

Logic Guidelines

All Ph.D. candidates are required to demonstrate proficiency in the area of logic. This may be accomplished in one of three ways: By taking PL 577, "Introduction to Symbolic Logic" with a grade of "B" or better; or by attaining a score of 80% or better on the Logic Proficiency Examination; or by showing evidence of comparable prior course work. The Examination will be administered once each year in the later part of May. Candidates are expected to have taken either the course or the Examination by the Spring of their second year.

The Logic Proficiency Examination is a two-hour written examination. It will cover both traditional and symbolic logic, and will include questions concerning the nature and purposes of logic, as well as questions testing logical skills.

Basic texts for the examination are:

Aristotle, *Prior Analytics*, and either
M. Bergman, J. Moor, I. Nelson, *The Logic Book*
Irving M. Copi, *Introduction to Logic* (MacMillan).

Questions covering the following areas may be expected:

1. Definition and illustration of basic logical terms. For example: validity, indifference, proposition, function, predication, relation, implication, description, syllogism, meta-language, definition, intension, logical system, "reduction to first figure", etc.
2. Identification and explanation of valid and invalid syllogisms.
3. Use of truth tables to show validity, contingency, tautology, and contradiction.
4. Symbolization of proposition and arguments; propositional and predicate logic.
5. Proofs for arguments both containing and not containing quantified propositions.
6. Explanation of the need for, uses of, and historical circumstances surrounding the rise of both traditional and symbolic logic.
7. Discussion of various forms of fallacy.
8. Comparison and contrast of induction and deduction.