

ELEMENTARY FORMAL LOGIC

PHIL203 (AO1)

Explores the fundamentals of good reasoning by means of symbolic techniques in both propositional and predicate logic. Students will learn to translate English sentences into logical notation, as well as how to use truth tables and derivations to demonstrate the validity of arguments.

PLACE/TIME	ECS 125, Monday, Wednesday, Thursday 2:30pm-3:20pm (<i>spring 2018</i>)
INSTRUCTOR	DR Mike Raven (✉ mike@mikeraven.net • 🌐 mikeraven.net)
ASSISTANTS	TBA
OFFICE HOURS	CLE B323 Monday 3:30-5:30pm, or by appointment.
WEBSITE	🌐 coursespaces.uvic.ca/course/view.php?id=33728
TEXT	<ul style="list-style-type: none">• BARKER-PLUMMER, BARWISE & ETCHEMENDY, <i>Language, Proof and Logic</i> (2nd ed) Available in physical or digital form (🌐 ggweb.gradgrinder.net/store). An unused registration ID is required and obtained by buying the text new. (Used copies likely won't have a usable ID, and therefore should be avoided.)

EVALUATION

GRADES	The grade you earn is determined by the quality of your work in this course. The university's scale is used: A+>90 A89-85 A-84-80 B+79-77 B76-73 B-72-70 C+69-65 C64-60 D59-50 F<50
WORK	<ul style="list-style-type: none">• Problem sets (50%): Best 10 of 12 weekly problem set (5% each). Most problem sets are submitted online to Submit. Consult website for further details.• Exams (50%):<ul style="list-style-type: none">Exam #1 (15%): FEB 8Exam #2 (15%): MAR 15Exam #3 (20%): TBA (APR during finals week)
ACCESSIBILITY	All accessibility accommodations should be arranged by CAL. Other requests for accommodations (e.g. extensions, extra credit, alternate or make-up assignments) will <i>not</i> be considered, except under extraordinary circumstances (instructor's discretion) and with apt documentation.
GRACE POINTS	Each student begins with 5 grace points . Each point can be used to delay a due date by 1 day. Points can be used in any combination at the students' discretion, <i>except for exams</i> . Inform the instructor in writing how many points are used upon submission (no justification needed). Points cannot be reused, traded, or earned.
LATENESS	Late work is penalized 5% per day late and is not entitled to feedback.

POLICIES

CONDUCT	Enrolling binds you to a social contract with your instructor and classmates: <ul style="list-style-type: none">• Be prepared. Read the syllabus. Do the reading before class. Attend class.• Be respectful. Don't bully or distract in or out of class.• Communicate professionally. Check sources first (don't expect replies to questions answered by the syllabus). Follow etiquette. Allow time for replies.
RECORDINGS	Recordings permitted only with instructor's prior consent. Do not distribute.
GUESTS	Guests are not permitted without instructor's prior consent.
INTEGRITY	Plagiarism and cheating are not tolerated. Ignorance is no excuse. Read: 🌐 web.uvic.ca/calendar2017-09/undergrad/info/regulations/academic-integrity.html

SCHEDULE

Tentative: see website for updates.

PROPOSITIONAL LOGIC

JAN3	• Introduction, 1.1-1.3
4	
8	• Validity and Soundness, 2.1, 2.5
10	
11	
15	• Boolean Connectives, 3.1-3.3, 3.5-3.7
17	
18	
22	• Truth Tables, 4.1-4.4
24	
25	
29	• Formal Proofs, 6.1-6.6
31	
FEB1	
5	• Conditionals, 7.1-7.2, 8.2, 8.4
7	
8	◆ Exam #1

QUANTIFIERS

FEB19	• Introduction to Quantifiers, 9.1-9.6
21	
22	
26	• Multiple Quantifiers, 11.1-11.4
28	
MAR1	
5	
7	• Numerical Quantifiers, 14.1
8	
12	• Identity, 2.1-2.4
14	
15	◆ Exam #2
19	• Formal Proofs with Quantifiers, 13.1-13.3
21	
22	
26	• Proving Numerical Claims, 13.5, 14.1-14.3
28	
29	
APR4	• Catch-up and Review
5	
TBA	◆ Exam #3

SURVEY

At the end of the term, please complete a *course experience survey* (CES) at ces.uvic.ca.