

PHIL 4510 (52134) / 6510 (52136) / LING 4510 (52138) / 6510 (52139): *Deductive Systems*
Spring 2020 TR 5:00 - 6:15 220 Peabody Hall
Brad Bassler, Peabody 1-B, bbassler@uga.edu
Office hours: TR 6:30 -7:30

The *Deductive Systems* course will follow the approach to logic taken by Dirk van Dalen's *Logic and Structure* (5th edition, Springer Verlag). This approach has the pedagogical advantage that it begins with a greater concentration on propositional logic than is usual, so that the way first-order predicate logic adds additional structure to propositional logic can be seen clearly. Throughout, natural deduction methods are emphasized as well. The entire approach is well-suited both to identifying the underlying role logical formalism plays in contemporary philosophy and in contemporary approaches to computer science.

PREREQUISITES: PHIL 2500 or PHIL 2500H or PHIL 2500E or permission of department

REQUIRED TEXT for the course is:

Dirk van Dalen, *Logic and Structure* (5th ed., Springer Verlag ISBN 978-1447145578)

REQUIREMENTS for the course are:

(1) Regular attendance is expected, and it should be clear from your behavior that you are attending to the presentation of material in the class. Attendance, in both senses, is an indication of commitment to the class and it should help you to digest the material. If you miss class for a good reason, please let me know by email; otherwise I will assume that your absence is unjustified. Attendance and commitment to the class will be taken into account to resolve borderline grades.

(2) Using electronic devices in the classroom is a privilege, not a right. Cell-phone usage is NOT permitted, as it is simply too distracting. Other electronic devices (tablets, computers) must be used responsibly, courteously and in a non-distracting way. If I find your use of them distracting (even if you are using them responsibly and courteously), you will be asked to put them up (which means stowed away). If this is a repeated problem, I will ask you to leave class and you will be counted as absent without justification.

(3) Evaluated assignments. There will be regular homework assignments (20 % of final grade), two midterm tests (20 % of final grade each, for a total of 40 %) and a cumulative final examination (40 % of final grade). All assignments must be submitted in hard copy, not electronically.

Make-up procedures: late homework will not be accepted and will receive a grade of 0; your two lowest homework grades will be discarded and the rest will be averaged. Make-up tests will be scheduled as necessary during office hours or at another time as determined by the instructor.

The Honor Code is in effect for this course. *UGA Student Honor Code: "I will be academically honest in all of my academic work and will not tolerate academic dishonesty of others." A Culture of Honesty, the University's policy and procedures for handling cases of suspected dishonesty, can be found at: www.uga.edu/ovpi*

The course syllabus is a general plan for the course; deviations announced to the class by the instructor may be necessary.

SYLLABUS OF CLASSES AND ASSIGNMENTS

January

7	INTRODUCTION / 2.1
9	2.1 cont'd
14	2.2-2.3 FIRST HOMEWORK ASSIGNED
16	cont'd
21	2.4 FIRST HOMEWORK DUE
23	2.4 cont'd
28	2.6 SECOND HOMEWORK ASSIGNED
30	2.6 cont'd

February

4	3.1-3.3 SECOND HOMEWORK DUE
6	cont'd.
11	FIRST MIDTERM EXAM
13	3.1-3.3
18	3.3.-3.4 THIRD HOMEWORK ASSIGNED
20	3.5
25	3.6-3.7 THIRD HOMEWORK DUE
27	3.8

March

3 3.9-3.10
5 SECOND MIDTERM EXAM (through 3.7)

9-13 SPRING BREAK

17 7.1
FOURTH HOMEWORK ASSIGNED
19 cont'd

24 7.2
FOURTH HOMEWORK DUE
26 cont'd

30 7.3
FIFTH HOMEWORK ASSIGNED

April

2 cont'd

7 7.4
FIFTH HOMEWORK DUE
9 cont'd

14 CONCLUSION I
16 CONCLUSION II

21 REVIEW I
23 REVIEW II

28 NO CLASS: MONDAY SCHEDULE IN EFFECT