Intermediate Logic Autumn Quarter, 2009 David Keyt

## Calendar

	9/30 Russell's paradox.	10/2 Baby set theory.
10/5 Interpretations.	10/7 Truth-tables.	10/9 Truth-trees.
10/12 Metatheorem on satisfiability.	10/14 Basic rules.	10/16 Derived rules.
10/19 Mathematical Induction.	10/21 Mathematical Induction.	10/23 Soundness.
10/26 Soundness.	10/28 Denumerability and nondenumerability.	10/30 Cantor's theorem.
11/2 Henkin's completeness proof.	11/4 Henkin's completeness proof.	11/6 Löwenheim-Skolem & Compactness.
11/9 Replacement & Negation theorems.	11/11 Veterans' Day observed.	11/13 Prenex normal form.
11/16 Weak completeness.	11/18 Effective enumerability.	11/20 Identity.
11/23 Functions.	11/25 Completeness proof completed.	11/27 Thanksgiving vacation
11/30 Formal theories & Aristotelian syllogistic.	12/2 Formal number theory: axioms.	12/4 Formal number theory: proofs.
12/7 More proofs in formal number theory.	12/9 Principal theorem about formal theories.	12/11 Gödel's incompleteness theorem.

FINAL: 8:30-10:20, Wednesday, December 16<sup>th</sup>.