Math 2283 - Honors Logic
Spring 2019 - Schedule
updated April 22, 2019 at 10:28

Class	Day	Chapter	Title	Description
1	2019.01.14	1	On The Use of Variables	Introduction to the semester. Chapter 1 covers the basic logical building blocks sentences, sentential functions, designatory functions, variables - free and bound, quantifiers
2	2019.01.16			Reading summary due, including problems 1–4 from the HW. Discussion about quantified, free, and bound variables.
3	2019.01.18			Discuss problems 5–14 in class, further observations on quantifiers, free and bound variables.
4	2019.01.23	2	On The Sentential Calculus	Problems 1–14 from Chapter 1 and reading summary from Sections 2.1–2.7 due, including problems 1–4 from the HW. Start of the discussion over Chapter 2, which includes logical connectives - and, or, if, iff, and an introduction to logical laws. Problems 1–10 assigned from Chapter 2 homework.
5	2019.01.25			Discussion of homework problems 1–10 from Chapter 2.
6	2019.01.28			Problems 1–10 from Chapter 2, summary from Sections 2.8–2.9 along with problems 11 (a), 12 (a), and 13 (a) due. Discussion of truth tables and rules of inference. Problems 11–20 from Chapter 2 HW assigned.
7	2019.01.30			More discussion on the topics of: rules of inference and logical laws. Discuss HW problems.
8	2019.02.01	3	On the Theory of Identity	Problems 11-20 from Chapter 2, summary from Sections 3.1–3.2 due, including problem 3. Begin Discussion of the logical concept of identity.
9	2019.02.04			Problems 1 and 2 from Chapter 3 assigned.
10	2019.02.06			Problems 1 and 2 from Chapter 3 due, reading summary from Sections 3.3–3.5 due along with homework problems 4 and 5. Begin discussion of numerical quantifiers and more on the topic of equality.
11	2019.02.08			Discussion of all problems from Chapter 3 HW.

continued on next page...

Class	Day	Chapter	Title	Description
12	2019.02.11	4	On the Theory of Classes	Problems 4–13 from Chapter 3 due. Reading summary for Sections 4.1–4.4, along with problems 1 and 2 from the homework of Chapter 4.
13	2019.02.13			Continue discussion of classes, and relations among classes. Problems 1–15 from Chapter 4 assigned.
14	2019.02.15			Continued discussion of classes, class relations, and related HW problems.
15	2019.02.18			Problems 1–15 from Chapter 4 due. Reading summary for Sections 4.5–4.6, along with problem 18 from the homework of Chapter 4. Begin discussion of class operations.
16	2019.02.20			Prove some class/operation based theorems, focusing on the logical steps needed to prove set theoretical theorems.
17	2019.02.22			Problems 16–26 from Chapter 4 assigned. More examples of set-based proof techniques explored (conditional vs. biconditional proofs)
18	2019.02.25			Continue to work on problems 16–26 from Chapter 4.
19	2019.02.27	5	On the Theory of Relations	Problems 16–26 from Chapter 4 due. Reading summary for Section 5.1–5.9, along with problems 1 and 6 (a), (e), (i), (j). Begin discussion on the logical properties of arbitrary relations.
20	2019.03.01			Continue discussion of Chapter 5, focusing mainly on relation properties, such as transitivity, connectedness, symmetry...
21	2019.03.04			Finish discussion of reading, start working on problems 1–20 of the homework.
22	2019.03.06			Continue wo+rk on homework from Chapter 5.
23	2019.03.08			Continue work on homework from Chapter 5.
24	2019.03.11			Continue work on homework from Chapter 5.
25	2019.03.13	6	On the Deductive Method	Problems 1–20 from Chapter 5 due, Reading summary for Chapter 6 along with attempts on Theorem I and II from problem 1, and problems 3 and 4.
26	2019.03.15			Further discussions on deductive theories, methods, and interpretations of of deductive theories. Concepts of completeness and consistency also introduced.

Class	Day	Chapter	Title	Description
27	2019.03.25			Start working on problems from the HW, discuss midterm exam.
28	2019.03.27		Midterm Exam	*Joyous Day!*
29	2019.03.29			Continue working on homework problems from Chapter 6.
30	2019.04.01			Continue working on homework problems from Chapter 6.
31	2019.04.03			Continue working on homework problems from Chapter 6. In particular, in problems 1, 2, 10, and 11 we explore examples of deductive theories based on specific rules of inference, primitive terms, and axioms.
32	2019.04.05			Continue working on homework problems from Chapter 6.
33	2019.04.08			Continue working on homework problems from Chapter 6.
34	2019.04.10			Continue working on homework problems from Chapter 6.
35	2019.04.12	7	Propositional Languages and the Deductive Method	HW from Chapter 6 due, discuss reading from Chapter 7 along with problem 1 from the homework.
36	2019.04.15			Start discussion over the comparison between propositional languages and propositional systems. Clarify notation as well.
37	2019.04.17			Continue discussion of Chapter 7, including examples of the Interpolation Theorem.
38	2019.04.22			Finish discussion of Chapter 7, including completeness of *PS*. Read Chapter 8 for Wednesday.
39	2019.04.22	8	Construction of a Mathematical Theory: Laws of Order for Numbers	Reading summary for Chapter 8 due. Begin discussion of the algebraic deductive theory introduced in the chapter.