

# Timeline (PHIL 114 Spring 10)

Date	Topics Covered	Class Activity	Textbook Reading DUE	HMWK DUE (Total)	HMWK DUE (Electronic Submission)	HMWK DUE (Written Portion)
Jan 12 (T)	Intro to Logic and LPL Software	Lecture	-	-		
Jan 14 (Th)	Atomic Sentences	Review HMWK	Intro pgs. 1-10; 1.1-1.4	Exercises 1.1-1.5, 1.7-1.10	Register your software then submit 1.2, 1.3, 1.4, 1.5, 1.7, 1.9	1.7, 1.8, 1.10
Jan 19	Set Theory and Arithmetic as Languages; Validity and Soundness	"	1.5-1.7; 2.1	Exercises 1.12, 1.15, 1.19, 1.20-1.22; 2.1-2.2, 2.4	1.19, 2.1	1.12, 1.15, 1.20, 1.21, 1.22; 2.1, 2.2, 2.4
Jan 21	Proofs; Fitch-Derivations; Non-Consequence		2.2-2.5	Exercises 2.5-2.22, 2.24-2.27	2.8-2.14, 2.15-2.20, 2.21, 2.24-2.27	2.5-2.7, 2.22
Jan 26	Boolean Connectives; Henkin-Hintikka Game		3.1-3.3	Exercises 3.2-3.10	3.2, 3.3, 3.5-3.7, 3.8-3.10	3.4
Jan 28	"		3.4-3.7	Exercises 3.11-3.16, 3.18, 3.20-3.23	3.12-3.16, 3.18, 3.20-3.23	3.11; Handout on FOL
Feb 2	Tautologies and Truth Tables		4.1-4.4	Exercises 4.1-4.8, 4.10-4.18, 4.20-4.23, 4.26	4.1-4.2, 4.4-4.7, 4.12-4.18, 4.20-4.23, 4.26	4.3, 4.8, 4.10-4.11
Feb 4	Proof Methods	<i>Take Quiz</i>	5.1-5.2	Exercises 5.1-5.14	5.9	5.1-5.6, 5.7-5.8, 5.10-5.14
Feb 9	Indirect Proof; Contradictions in Proofs		5.3-5.4	Exercises 5.15-5.18, 5.20-5.27	5.15-5.18	5.20-5.22, 5.23-5.27
Feb 11	Introduction and Elimination Rules		6.1-6.3	Exercises 6.1-6.16	6.1-6.6, 6.7-6.16	-
Feb 16	Subproofs and Tactics		6.4-6.6	Exercises 6.18-6.21, 6.28-6.33, 6.40-6.42	6.18-6.20, 6.21, 6.28-6.32, 6.33, 6.40-6.42 ( you may use Taut Con)	
Feb 18	Conditionals		7.1-7.4	Exercises 7.1-7.10, 7.12-7.13, 7.15-7.16, 7.20-7.25, 7.29-7.30	7.1-7.8, 7.10, 7.12-7.13, 7.15-7.16, 7.21, 7.25	7.9, 7.20, 7.22-7.24, 7.29-7.30
Feb 23	Introduction and Elimination Rules for Conditionals		8.1-8.2	Exercises 8.1-8.10, 8.13-8.38	8.2, 8.10, 8.17-8.38	8.1, 8.3-8.9, 8.13-8.16; for 8.3, assume the additional premise, "Mythical(u) v ¬Mythical(u)".
Feb 25	Soundness and Completeness		8.3-8.4	Exercises 8.39-8.42	8.39-8.40	8.41-8.42
Mar 2	<i>Exam (1-8)</i>	<i>Mid Term</i>	-	-	8.44-8.53 (Review)	

Mar 4	Quantifiers		9.1-9.7	Exercises 9.1-9.9, 9.13-9.20, 9.24-9.25	9.1-9.3, 9.5-9.6, 9.8-9.9, 9.13-9.14, 9.15-9.19, 9.25	9.4, 9.7, 9.20, 9.24
Mar 11	Quantifier Predicate Logic		10.1-10.3	Exercises 10.1-10.22	10.8-10.9, 10.22	10.1-10.7, 10.10-10.19, 10.20-10.21
Mar 16	QPL cont. and Axiomatic Method		10.4-10.5	Exercises 10.23-10.31	10.23-10.29, 10.31	10.30
Mar 18	Multiple Quantifiers; Skolemization		11.1-11.2; 18.5	Exercises 11.1-11.14; 18.20-18.21	11.1-11.7, 11.8-11.14	18.20-18.21
Mar 23	Translations		11.3-11.5	Exercises 11.17-11.18, 11.21, 11.27-11.28; 11.30-11.31	11.17, 11.18, 11.21	11.27-11.28, 11.30-11.31
Mar 25	Proof with Quantifiers		12.1-12.3	Exercises 12.1-12.10	12.4-12.10	12.1-12.3
Mar 30	<i>Spring Break</i>	-	-	-	-	-
Apr 1	<i>Spring Break</i>	-	-	-	-	-
Apr 6	Proofs with Mixed Quantifiers		12.4-12.5	Exercises 12.11-12.35	12.16-12.22, 12.30-12.35	12.11-12.15, 12.23-12.29
Apr 8	QPL with Multiple Quantifiers		13.1-13.2	Exercises 13.1-13.18	13.1-13.9, 13.10-13.18	-
Apr 13	Strategies; Soundness and Completeness of QPL		13.3-13.5	Exercises 13.19-13.28	13.19-13.27, 13.28	-
Apr 15	Numerical Quantifiers; Definite Descriptions	<i>Take Quiz</i>	14.1, 14.3, 14.6	Exercises 14.1-14.2, 14.8-14.9; 14.26-14.27; 14.55-14.56, 14.58, 14.60-14.61	14.1, 14.8-14.9, 14.26, 14.27, 14.60	14.2, 14.55-14.56, 14.58, 14.61
Apr 20	Baby Set Theory		15.1-15.4	Exercises 15.1-15.19, 15.22-15.23, 15.26-15.27	15.5, 15.12-15.13, 15.14, 15.17, 15.19	15.1-15.4; 15.6; 15.7-15.11; 15.15-15.16; 15.18; 15.22-15.23, 15.26-15.27
Apr 22	Russell's Paradox; ZFC		15.8-15.9	Exercises 15.62-15.67	-	15.62-15.67
Apr 27	Mathematical Induction		16.1-16.3	Exercises 16.1-16.2; 16.11; 16.14-16.18	-	16.1-16.2; 16.11; 16.14-16.18
Apr 29	Peano Arithmetic		16.4-16.5	Exercises 16.19-16.26, 16.30-16.31	16.19	16.20-16.26; 16.30-16.31
May 3-7	<i>Final Exam (1-16)</i>	<i>Take Final</i>			11.39-11.45 (translation review); 13.40-13.58 (general review)	

Grade:

HMWK (electronic submissions) – 30%

Quizzes – 20%

Exams (Mid Term and Final) – 50%

**Class Participation Does Bump Your Grade!**

How to do Well In this Class:

Do all the HMWK assignments (even the written ones). Don't get behind. Ask questions in class when things confuse you.