PHIL 50: Introductory Logic Autumn 2014 MWF 11:00-11:50am 320-220 & (M 4:15-5:05pm 120-59 ∨ R 1:15-2:05pm 60-118)

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### **Office hours**

Wang: W 12-2pm & by appointment Turman: R 11am-12pm & by appointment

# **Objectives**

Formal logic provides us with tools to assess the inferences made in reasoning and argumentation. In this class, we will learn semantics and proof systems for formal systems of logic, including sentential and predicate logic. If we have time, we will also look at probability theory.

# Assessment

Final grades will be based on:

- 1. Attendance and participation
- 2. Problem sets
- 3. Two in-class exams

# **Textbook and resources**

- 1. Logic Primer, 2<sup>nd</sup> edition, Colin Allen and Michael Hand, MIT Press (2001)
- <u>http://logic.tamu.edu</u> This online resource is provided as a companion to *Logic Primer*, and includes a proof checker, among other tools.

# **Scheduled** topics

Weeks 1-2: Introduction to sentential logic (*LP* chapter 1) Weeks 3-4: Truth tables for sentential logic (*LP* chapter 2) Weeks 5-6: Introduction to predicate logic (*LP* chapter 3) Weeks 7-8: Model theory for predicate logic (*LP* chapter 4) Weeks 9-10: Introduction to probability theory

### Students with disabilities

Students with disabilities who require academic accommodation should contact the Office of Accessible Education (studentaffairs.stanford.edu/oae) and initiate a request before the beginning of term.