

# PHILOSOPHY 101

FALL 2016

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# CLASS INFO

**COURSE WEBSITE: [HTTP://PHIL101.COLINMCLEAR.NET](http://phil101.colinmclear.net)**

- syllabus
- course assignments
- readings (posted online)
- announcements

## EVALUATION

- Essay: 25%
- Two Exams: 45%
- Quizzes: 20%
- Participation: 10%

## CLICKERS

- Always bring to class
- Available at the bookstore

# THE LOGIC OF ARGUMENT

# KINDS OF ARGUMENT

**deductive Argument:**

the conclusion follows from the premises *necessarily*

**inductive Argument:**

the conclusion is made *probable* by the premises

**abductive Argument:**

the conclusion is the best explanation of the truth of the premises



# CHARACTERISTICS OF DEDUCTIVE ARGUMENT

- Validity
- Soundness

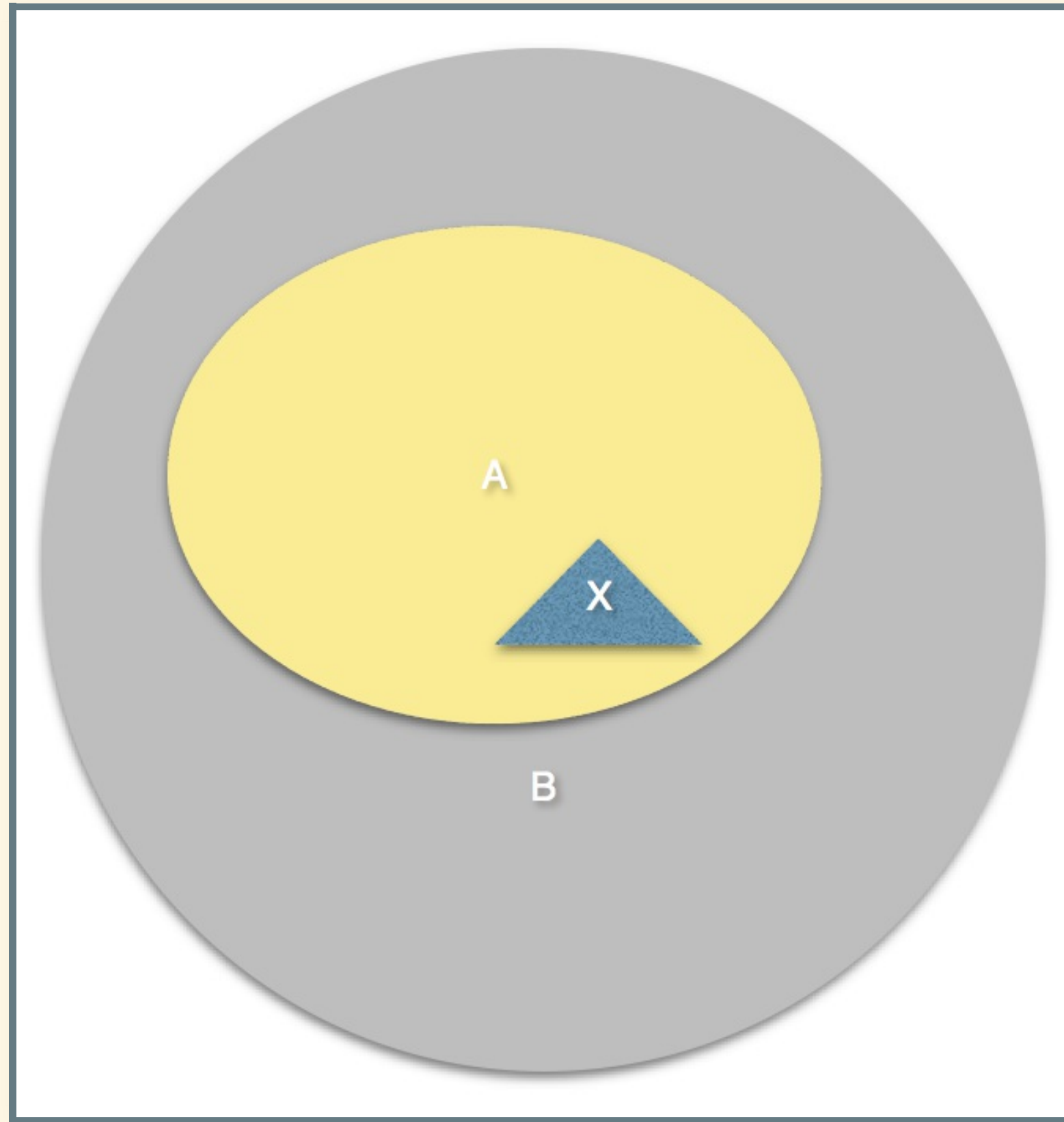
# VALIDITY

- An argument whose form *guarantees* that, if the premises are true, the conclusion must also be true

## FORM VS. CONTENT

- |                                |                        |
|--------------------------------|------------------------|
| 1. All humans are mortal       | 1. All A is B          |
| 2. John is human               | 2. x is A              |
| 3. $\therefore$ John is mortal | 3. $\therefore$ x is B |

Whatever the content of this argument form, it will *always* be valid



# SOUNDNESS

- An argument which is (i) valid and (ii) has true premises
- Whether an argument is sound concerns both its *form* and its *content*
  - Not all valid arguments are sound arguments
  - Not all arguments with true premises and a true conclusion are sound

# TWO BASIC DEDUCTIVE ARGUMENT FORMS

## MODUS PONENS: "THE AFFIRMING MODE"

1. If P, then Q
2. P
3.  $\therefore$  Q

1. If there is beer in the fridge then today will not be dull
2. There is beer in the fridge
3.  $\therefore$  Today will not be dull

## MODUS TOLLENS: "THE DENYING MODE"

1. If P, then Q
2.  $\sim Q$
3.  $\therefore \sim P$

1. If there is beer in the fridge then today will not be dull
2. Today will be dull
3.  $\therefore$  There is no beer in the fridge



# INTERPRETING ARGUMENTS

## ARGUMENT MARKERS

- Arguments are *constructed* from statements but they typically don't appear as lists of statements
- (Good) Arguments often contain "marker" words, which indicate what is evidence or conclusion

## SAMPLE EVIDENCE MARKERS

- as
- because
- for
- from
- since

## SAMPLE CONCLUSION MARKERS

- hence
- so
- then
- therefore
- thus

## ARGUMENT EXTRACTION

- Is there an argument being made?
- What's the conclusion of the argument?
- What support does the conclusion have?
- What material is essential to the argument and what is extraneous?
- Is the argument valid?
- Is the argument sound?

*There is no reason to think that there are any absolute moral truths. We can see this when we consider different cultural outlooks concerning what is morally required. For example, indigenous Inuit culture considered infanticide to be morally permissible in some situations. But modern American culture clearly thinks infanticide is always morally wrong. So what's morally right or wrong is just a matter of opinion, which can vary from culture to culture. (James Rachels, The Elements of Moral Theory)*

## A SAMPLE EXTRACTION

1. If moral truths were absolute then they would not vary from culture to culture
2. What's considered morally right or wrong does vary from culture to culture
3.  $\therefore$  There are no absolute moral truths

1. If P, then Q
2.  $\sim Q$
3.  $\therefore \sim P$

*There are, moreover, seemingly unanswerable arguments that, if they are correct, demonstrate that the existence of moral responsibility entails the existence of free will, and, therefore, if free will does not exist, moral responsibility does not exist either. It is, however, evident that moral responsibility does exist: if there were no such thing as moral responsibility nothing would be anyone's fault, and it is evident that there are states of affairs to which one can point and say, correctly, to certain people: That's your fault. (van Inwagen "How to Think")*



## SAMPLE EXTRACTION

1. If there were no such thing as moral responsibility, then no one would be at fault for anything
2. But people do correctly fault others for performing certain kinds of actions
3.  $\therefore$  There must be moral responsibility
4. If there were no free will, then there would be no moral responsibility
5. There is moral responsibility
6.  $\therefore$  There is free will

1. If A, then B
2.  $\sim B$
3.  $\therefore \sim A$  (by 1, 2, modus tollens)

# LOGICAL FALLACIES

## Logical fallacy:

A defect in the logical form or content of an argument

- formal fallacy (defect of logical form)
- informal fallacy (defect of content)

# FORMAL FALLACIES

## Denying the Antecedent:

denying the consequent of a hypothetical by denying the antecedent

1. If the dog is outside, then he is barking
2. The dog is not outside
3.  $\therefore$  The dog is not barking

1. *If  $P$ , then  $Q$*

2.  $\sim P$

3.  $\therefore \sim Q$

## Affirming the Consequent:

Accepting the antecedent of a hypothetical by accepting the consequent

1. If the dog is outside, then he is barking
2. The dog is barking
3.  $\therefore$  The dog is outside

1. *If  $P$ , then  $Q$*

2.  $Q$

3.  $\therefore P$

# INFORMAL FALLACIES

## Straw Man:

Purposely misrepresenting a view so that it can be more easily attacked or criticized

*Mary: We must not betray the principles of justice and democracy. Suspected terrorists must be granted basic rights as well as legal representation and access to a fair court.*

*Tom: Mary is advocating the release of known terrorists. We cannot afford to allow our enemies to move freely in our society.*

## Genetic Fallacy:

Accepting or rejecting a statement or argument on the basis of its source

*The US Senate is arguing for various proposals to reduce social inequality. But anything they come up with will be ridiculous because they are all rich white people.*

## Appeal to the Person (*ad hominem*):

Rejecting a statement or argument because it comes from a particular person or group, rather than because the statement or argument is false or dubious

*President Obama says that the United States health care system is in need of serious reform, and should be changed so that more people can affordably receive adequate coverage. But Obama is a socialist and we shouldn't believe anything he says.*

## Begging the Question:

Attempting to prove the truth of a statement by using that very statement as evidence

*We know that God exists because the bible says so, and everything the bible says is true because God wrote it.*



