COURSE SYLLABUS

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YEAR COURSE OFFERED: 2011
SEMESTER COURSE OFFERED: Fall
DEPARTMENT: Philosophy
COURSE NUMBER: 1321
NAME OF COURSE: Logic I
NAME OF INSTRUCTOR: Cameron Buckner

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The information contained in this class syllabus is subject to change without notice. Students are expected to be aware of any additional course policies presented by the instructor during the course.

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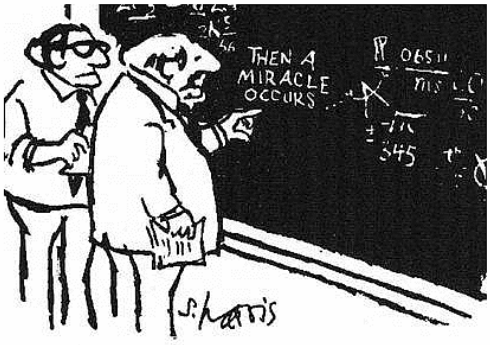
Time and Location: MoWe 1:00PM - 2:30PM, D3 E321
Office Hours: 2:30-3:30 Mo/We and by appointment, AH 654
Instructor E-mail: cjbuckner@uh.edu

TA: Peter Gates
Office Hours: Fr 2:00-5:00 PM Office: AH 508
E-mail: gates_peter@msn.com

Learning Objectives



'I think you should be more explicit here in step two."

Logic is the science of correct reasoning. Instead of assessing each argument on a case-by-case basis, logicians try to generalize about good and bad forms of reasoning. However, most arguments occur in everyday language in informal contexts, full of vagueness and ambiguity. For this reason, logicians have developed formal symbolic systems of reasoning which attempt to remove these forms of unclarity and render reasoning more precise.

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The primary goal of this course is to train you to use two of these formal symbolic systems, propositional logic and predicate logic. We will practice translating informal English sentences into symbolic notation and study formal techniques of reasoning to determine what conclusions logically follow from a set of premises, and whether given arguments are valid or invalid. Because our goal is to train you to use these formal systems of reasoning, we will spend a great deal of time practicing translations and proofs. While we will touch on a number of interesting philosophical issues in the course, our main goal is to teach you a particular skill—proficiency with symbolic logic—which takes quite a lot of practice with formalized notation and proof methods. As such, you may find this course more like a typical math course than a typical philosophy course.

Major Assignments/Exams

Homework	10%
Quizzes	60%
Final	30%

Homeworks: Typically, a homework will be due every week that there is not a quiz. Homeworks are due on the date listed, and must be ready to hand in to me at the beginning of class. (Note that answers to most homework problems can be checked using the software included with the textbook.)

Final exemption policy: If you have an average course grade of 93.5 or above and are happy with your grade going into the final, you can opt NOT to take the final exam. If you choose this exemption, your course grade would become your pre-final course average from quizzes and homework.

Required Reading

Introduction to Logic: Propositional Logic, Revised 3rd Edition by Howard Pospesel (2000)
Introduction to Logic: Predicate Logic, 2nd Edition by Howard Pospesel (2003)

Recommended Reading

No additional readings.

List of discussion/lecture topics

Week	Topic	Readings & Activities
Week 1 Aug 22	Arguments and sentences	Read: *Propositional Logic*, Ch1 Homework #1, Due Sep 7th: Ch. 1: Problems 1 2 Ch. 2: 1 2 3a, b, c 5 7 8 9 11

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Week 2 Aug 29	"if"	Read: Ch2
Week 3 Sept 5 *Labor day holiday Sept 5	"and"	Read: Ch3 Homework #2, due Sept 12**:** Ch. 3: 1a, b, c, f, g, j 2b, d 3b, d 6 7 8 9 12 13
Week 4 Sept 12	"if (again)"	Read: Ch4
Week 5 Sept 19	"not", "iff"	Ch5-6 **Quiz 1 Sept 19** Homework #3, Due Sept 26 Ch. 4: 1b, c, e, f, g, i, j, n 4a, b, c, d 6 9a 10 13 14 16 Ch. 5: 1a, b, c, e, f, g, j, m 3a, b, c 4 5 8 9 10 12 13
Week 6 Sept 26	"or"	Ch7 Homework #4, due Oct 3 Ch. 6: 1b, d, f, g 2b, c 5 7 9 10 11 13 15 Ch 7: 1a, b, e, f, j, l, n, p, r 3a, b 4 5 6 8 10 11 13
Week 7 Oct 3	Translation review	Ch8
Week 8 Oct 10	Derived rules	Ch9 **Oct 10: Quiz 2** Homework #5, due Oct 17th: Ch. 8: 2b 4 6 8 9 10 12 13 Ch. 9: 10b, d 11 12 14b, d 15 16 21b, c, i
Week 9 Oct 17	Truth tables	Ch10 Homework #6, due Oct 24: Truth Tables: Ch. 10: 1a 4 5 6 8
Week 10 Oct 24	Statements	Read: Ch12
Week 11 Oct 31*	Logical relations	Read: Ch13 **Oct 31: Quiz #3** Homework #7, due Nov 7 Ch. 12: 1 2 4 5 7 9 10 Ch. 13: 2 3 4b 6 7 9

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Week 12 Nov 7	Predicate Logic	*Predicate Logic* Ch1-2, Homework #8, due Nov 14: Predicate Logic Ch. 2: 1 2 3 4 6 (all parts)
Week 13 Nov 14	Quantifiers I	Read: Ch 3 Homework #9, due Nov 28 Predicate Logic Ch. 3: 1-6 8-13 do proofs Predicate Logic Ch. 4: 10-15 do proofs
Week 14 Nov 21	Quantifiers 2	Read: Ch4 **Nov 21: Quiz 4** *Thanksgiving Holiday Nov 23-26*
Week 15 Nov 28	Review	
Final Exam	**Monday, Dec 12 2-5:00 PM**	**All material**