, and *Metaphysics*

Part I: Deductive Logic (14 lectures)

- Proof, from geometry to theology
- Aristotle's logic
- Ideas and combinations
- Rationalism (Descartes, Leibniz)
- Boole's logic
- Frege's logic
- Modern logic and the philosophy of mathematics

Reading: *Thinking Things Through*, Chapters 1-6; Anselm, *Proslogion* (and Guanilo's *Reply*); Aquinas, *Summa Theologica*; Spinoza, *The Ethics*; Hobbes, *Leviathan*; Descartes, *Meditations on First Philosophy*; Leibniz, *Monadology*

Part II: Inductive Logic (13 lectures)

- The scientific revolution
- Empiricism (Hobbes, Locke)
- Berkeley's idealism
- Hume's skepticism
- Probability
- Bayes' theorem
- Kant
- Modern philosophy of science

Reading: *Thinking Things Through*, Chapters 7-10; Locke, *An Essay Concerning Human Understanding*; Berkeley, *Three Dialogues*; Hume, *An Inquiry Concerning Human Understanding*; Kant, *Critique of Pure Reason*.

Part III: Mind and Computation (7 lectures)

- The philosophy of mind
- Undecidability and incompleteness
- The computational view of the mind

Reading: *Thinking Things Through*, Chapters 11-14.