## **Exam 1 Review**

The following is a review guide only. It provides almost **none** of the actual information you will need; it is intended merely to remind you of the topics that you have studied which may come up on the exam. This list may not be exhaustive. If you are in doubt about whether you need to know about a topic not mentioned in this guide, please ask.

Questions on the midterm may be on any topic covered in class or on handouts, in the homework exercises since the problem set. In particular, questions may be taken from exercises in the assigned readings, or on handouts, that are similar to exercises covered in class or in homework or problem sets. Questions will be similar in style and difficulty to those on the problem sets, but designed to be solvable within the time allotted. Reviewing the homework problems assigned since the problem set would be a good way to gauge how well and how much you need to study the following items.

## **Argument Basics**

- You should be familiar with (i.e. have already memorized) the following:
  - The definitions of:
    - Statement
    - Premise
    - Conclusion
    - Argument
    - Deductive
      - Valid / Invalid
      - Sound / Unsound
    - Truth Value
- You should be able to read a passage of text and pick out the argument (i.e. isolate the premises and conclusion) and be able to explain what kind of argument it is.

## **Categorical Logic**

- Understand the basic structure of categorical propositions. Be able to identify:
  - The quantifier, subject, predicate, copula, and sentence type (A, E, I, O) of a given proposition.
- Understand the differences between the Modern Square of Opposition (Boolean) versus the Traditional Square of Opposition (Aristotelian).
  - You will not be required to memorize either Square. I will produce them if needed.

 You will be required to know what the names for each relation on the respective Squares means.

- Be able to prove whether an argument is valid / invalid using the Squares.
- You will need to know the definitions of conversion, obversion, and contraposition.
  - Be able to prove whether an argument is valid / invalid using conversion, obversion, and contraposition.
  - Translate sentences from one kind to another using conversion, obversion, and contraposition, and the corresponding truth values.
- Understand the difference between the Modern and Traditional uses of Venn Diagrams.
  - Be able to prove whether a syllogistic argument is valid / invalid using both the Modern/Traditional versions of the Venn Diagram.
- If I forgot to include anything, I'll let you know. If you have any questions, don't hesitate to email me.