Symbolic Logic

PHI 3130 Fall 2022 Prof. Ray

The course is designed to provide the student with a basic working knowledge of first-order logic and semantics, and familiarize him or her with some basic metalogical results. We will cover basic topics in elementary logic including: propositional, quantificational, identity, free, and modal logics, formal semantics, soundness and completeness. We will also formulate the philosophical underpinnings of our subject with special care.

The learning goals for PHI 3130 are broadly spelled out here (https://catalog.ufl.edu/ugrad/current/liberalarts/alc/philosophy.aspx).

Course Work:

Regular homework (25%) and three tests (20%,25%,30%).

Course Materials:

All course materials will be made available either via Canvas or through this web site. Some course materials may be posted as password protected pdf. In order to open them you need to know a password—which will be given to you in class...

This course does not require a textbook.

Some interactive course materials, like online practice problems and sample derivation demonstrations, will be made available on this class web site. You are strongly urged to make use of these helpers throughout the course.

Rules of Engagement:

1) The materials on this site do not belong to you. You may not give access to or share them with anyone outside the class. This applies equally to materials supplied on the class Canvas site (if applicable). 2) The use of recording devices in the classroom is circumscribed by law. Students may not share, transmit, circulate, distribute to any person any such recording, nor upload such to any media platform.

Nota bene:

Students who do not get assignments in on time are subject to the Devilish Lateness PolicyTM

Academic honesty violations are not tolerated and will result in i) immediate failure in the course and ii) referral to the Dean of Students for further action. All assignments are to be completed on your own. It is your responsibility to know and understand the UF Student Honor Code (http://www.dso.ufl.edu/judicial/honorcode.php).

Note for Students with Disabilities:

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the Disability Resource Center. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

UF General Policy:

Course Evaluation:

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations (https://ufl.bluera.com/ufl/). Evaluations are typically open during the last two or three weeks of the semester. UF emails students with specific times when they are open. Summary results (https://gatorevals.aa.ufl.edu/public-results/) of these assessments are made available to students. UF has specific guidance (https://gatorevals.aa.ufl.edu/students/) on how to give professional (and respectful) feedback.

Conformality:

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with prevailing university policy (https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx).

Grade Points:

Information on how UF calculates grade points from grades can be found here (https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx).

Useful Disclaimer:

Our schedule of topics/readings/assignments are subject to change. So, stay informed as we go along.

Personnel & Contact

- Prof. Greg Ray, 300 FLO Class Professor
- Marcus Davis, 303 FLO Graduate Assistant

Office Hours

- Monday 2:00-4:00 [GR] 300 FLO
- Tuesday 10:30-1:30 [MD] 303 FLO
- Weds 10:45-12:00 [GR] 300 FLO
- And by appt [GR] 300 FLO

Topical Schedule:

- 08/24- Opening.
- 08/26- (No section meetings).
- 08/29- Ideal of Logic.
- 08/31- Logical Properties.
- 09/02- (No section meetings).
- 09/07- Formal Language.
- 09/12- Translation & Analysis.
- 09/19- Formal Semantics.
- 09/26- Tableau Proof.
- 10/03 1st Exam.
- 10/10- SC-Derv.
- 10/24- L-Derv.
- 11/07- 2nd Exam.
- 11/14- Modal Logic.
- 11/21- Metalogic.
- 12/15- 3rd Exam (Thu Dec 15 12:30-2:30).

Tentative Due Dates:

- 09/12- Due: LANG.
- 09/19- Due: TRANS.
- 09/26- Due: SEM.
- 10/03-1st Exam.
- 10/10- Due: TABX.
- 10/17- Due: SC-DERV1.
- 10/24- Due: SC-DERV2.
- 10/31- Due: LDERV1.
- 11/07- 2nd Exam.
- 11/14- Due: LDERV2.
- 11/28- Due: MODAL.
- 12/05- Due: META.
- 12/15- 3rd Exam. (Thu Dec 15 12:30-2:30)

Section Meetings:

- Lecture--MW 12:50-1:40 [GR] FLI 0105
- 16724--F 5th [MD] WEIM 2050
- 16725--F 7th [MD] WEIM 2050

• 16726--F 8th [MD] WEIM 2050