

LOGIC, REASONING, AND PERSUASION, SECTION 07

Midterm Review Guide:

1. Study Guide for the Handouts
2. Guide to Supplemental Materials
3. Advice

1. Study Guide for the Handouts

1. **Handout 2-1: *entire handout*.** Understand the general structure of A&C's argument. You don't have to be able to recall it, only to recognize it.
2. **Handout 2-2: *entire handout*.** Know what the following are:
 - Statements
 - Premises and conclusions
 - Arguments.
3. **Handout 3-1: *\$1 (including \$1.1); §§2.1, 2.2, 2.3, 2.4, §3.1, 3.2*.** *You do not have to study: §§2.4-2.8, 3.3-3.5.* Know what the following are:
Focus on the following:
 - Truth-Preservation
 - Logic Machines
 - Implication Machine
 - Chain Machine
4. **Handout 4-1: *entire handout*.** Know how to implement the following:
 - The General Strategy for the Implication Machine.
 - The General Strategy for the Chain Machine.
5. **Handout 4-2: *first two pages*.** Know how to work with the following:
 - Reverse Implication Machine
 - Normative Implication Machine
 - Normative Reverse Implication Machine
6. **Handout 4-3: *entire handout*.** You do *not* have to memorize the content of the handout. Treat this as an *example/exercise*. Know how to do the following:
 - Identify the logic machines at play in each part of the argument.
 - Understand how the multiple subparts of the argument come together to
 - Understand that some of the parts of the argument are *deductive* and other parts are *inductive*.
7. **Handout 5-1: *entire handout*.** Know the following:
 - General approach to informal argument mapping
 - Rules of Argument Mapping
 - Rules of Thumb for Simple Statements
 - Rules of Thumb for Mutual Dependence.
8. **Handout 5-2: *entire handout*.** Know the following:
 - What support is.
 - Recipe for evaluating support.
 - Types of support (inductive/deductive, theoretical/practical). Special emphasis on inductive vs deductive theoretical arguments.

2. Guide to Supplemental Materials

The topics I cover overlap with an open-access textbook from James van Cleave. You may wish to review material from the textbook, to get another perspective on things. All of what I've taught is *consistent* with the textbook, in the sense that you don't have to worry about the textbook leading you wrong. Here is a link to the textbook: [Introduction to Logic and Critical Thinking](#)

For explanations of general concepts:

1. 1.1–1.4 Arguments.
2. 1.6–1.7 Validity: what I've called "truth-preservation.
3. 1.8: Deductive vs Inductive Arguments.

For more practice and examples:

1. 1.5: How to paraphrase arguments into premise-conclusion form.
2. 1.9: How to add missing premises in arguments.
3. 1.12: Analysis of a complicated argument.

You can also read 1.10 and 1.11, though I didn't cover topics like that!

3. Advice

1. **When practicing problems, do so *without* looking at the solutions first.**

There are two ways that you can know things that are relevant to studying. You *recognize* something if, when it is shown to you, you can verify it. You *recall* something if you can bring it to your memory on your own.

For instance, you could be unable to *recall* someone's name, but once someone else says it, you *recognize* it: you go "of course! I remember now."

Recall is much more difficult than recognition, but we can *think* that we could recall something just because we can recognize it. But this is not in general true: so when practicing recall, we need to practice *recall*.

When it comes to studying, this means that if you look at solutions to see if you can *recognize* the solutions as being correct, that may not help you too much on a test where your job is to *recall* which answer is correct, or how to produce the correct answer.

2. **Really think about if sentences sound natural.** Logical reasoning is something humans do all the time, and we often express it in natural language. If something sounds weird in natural language, there is often something logically weird going on. Pay attention to this!

3. **Worry about Understanding, not Being Correct.** My goal in teaching this class is to make you better reasoners. It's a hard skill, and *generally applicable*. The point is not to get things right *on the homework and the tests*, but to be better able to reason in your life beyond the classroom. I grade based on evidence of *understanding* the relevant structures and principles. This means I'll often award points when you demonstrate that you understand the concept, even if you make mistakes in execution.