

**Philosophy 123**  
**Philosophy of Logic**  
**Spring 12**  
**Prof. G. Sher**

Office: HSS, 8042

Office Hours: T 3:45-4:45 and by appointment

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**Topic: Foundations of Modern Logic: Historical & Contemporary Perspectives**

Prerequisite: Phil 120 or the instructor's permission

Course Requirements: Midterm (30%), Paper (30%), Final (40%)

Syllabus

T 4/3	Introduction to Course
TH 4/5	Historical Foundations of Logic I: Frege
T 4/10	Cont.
TH 4/12	Historical Foundations of Logic II: Russell.
T 4/17	Cont.
TH 4/19	Historical Foundations of Logic III: Axiomatic Set Theory
T 4/24	Cont.
TH 4/26	Historical Foundations of Logic IV: Tarski
T 5/1	Cont.
TH 5/3	Contemporary Foundations of Logic: Model Theory
T 5/8	Cont.
TH 5/10	MIDTERM
T 5/15	Contemporary Foundations of Logic: Etchemendy's Challenge
TH 5/17	Cont.
T 5/22	Contemporary Foundations of Logic: Sher's Response
TH 5/24	Cont.
T 5/29	A New (Holistic) Foundation for Logic: Sher
*TH 5/31	Gödel's Completeness and Incompleteness Theorems
*T 6/5	Cont.
TH 6/7	Course Conclusion.

Readings. (Most items are available on Electronic Reserves or on SSH Reserves. Other items are available at the UCSD Library Reserves.)

*Frege*

1. *Begriffsschrift: a Formula Language, Modeled upon that of Arithmetic, for Pure Thought*
2. "Function & Concept".
3. "Introduction", *The Basic Laws of Arithmetic*.
4. Selection from *Posthumous Writings*.

*Russell*

1. "The Philosophy of Logical Atomism".
2. "Logic as the Essence of Philosophy", *Our Knowledge of the External World*.
3. "Introduction to the Second Edition", *Principles of Mathematics*.
4. "Introduction to the Second Edition", *Principia Mathematica* (Whitehead & Russell)
3. "Descriptions"; "Mathematics & Logic". *Introduction to Mathematical Philosophy*.

*Tarski*

1. "The Concept of Truth in Formalized Languages", §1-3 (Excerpts from *Logic, Semantics, Metamathematics*).
2. "The Establishment of Scientific Semantics". (Excerpts ...)
3. "On the Concept of Logical Consequence". (Excerpts ...)
4. "What Are Logical Notions?".

*Model Theory*

1. Handout.

*Etchemendy*

1. *The Concept of Logical Consequence* (Excerpts / Book)
2. "The Doctrine of Logic as Form".

*Sher*

1. *The Bounds of Logic* (Excerpts / Book)
2. "Did Tarski Commit 'Tarski's Fallacy'?"
3. "Is Logic a Theory of the Obvious?"
4. "Is Logic in the Mind or in the World?"

