## Phi 270 F13 test 5

## F13 test 5 topics

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.

This test will have a few more questions than earlier ones (about 9 or 10 instead of about 7) and I will allow you as much of the 3 hour period as you want. The bulk of the questions (6 or 7 of the total) will be on ch. 8 but there will also be a few questions directed specifically towards earlier material (see below).

- Analysis. This will represent the majority of the questions on ch. 8. The homework assignments give a good sample of the kinds of issues that might arise; but you should, of course, consider examples and exercises in the text as well. In particular, pay attention to the variety of special issues that show up (e.g., how to handle there is or else).
- Synthesis. You may be given a symbolic form and an interpretation of its non-logical vocabulary and asked to express the sentence in English. (This sort of question is less likely to appear than a question about analysis, and there would certainly be substantially fewer such questions.)
- *Derivations*. Be able to construct derivations to show that entailments hold and to show that they fail (derivations that hold are more likely). I may tell you in advance whether an entailment holds or leave it to you to check that using derivations. If a derivation fails, you may be asked to present a counterexample, which will involve describing a structure. You will not be responsible for the rule for the description operator introduced in §8.6 or for the supplemented rules (i.e., PCh+, etc.) used to find finite counterexamples.
- Earlier material. These questions will concern the following topics.
  - Basic concepts. You may be asked for a definition of a concept or asked questions about the concept that can be answered on the basis of its definition. You are responsible for: entailment, tautologousness and absurdity, and the relations between pairs of sentences (i.e., implication, equivalence, exclusiveness, joint exhaustiveness, and contradictoriness). These are the concepts you were responsible for on the first test. You can find sample definitions in Appendix A.1 (and find the discussions of the ideas in ch. 1 by using the glossary-index).
  - Calculations of truth values. You should be able to complete a row of a truth table for a sentence formed using truth-functional connectives. (That is, you should be able to carry out the sort of calculation used to complete the confirmation of a counterexample in chs. 2-5.)
  - Using abstracts to analyze sentences involving pronouns. You might be asked to represent pronouns using abstracts and variables in order to avoid repeating individual terms (i.e., the sort of question on 6.2 you were responsible for on the third test).