Course description

Content

This year's incarnation of this course will focus on modal logic. Modal logic is the logic of truth-modifying adverbs, most famously "necessarily" and "possibly." A surprising number of arguments in philosophy use such notions, and logic helps clarify their relations. (In some cases there is no controversy. For example, we can all agree that if it is true that *p*, then it's possibly true that *p*. But do we want to agree that if there *could be* a movie star who invents cold fusion, then there is something actually existing, which has the property that *it* could be a movie star that invents cold fusion?) There are an interesting variety of different logical systems that capture some, but not other, intuitions we have about modal claims. We'll learn about these systems: we'll learn how to interpret them in terms of "possible worlds", and how to do proofs using a tableau system. Along the way we will discuss various philosophical arguments, seeing how our logical systems illuminate them.

Work

Each student will
- complete 6 assignments;
- write one test
- write the final examination.

Textbook

First-order modal logic by Melvin Fitting and Richard L. Mendelsohn. Kluwer Academic Publishers. ISBN 0–7923–5335–8.

Lectures

Tuesday and Thursday, 11:30–12:50pm in MacKinnon 309.

Grading

Item	Value
Weekly assignments 6 × 8% = 48%	
Test	22%
Final exam	30%