

School of Arts & Science HUMANITIES DEPARTMENT

PHIL 212-001 Introductory Symbolic Logic 2 Winter 2015

COURSE OUTLINE

The Approved Course Description is available on the web @

- Please note: this outline will be electronically stored for five (5) years only.
 It is strongly recommended students keep this outline for your records.
- 1. Instructor Information

(a)	Instructor:	Sandy Bannikoff		
(b)	Office Hours:	Tues. & Thurs. 1 – 3 pm		
		Other times by appointment		
(C)	Location:	Y315F		
(d)	Phone:	370-3508	Alternative Phone:	
(e)	Email:	Bannikof@camosun.bc.ca		

2. Intended Learning Outcomes

Upon completion of this course the student will be able to:

1. Translate English sentences and arguments into the notation of sentence logic.

- 2. Construct proofs in sentence logic with truth tables and derivations.
- 3. Translate sentences and arguments into the notation of predicate logic.
- 4. Construct proofs in predicate logic with derivations.

3. Required Materials

(a) Texts <u>Essentials of Symbolic Logic</u> by R. L. Simpson

4. Course Content and Schedule Dates of Each Week

Week One: January 5 to 9 Week Two: January 12 to 16 Week Three: January 19 to 23 Week Four: January 26 to 30 Week Five: February 2 to 6 Week Six: February 10 & 11 only (Family Day + Reading Break) Week Seven: February 16 to 20 Week Eight: February 23 to 27 Week Nine: March 2 to 6 Week Ten: March 9 to 13 Week Eleven: March 16 to 20 Week Twelve: March 23 to 27 Week Thirteen: March 30 to April 2 (Good Friday) Week Fourteen: April 7 to 10 (Easter Monday) Weekly Schedule Caveat: What follows is a tentative schedule.

<u>Week One</u> Symbols, Truth Functions, Well Formed Formulas, <u>Essentials of</u> <u>Symbolic</u>

Logic (hereafter I will just indicate the section numbers) 2.1-2.6

<u>Week Two</u> Translation, 2.13; and Truth Functional Definitions, 2.14 (On the side: Truth Tables. 2.7 – 2.14)

Week Three Translation, 2.13; and Translating Arguments, 2.24 Begin Derivations, 3.1- 3.10

Week FourTranslation & DerivationsDerivations, 3.11 – 3.17

Week Five Derivations, 3.18 -3.19

<u>Week Six</u> (BC Day, and Reading Break) Indirect Proof and Categorical Derivations, 3.20 – 3.23

<u>Week Seven</u> Derivation Practice Exam 1: Sentence Logic Translations and Derivations

Week Eight

Predicate Logic, 4.1 - 4.4; Begin derivations, 5.1 - 5.3

Week Nine Predicate Logic Translation, 4.1 – 4.4; inference rules, 5.4 – 5.5

<u>Week Ten</u> Quantifiers, 4.5 - 4.9, People and Things, 4.10 - 4.11; inference rules, 5.6 - 5.7

Week Eleven Identity, Domains and Arguments 4.12 – 4.17; Derivations

Week Twelve Derivations, 5.9 – 5.10

Week Thirteen Derivation Strategies, Categorical Derivations, 5.12-5.15

Week Fourteen Easter Monday: No Class Derivation Practice

Final Exam: Predicate Logic Translations and Derivations. To be scheduled by the college during the final exam period.

5. Basis of Student Assessment (Weighting)

(a)	Homework	25% (See note in section 7 below)	
(b)	Exams	2 exams, 37.5% each	