

*Department of Philosophy Summer Course*

**PHILOSOPHY 102 Summer Session I, May-June 2014**

*Instructor: Professor T. McCarthy, [tgmccart@illinois.edu](mailto:tgmccart@illinois.edu)*

This is the standard introduction to logic and critical thinking taken by both philosophy majors and by students that require a background in basic logic for other fields. This course will emphasize the concepts, methods and examples that have become increasingly relevant to pre-professional training for law and medicine and for the social sciences. The *LSAT* exam has long emphasized problems requiring special sorts of inference (causal inference, statistical inference, truth-functional and analogical inference, in particular) relevant to legal study. In the new *MCAT* exam coming on line in 2015, there is an increased focus on the socio-cultural and behavioral determinants of health, and a section, "Critical Analysis and Reasoning Skills," has been added requiring proficiency in the types inference mentioned above.

This intensive four-week course will begin by introducing the distinction between deductive and inductive inferences and by presenting a variety of examples designed to illustrate the range of inferences and arguments that we shall study. (A *deductive* inference or argument is one in which the truth of the premises guarantees the truth of the conclusion; in an *inductive* argument, the truth of the premises make the conclusion only probable.) We will then move on to a brief study of deductive logic, emphasizing basic concepts and methods for evaluating deductive arguments. The concluding two and a half weeks of the course will focus on inductive logic: casual arguments, arguments from analogy, and elementary concepts and methods of statistical inference.

*Requirements:* Daily assignments, in part done cooperatively in class, and 4 tests, one at the end of each week. The homework and exam problems will be taken in part from *LSAT* and *MCAT* sample exams.