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➤ GENERAL DESCRIPTION. This course is designed as an advanced introduction to classical sentential and predicate logic. No previous acquaintance with logic is required. Nonetheless a willingness to master technicalities and to work at a certain level of abstraction is desirable.

➤ ORGANIZATION. The course is organized in two lecture sessions (M and W, 1:10pm–2:25pm, 207 Mathematics) and a mandatory discussion session (M or T or W, 6:10pm–6:55pm, 716 Philosophy).

➤ REQUIREMENTS. There will be two one-hour tests and a final three-hour examination. Each test will be worth 25% of the final grade; the examination will account for 40%. The remaining 10% will be based on home assignments and participation in the discussion sessions.

➤ TEXT. The textbook is Haim Gaifman's *A Course in Symbolic Logic*. This book is not yet in print; bound copies may be purchased at *Village Copier* on Broadway.

➤ WEBSITE. Material for this course, including all lecture notes and homework assignments/solutions, is posted on *CourseWorks* at https://courseworks.columbia.edu (section *Class Files*, folder *Shared Files*).

Week	*Date*	*Topic*	*Reading(s)*	*HW due*
1.	W 9/8	1. Introduction and overview	Chapter 1	
2.	M 9/13	2. Sentential logic: preliminaries; negation	2.0–2.1.1, 3.0–3.1.1	/
	W 9/15	3. Sentential logic: conjunction	2.1.2–2.1.2, 3.1.2	
3.	M 9/20	4. Sentential logic: truth-tables, logical equivalence	2.1.3, 2.2.0–2.21	HW#1
	W 9/22	5. Sentential logic: disjunction; tautologies/contradictions	2.2.2–2.2.3, 3.1.3	
4.	M 9/27	6. Sentential logic: equivalence laws	2.5.0	HW#2
	W 9/29	7. Sentential logic: using the equivalence laws	2.5.1–2.5.2	
5.	M 10/4	8. Sentential logic: conditional and biconditional	2.6, 3.1.4	HW#3
	W 10/6	9. Sentential logic: logical implication	4.0–4.2.0	
6.	M 10/11	TEST (25%) -- will cover topics 1 through 9		HW#4
	W 10/13	10. Sentential logic: general implication laws	4.2.1	
7	M 10/18	11. Sentential logic: more implication laws	4.2.2	HW#5
	W 10/20	12. Sentential logic: the fool-proof method	4.3.2–4.4	
8.	M 10/25	13. Predicate logic: preliminaries	7.0, 7.3	HW#6
	W 10/27	14. Predicate logic without quantifiers: syntax	7.1.0	
9.	*M 11/1*	*Academic Holiday*	/	HW#7
	W 11/3	15. Predicate logic without quantifiers: semantics	5.0–5.1.4, 7.1.1	
10.	M 11/8	16. Predicate logic without quantifiers: derivations; equality	7.2	HW#8
	W 11/10	17. Predicate logic with quantifiers: preliminaries	7.4.0–7.4.1, 8.1	
11.	M 11/15	TEST (25%) -- will cover topics 10 through 16		HW#9
	W 11/17	18. Predicate logic with quantifiers: symbolization	8.2.2, 8.3.2–8.3.5	
12.	M 11/22	19. Predicate logic with quantifiers: more on symbolization	8.3.6, 8.2.1, 8.2.3	HW#10
	W 11/24	20. Predicate logic with quantifiers: models and truth	9.1.0–9.1.1	
13.	M 11/29	21. Predicate logic with quantifiers: models and truth (cont'd)	9.1.1	HW#11
	W 12/1	22. Predicate logic with quantifiers: logical implications	9.2.0–9.2.2	
14.	M 12/6	23. Predicate logic with quantifiers: equivalence laws	9.2.3	HW#12
	W 12/8	24. Predicate logic with quantifiers: top-down derivations	9.3	
15.	M 12/13	25. Predicate logic with quantifiers: top-down derivations (cont'd)	9.3	HW#13
	TBA	FINAL EXAMINATION (40%) – Comprehensive		