AAPT Workshop - Logic and Philosophy Russell Marcus Department of Philosophy, Hamilton College <u>rmarcus1@hamilton.edu</u> August 2, 2010

List of Topics for Logic and Philosophy

1. Introductory Material

1A. Deduction and Induction

1B. History of Logic

2. Philosophical Questions Illuminated By Studying Logic

2A. Syntax, Semantics, and the Chinese Room

2B. Truth and Liars/ Semantic Paradoxes

2C. Quine and Ontological Commitment

2D. Propositions and Abstract Objects

2E. Scientific Explanation and Confirmation

2F. Names and Definite Descriptions

2G. The Ontological Argument for God's Existence

3. Topics in the Philosophy of Logic

3A. Conditionals

3B. Motivations for Three-Valued Logics

3C. The Right Logic

3D. Color Incompatibility

3E. The Proof of God's Existence from First-Order Logic

3F. Intuitionism and Rejection of Reductio Proofs

3G. Existential Commitment and the Universal Quantifier

3H. Vagueness

4. Advanced Topics in Logic Raising Philosophical Questions

4A. Dialetheic Logics

4B. Adequate Sets of Connectives

4C. Modal Logics

4D. Axiomatic Systems and Canonical Form

4E. Second-Order Logic

4F. Belief Revision and Non-Monotonic Logic

4G. Branching Quantifiers

4H. Gödel's Theorem

4I. Free Logics

4J. Three-Valued Logics

5. Logic and Mathematics

5A. Logicism

5B. Infinity