

Philosophy A201: Practical Logic
Loyola University of New Orleans, Spring 2015
Ben Bayer

Course description

This course is a broad survey of the basic ways in which human beings acquire knowledge by inference, and common mistakes encountered in their attempt to do so. This course begins by looking at some rules for the most rigorous forms of reasoning, formal deductive reasoning, and proceeds to examine other forms of reasoning that fall short of its rigor but still contribute positively to human knowledge. Using a variety of examples from everyday life and from science, we discuss more generally how we reason from relevant, better known evidence to less obvious conclusions—and how the failure to distinguish evidence from mere belief or emotion can interrupt this process. After examining each positive form of reasoning, we look at degraded forms that resemble them but which represent sources of error (fallacies). To understand this process, we survey a variety of practical case studies from science, journalism, politics, and the law. Special emphasis is placed on the role of background knowledge and definitions in the establishment of evidential relevance.

Grading

5 homework sets: 40%
Online participation: 10%

First exam: 15%
Second exam: 15%
Final exam: 20%

Recommended text

- *Introductory Practical Logic* (by Bayer)

Lecture and reading schedule

(“IPL” is *Introductory Practical Logic*. Pages numbered are those ideally read in advance of the scheduled class.)

Introduction

Wednesday, January 7th

What is logic and why do we need it? (part 1)

Friday, January 9th

What is logic and why do we need it? (part 2)

- IPL, pp. 1–21

Monday, January 12th

Logic and the basic requirements of good reasoning (part 1)

- IPL, pp. 23–39

Wednesday, January 14th

Logic and the basic requirements of good reasoning (part 2)

- IPL, pp. 23–39

Friday, January 16th

Inductive and deductive reasoning

- IPL, pp. 277–296

Deductive reasoning

Wednesday, January 21st

Deductive validity and invalidity (part 1)

- IPL, pp. 338–346

Friday, January 23rd

Deductive validity and invalidity (part 2)

- IPL, pp. 347–354

Monday, January 26th

Deductive validity and invalidity (part 3)

Categorical syllogisms (part 1)

- IPL, pp. 355–365

Wednesday, January 28th

Categorical syllogisms (part 2)

- IPL, pp. 365–374

Friday, January 30th

Categorical syllogisms (part 3)

- No reading

Monday, February 2nd

Categorical syllogisms (part 4)

- No reading

Wednesday, February 4th

Hypothetical syllogisms

- No reading

Friday, February 6th

Inference to the best explanation

- (No reading)

Major fallacies that violate the basic requirements of good reasoning

Monday, February 9th

The fallacy of begging the question (part 1)

- IPL, pp. 43–52

Wednesday, February 11th

The fallacy of begging the question (part 2)

- IPL, pp. 53–62

Friday, February 13th

The fallacy of begging the question (part 3)

- No reading

Monday, February 23rd

The fallacy of context dropping (part 1)

- IPL, pp. 163–169

Wednesday, February 25th

The fallacy of context dropping (part 2)

- IPL, pp. 170–176

Illusory sources of evidence

Wednesday, March 4th

Relevance and the fallacy of subjectivism (part 1)

- IPL, pp. 63–75

Friday, March 6th

Relevance and the fallacy of subjectivism (part 2)

- IPL, pp. 75–85

Monday, March 9th

Reliable and unreliable testimony (part 1)

- IPL, pp. 86–99

Wednesday, March 11th

Reliable and unreliable testimony (part 2)

- IPL, pp. 99–106

Friday, March 13th

Reason, emotion, and emotionalism (part 1)

- IPL, pp. 114–126

Monday, March 16th

Reason, emotion, and emotionalism (part 2)

- IPL, pp. 126–135

Wednesday, March 18th

Reason, emotion, and emotionalism (part 3)

- IPL, pp. 135–142

Friday, March 20th

Shifting the burden of proof and the fallacy of the argument from ignorance (part 1)

- IPL, pp. 177–182

Monday, March 23rd

Shifting the burden of proof and the fallacy of the argument from ignorance (part 2)

- IPL, pp. 182–193

Definition and meaning

Wednesday, March 25th

Rules of definition (part 1)

- IPL, pp. 231–241

Friday, March 27th

Rules of definition (part 2)

- IPL, pp. 241–251

Wednesday, April 8th

Rules of definition (part 3)

- IPL, pp. 251–260

Induction and causality

Wednesday, April 15th

Induction and causal analysis (part 1)

- IPL, pp. 316–326

Friday, April 17th

Induction and causal analysis (part 2)

- IPL, pp. 327–331

Monday, April 20th

Induction and causal analysis (part 3)

- IPL, pp. 331–337

Wednesday, April 22nd

Inductive fallacies (part 1)

- IPL, pp. 297–309

Friday, April 24th

Inductive fallacies (part 2)

- IPL, pp. 309–315

Monday, April 27th

Inductive fallacies (part 3)

- IPL, pp. 309–315