

ELEMENTARY FORMAL LOGIC

PHIL203 (A01)

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 116, Mon/Thu 1:00pm-2:20pm (<i>spring 2019</i>)
INSTRUCTOR	DR Mike Raven (✉ mike@mikeraven.net • 📧 mikeraven.net) OFFICE HOURS • CLE B323 Mon/Thu 11:30am–12:30pm, or appointment.
ASSISTANTS	Patrick Reilly (✉ patttemplereilly@gmail.com) Ryan Tonkin (✉ rtonkin@gmail.com) OFFICE HOURS • MAC D281 Fri 12:00pm–2:00pm.
WEBSITE	📄 coursespaces.uvic.ca/course/view.php?id=51690 The website’s content (including this syllabus) is “live” and will be updated. Consult the website for the most up to date, official course information.
TEXT	• BARKER-PLUMMER, BARWISE & ETCHEMENDY, <i>Language, Proof and Logic</i> (2 nd 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.) When registering, write your name as it appears on University records.
QUESTIONS	Email questions about the content of the course to: logic.uvic@gmail.com

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	↗ PROBLEM SETS (40%) : 11 problem sets; lowest 1 dropped (4% each). <ul style="list-style-type: none">• Most problem sets are submitted online to Submit:<ul style="list-style-type: none">– Problem sets are available throughout the term and may be submitted any time before their due dates.– Follow the problem set’s instructions to submit files.– When submitting to Submit, use logic.uvic@gmail.com.– Submitted files are graded automatically by the GradeGrinder software.☑ CHECKPOINTS (20%): 20 reading comprehension quizzes; lowest 3 dropped (1.2% each).<ul style="list-style-type: none">• Complete these online at CourseSpaces prior to the designated class.<ul style="list-style-type: none">– Submissions are unlocked after the previous class ends.– Submissions are locked 30 minutes before the designated class starts.◆ EXAMS (40%): 2 cumulative exams (weighted comparably).<ul style="list-style-type: none">– Exam 1 will be held in class Thursday February 14.– Exam 2 will be held in class Thursday April 4.– Read <i>Exam Study Guide</i> posted on CourseSpaces.
GRACE POINTS	A grace point can be used to delay a <i>problem set</i> ’s due date by 1 day. Each student begins with 5. Points can be used in any combination at the students’ discretion (no justification needed). But points cannot be reused, traded, or earned. <ul style="list-style-type: none">• To use, click Add Text Message in Submit when submitting your problem set and write in the text box ‘Using # grace points’ (replace # with the number of grace points). <i>This is the only way to use grace points.</i>
LATENESS	No work submitted after a due date will be accepted, except for appropriate accessibility reasons (see ACCESSIBILITY).

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. In class, don't bully or distract.• Be professional. Check sources first (don't expect replies to questions answered by the syllabus). Follow etiquette. Allow time for replies.
ACCESSIBILITY	Arrange accommodations with CAL. Other accommodation requests (e.g. extra credit, extensions, alternate/make-up work) will <i>not</i> be considered, except under extraordinary circumstances (instructor's discretion) and when both the request and suitable documentation are received no more than 3 days after the due date.
PRIVACY	Course documents are the instructor's intellectual property. Do not distribute. Recordings permitted only with instructor's prior consent. Do not distribute.
GUESTS	Guests permitted only with instructor's prior consent.
INTEGRITY	Plagiarism and cheating are not tolerated. Ignorance is no excuse. Read: web.uvic.ca/calendar2019-01/undergrad/info/regulations/academic-integrity.html Additionally, GradeGrinder checks all submissions for plagiarism. Read: ggweb.gradegrinder.net/gradegrinder/timestamps

SCHEDULE

Tentative: see website for updates.

PREDICATE LOGIC

JAN 7	• All course documents	
	• Introduction, 1.1-1.3	
10		
14	• Validity and Soundness, 2.1, 2.5	↗ DUE: Problem Set 1
17		
21	• Boolean Connectives, 3.1-3.3, 3.5-3.7	↗ DUE: Problem Set 2
24		
28	• Truth Tables, 4.1-4.4	↗ DUE: Problem Set 3
31		
FEB 4	• Formal Proofs: Boolean Connectives, 2.2-2.4, 6.1-6.6	↗ DUE: Problem Set 4
7		
11	• Conditionals, 7.1-7.2, 8.2, 8.4	↗ DUE: Problem Set 5
14	◆ Exam #1	

FIRST-ORDER LOGIC

25	• Introduction to Quantifiers, 9.1-9.6	↗ DUE: Problem Set 6
28		
MAR 4	• Multiple Quantifiers, 11.1-11.5	↗ DUE: Problem Set 7
7		
11	• Numerical Quantifiers, 14.1, 14.3	↗ DUE: Problem Set 8
14		
18	• Formal Proofs: Quantifiers, 13.1-13.3	↗ DUE: Problem Set 9
21		
25	• Formal Proofs: Numerical Quantifiers, 13.5, 14.1-14.3	↗ DUE: Problem Set 10
28		
APR 1	• Catch-up and Review	↗ DUE: Problem Set 11
4	◆ Exam #2	