I. Administrative
   A. Questions?
   B. Problem set #1 due on Tuesday, September 29

II. Language Analysis
   A. Take some time and work on the linguistic act/speech act/conversational act analysis of the short piece (4.1)
   B. How might we interpret this particular piece?

III. Standard Form Representation of Arguments
   A. More of an art than a science—the key things are:
      1. Identify and list all the premises, including the implicit ones
      2. Arrange the premises so that they flow into the conclusion
      3. Think about the connections among the premises, and between the premises and the conclusion: is it a non-deductive argument? A deductive argument?
      4. https://www.youtube.com/watch?v=zrzMhU_4m-g
   B. Examples (4.2)

IV. Argumentative Language
   A. Words that indicate arguments
2. **Conclusion markers:** ‘therefore’, ‘thus’, ‘hence’, ‘then’, ‘so’

3. Be careful, as these do not always do argumentative work.

4. **Examples** (4.3, 4.4)

B. **Structures that indicate arguments**

1. Conditional structure: “if … then …”

2. Disjunctive structure: “… or …; so …”, “either …”, “on the one hand, …; on the other hand, …”?)

C. **Evaluative language**

1. *The Test:* “Does the word mean that something is good or bad (right or wrong) in a particular way?” (p. 72)

2. Evaluative language invokes standards, which vary according to context and topic

3. Evaluative terms can be general (‘good’) or specific (‘putrid’)

4. Various jobs evaluative language can do:
   a. Prescribe action
   b. Express emotion
   c. Change behavior or feelings

5. *Things to keep in mind:* context, spin doctoring

6. **Examples** (4.5, 4.6)

V. **Argumentative Moves**

A. We can do various things while making arguments that can help us be more compelling.

B. Some of these moves are discussed in the text:

1. *Assuring:* gesture in the direction of supporting reasons without supplying them
   a. Cite authorities
b. Express the strength of our convictions

c. Audience abuse

d. **Things to keep in mind**: context, the trick of abusive assurances

2. **Guarding**: weakening claims to make them “less subject to attack”, especially conclusions

   a. Weaken extent

   b. Introduce probability

   c. Reduce commitment level

   d. **Things to keep in mind**: context, the “middle way”, the trick of the disappearing guard

3. **Discounting**: identify criticisms and respond to them


   b. **Things to keep in mind**: context, attacking straw men

4. **Examples**: (below)
Argumentative Moves

Indicate what role the **boldface-italic** terms play in these sentences, if any. Your options are: *reason marker (RM), conclusion marker (CM), guarding (G), assuring (A), discounting (D),*


3. “*I am convinced* [9] that the U.S. should not get back into another ground war in the Middle East, *because* [10] it’s not in our national security interest and not necessary for us to defeat ISIL,” he said.

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VI. Argumentative Standards – Read pp. 90-94

A. Validity

1. This standard applies to deductive arguments, but not to non-deductive ones; indeed, that it is the gold standard could be seen as the characteristic feature of deductive argumentation

2. An argument is valid if and only if its conclusion must be true if its premises are; alternatively, an argument is valid if and only if when the conclusion is false, at least one of the premises must be false

3. This is a conditional standard, and so is quite tricky

B. Truth

1. The topic of much discussion in philosophy

2. It is a multifaceted concept, but we are interested in it only insofar as it applies to statements

3. A statement will be considered true if and only if it describes the world the way it is

C. Soundness

1. An argument is sound just in case it is valid and its premises are true

2. Thus, this is also a standard that applies to deductive argument

3. This is the standard that we most care about outside the logic classroom

D. Examples – Worksheet
VII. More on Validity

A. Examples of valid arguments

P1. If I am in my office, my lights are on
P2. I am in my office
---------------------
C. ?

P1. He is either in class or he is at home
P2. He is not in class
---------------------
C. ?

P1. All of the students will understand validity
P2. You are one of the students
---------------------
C. ?

B. Our objectives

1. Define validity and say what must be true of an argument if it is valid

2. Determine if the information you have about an argument enables you to judge whether or not it is valid

3. Understand the relationship between validity and soundness

C. Objective 1: Definitions of validity

1. Two main forms: (These are equivalent – see handout)

   a. An argument A is valid if and only if whenever its premises are all true, its conclusion is also true.

   b. An argument A is valid if and only if whenever its conclusion is false, at least one of its premises is false.
2. Validity is essentially connected with the notions of *possibility* and *necessity*:
   
a. An argument is **valid** if and only if it is *not possible* for the conclusion to be false if all the premises are true.

   b. An argument is **valid** if and only if it is *necessary* for the conclusion to be true if all the premises are true.

3. This is why valid arguments are so important – if you have an argument that is valid, you know that there is *no way* to defeat it

D. **Objective 2: Judging validity**

1. In order to understand validity, you need to think in terms of what is possible and what is necessary. With respect to a particular argument, this can take the following forms:
   
a. **Positive form** (i.e., seeking **validity**): if I make the premises true, does that *necessitate* that the conclusion is true? If so, then the argument is **valid**.

   b. **Negative form** (i.e., seeking **invalidity**): is it *possible* for the premises to be true and the conclusion false? If so, the argument is **not valid**.

2. What about *actual* information concerning the truth values of the argument steps? There is very little you can learn from this – *See handout*

3. The best way to assess the validity of an argument is to try to *break it*, i.e., imagine a possible situation in which the premises are true and the conclusion is false – *See handout*

E. **Objective 3: Distinguishing between validity and soundness**

1. An argument is **sound** if and only if it is (a) valid, and (b) all of its premises are true

2. Thus:
   
a. An argument might have all of its premises be true *without being sound* because it is not valid

   b. An argument might be valid *without being sound* because not all of its premises are true
3. *Big Finish*: an argument can be valid without being sound, but *cannot* be sound without being valid