Syllabus for Philosophical Applications of Logic. A. Falk 9/2013

Office hours: the half hour before class. Other times by appointment.

September will be devoted to mastering “first order quantificational logic with identity” as presented in the first five chapters and ch. 6 1-3 of Richard Jeffrey’s Formal Logic, fourth edition (Hackett Publishing). There will be a midterm exam on the skill of doing problems of translation of English into the notation of logic and Jeffrey’s method of testing for logical properties, such as validity of arguments. The exam will be at the end of September or beginning of October, depending on the outcome of the diagnostic test I will give on the first day of class. The diagnostic test does not count toward your grade; the midterm counts for 40% of your grade.

Students should read in September chapter one of Burgess’s Philosophical Logic (Princeton University Press). The worst typos that made the hardback version of this book very frustrating have been corrected in the paperback edition, and so use it. (The first five chapters of Sider’s Logic for Philosophy, though not required, are another good extra reading.)

Early October will be devoted to temporal logic. Read chapter 2 of Burgess (and, if you want, section 7.3 of Sider). Late October and early November will be devoted to modal logic. Read chapters 3 and 4 of Burgess (and, if you like, chapters 6-10 of Sider, but class discussion will follow the order of Burgess’s presentation). I then go on to counterfactual logic, and your reading is chapter 4 in Burgess. A fuller treatment of the computational techniques of counterfactual logic is in Sider.

Whatever is left of the term will be devoted to intuitionistic logic. Read chapter 6 of Burgess (and, if you wish, section 3.5 of Sider). I don’t expect to devote any class time to Burgess, chapter 5.

There will be no paper required for the course. The final exam will be a mix of take home questions and questions to be answered in class in writing on the day scheduled for the final exam.

The grade for the course will be 40% midterm, 50% final exam, and 10% for quality of occasional homework assignments and contributions to class discussions and (for those already highly skilled in logic) the help given to others. I will let each of you know by mid-October how you have been doing on class contributions.