

John Halpin

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PHL 1000 Introduction to Logic

Textbook: the Logic Cafe <http://thelogiccafe.net/1000/> (free and online)

Administrative matters: see the week-by-week description in Moodle for what to do when and the syllabus for grade details. moodle.oakland.edu

I. Logic...the idea

In this course we study the basics of reasoning and inference to conclusions. *Here's a take on our entire course in a nutshell.*

1. A big part of the class is a matter of formal, symbolic reasoning. *Example:* "Either a Democrat or a Republican will win the election, it's not going to be a Republican this time, so a Democrat will win." This little bit of reasoning is straightforward.
2. You might think of it this way: There are two serious possibilities D or R. But it won't be R, so D. I symbolize to stress the *form* of reasoning in what we will call a *formal* or *deductive* argument. Symbolizing will be a big deal for the course.
3. Still, as I write this in Summer 2020, you may say: "don't count the Republicans out yet!" Your point is not to object to my style (*form*) of reasoning but to its *content*.

When content, the factual basis, is at issue, you may have to argue *informally* or *inductively*.

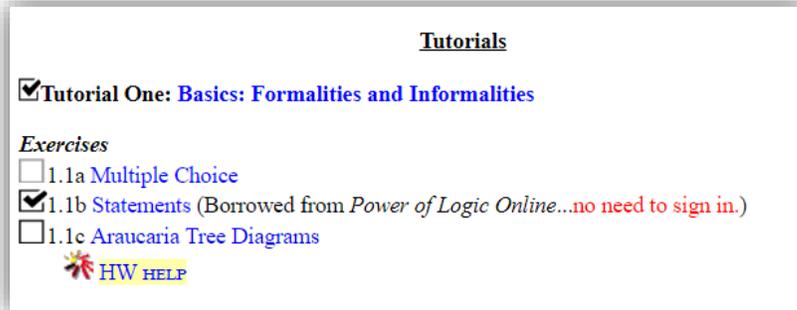
Example 2: You might say that people change their minds and it's long before November. Thus, you conclude, we should not yet assume that Republicans can't regain ground and win. This is based not on form but on your *best interpretation* of the political information you now have.

II. The important things to do to pass this course!

- a) Work your way through our textbook, <http://thelogiccafe.net/PHL1000/>, starting with *the first two tutorials of chapter one*. This is our first "topic", the week 1 topic. And the most important work this week, and any week, is doing the exercises or problem sets. When these exercises get difficult (in week 1 or week 14 or whenever!) make sure you come to *Yuja/Zoom* for our online problem sessions. As well, there are loads of online lectures meant to help you quick-start the exercises. You'll find these in the Café right next to the exercise links.
- b) Make sure you do **all** the main graded work with strict deadlines: *The Moodle Quizzes (every other week starting week 2) and the two Exams*. Together this amounts to 75% of your grade.
- c) Third and *less important* as you get started: Look to the smaller matters (like Postings) as incentive to keep you going. These are details and count for a small part of the grade. But keeping up with these will really help. Still, they are of lesser import so don't stress on them. There are no strict deadlines for getting to this stuff but best not to be put it off for long. We should talk if you're not soon getting comfortable with these details come about the end of the first week of class.

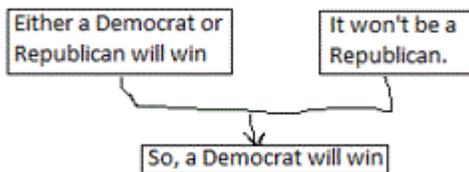
III. Details and how to get on week-by-week in this class (but mostly less important than what is mentioned just above).

- a) The learning material is in the Logic Café, <http://thelogiccafe.net/1000>. (The name comes from the days when Java and JavaScript programming was new and it was popular to name your website that way. The first version of the Café was up back in 1999 so make sure you go to the current one with link above.) Anyway, go to the first chapter outline and you'll see something like this:



The check mark's show what has been completed. If you look closely you will see that one of the two unchecked boxes is darker than the other, 1.1c. If you click this darker box you will get a check mark...this is because I'm borrowing an exercise from another textbook and so the Logic Café can't keep track. But for 1.1a (that's the first exercise from chapter 1 and tutorial 1) you need to complete it on the Café to get the checkmark...your computer's browser will remember this so long as you "allow cookies". (If you use more than one computer or browser, you'll have different things check marked in each.)

- b) *Don't get behind.* Nothing is really due until the second week of class (the first Moodle Quiz), but logic is like a new language and it will seem like gibberish when I suddenly move from "If a Republican wins, then a Democrat doesn't" to this odd bit of terminology: ' $R \supset \sim D$ '. Sorry, you'll have to get used to the symbols for the symbolic logic part!
- c) Come on *Yuja/Zoom* (or see the recordings) when you get a chance. This is our online classroom. We can talk and I can show you how to do things. And you can show me any problems you're having. I require that you come on just 5 times over the entire term. Easy points for 5% of the grade!
- d) *Posting* (5%) and *replies* to others (another 5%). Often but not always these postings will involve drawing up a little diagram of the reasoning. Here's a little example:



Too ugly? I used Paint to draw this up. But you should try to use the (optional) drawing program described in the Logic Café. This is *Araucaria* and (if you can stand it long enough to get used to it!) you'll save some time and have neater argument drawings to *post* in the biweekly postings. Or you can draw things up by hand and take a smartphone picture. Upload the picture to your computer and post.

- e) *Café checks!* Each topic period, you'll be asked to find a "key phrase"... don't try to figure out what the phrase might be; *look for it*. This is an easy 5%. Look for the big red marker as you work through the Logic Café. It may be in the readings or in the exercises. Here's what to look for:



Can't find a key phrase some week? Come to a Yuja/Zoom session and I'll give out the phrase for free.

- f) *Online lectures*...fast-paced videos describing each topic's work. So, set aside a 15 or 20 minutes to quickly get the overview.

- g) The *Café reading*...each topic involves two or three tutorials. Work your way through these *slowly*.
- h) Homework *exercises* in the Logic Café. 0% These are ungraded (except for a few postings). But they are the essential prep work for the Moodle quizzes and Exams. *Repeat*: these are essential to prepare for the biggest part of your grade.
- i) Questions? See the forums near the top of our Moodle page: moodle.oakland.edu. I have these forum posts sent straight to my email and smartphone where they are given first priority.