

***Topics for test 1 in 2010***

The following are the topics to be covered. The proportion of the test covering each will approximate the proportion of the classes so far that have been devoted to that topic. Your homework and the collection of old tests will provide specific examples of the kinds of questions I might ask.

- *Basic concepts of deductive logic.* You will be responsible for entailment, tautologousness and absurdity, and the relations between pairs of sentences (i.e., implication, equivalence, exclusiveness, joint exhaustiveness, and contradictoriness). You should be able to define any of these ideas in terms of truth values and possible worlds (see appendix A.1 and 1.2.6 for samples of such definitions), and you should be ready to answer questions about these concepts and explain your answers in a way that uses the definitions.
- *Implicature.* Be able to define it and distinguish it from implication. Be able to give examples and explain them. Be ready to answer questions about it, justifying your answer in a way that uses the definition.
- *Analysis.* Be able to analyze the logical form of a sentence as fully as possible using conjunction and present the form in both symbolic and English notation (that is, with the logical-and symbol  $\wedge$  and with the **both-and** way of expressing forms).
- *Synthesis.* Be able to synthesize an English sentence that has a given logical form.
- *Derivations.* Be able to construct derivations to show that entailments hold and to show that they fail. I may tell you in advance whether an entailment holds or leave it to you to check that using derivations. There may be some derivations where the rule Adj introduced in 2.4 would be convenient to use; but it is never necessary. You should be ready to use EFQ and ENV (the rules for  $\top$  and  $\perp$ ) in addition to Ext, Cnj, and QED; but derivations requiring EFQ and ENV are only a possibility while you are certain to run into derivations requiring the latter three rules.