

PHILOSOPHY 012:  
INTRODUCTION TO SYMBOLIC LOGIC  
UNIVERSITY OF CALIFORNIA, DAVIS – SUMMER I, 2013  
TWR 11:00 A.M. - 1:15 P.M., WELLMAN 229

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**Basic course information:**

INSTRUCTOR: Ted Shear  
CONTACT: ebshear@ucdavis.edu  
OFFICE: SSH 239  
OFFICE HOURS: Wednesdays 1:30 - 3:30 p.m.  
TEXTBOOK: Paul Teller – *A Modern Formal Logic Primer: Sentence Logic, Volume I*  
Available free online at: <http://tellerprimer.ucdavis.edu>  
Or on amazon for \$269.94: <http://amzn.com/0139031707>

**Topic and goal of the course:**

The focus of this course will be on the system of deductive logic known as first-order propositional logic (sometimes called sentential logic), which takes atomic propositions as the fundamental units of logical analysis. We will develop and explore the syntax and semantics of sentential logic, as well as a natural deduction proof theory.

There are a variety of reasons why one might be interested in understanding such a system. Here are several examples of such reasons: (1) first-order logics play a central role in the subfield of linguistics known as semantics, which investigates the meanings of natural language sentences; (2) mathematicians interested in providing independence results for ZFC rely on lattice theory, which uses lattices that are isomorphic to our system; (3) any more advanced work in logic requires a thorough understanding of the foundational concepts presented in this course; (4) first-order logic is one of the central tools used by contemporary analytic philosophers for the investigation of the logical relations that hold between concepts; finally and perhaps most relevant to you, (5) understanding systems of deductive logic can help us differentiate good reasoning from bad reasoning, and this, in turn, can serve as an important and useful tool in adjudicating the quality of arguments and the basis for our beliefs.

Our primary concern in this course will be understanding and exploring the notion of deductive validity provided by the system; but, our study will also extend to related topics, such as, the translation of English arguments into formal logic and various topics in the meta-theory of first-order sentential logic.

Not open for credit to students who have taken course 112, 113, 131, 134, or 135-I, IV.

**Grading criteria and procedures:**

The chart below outlines the breakdown and distribution of each graded item for the course:

Assignment	Weight	Date
Assignment 1:	10%	7/3/13
Assignment 2:	10%	7/10/13
Assignment 3:	10%	7/24/13
Assignment 4:	10%	7/31/13
Midterm Exam:	20%	7/17/13
Final Exam:	30%	8/1/13
Quizzes:	10%	—

Assignments, quizzes, and exams will be graded and returned within a week of submission.

While collaboration on Assignments 1-4 will be allowed, each student will be required to submit his/her own assignment separately.

No late assignments or make-up exams are permitted unless a medical note is provided or permission is granted by the instructor prior to the due date.

It is the responsibility of the student to keep-up with the lectures, and assignment/exam dates.

### Quizzes:

There will be a quiz in class each week with the exception of Week 4. I will *not* announce which day of the week the quiz will occur before it occurs.

You will be permitted to work in groups on the quizzes, if you would like; however, if you are working in a group, then each student will be expected to turn in their own work.

Additionally, if you are working in a group, then each student will be expected to participate—I reserve the right to remove people from groups if they are not actively participating.

### Schedule:

WEEK:	DAY:	ASSIGMENTS/EXAMS:	Readings/Quizzes
<b>Week 1</b>	6/25/13		Chapters 1 & 2 and Quiz 1
	6/26/13		
	6/27/13		
<b>Week 2</b>	7/2/13		Chapter 3 and Quiz 2
	7/3/13		
	7/4/13	NO CLASS	
<b>Week 3</b>	7/9/13	Homework 1	Chapter 4 and Quiz 3
	7/10/13		
	7/11/13		
<b>Week 4</b>	7/16/13	Homework 2	Chapters 5 & 6
	7/17/13	Midterm Exam	
	7/18/13		

WEEK:	DAY:	ASSIGNMENTS/EXAMS:	Readings/Quizzes
<b>Week 5</b>	7/23/13		Chapter 7 and Quiz 4
	7/24/13		
	7/25/13	Homework 3	
<b>Week 6</b>	7/30/13		Chapters 8 & 9 and Quiz 5
	7/31/13	Homework 4	
	8/1/13	Final Exam	

### **Academic honesty:**

Suspected cases of any sort of academic dishonesty are, without question, reported to Student Judicial Affairs (SJA). See the following website for more information on the university's policy and procedure regarding academic honesty:

<http://sja.ucdavis.edu/>

If you are unsure about whether a particular practice counts as academic dishonesty, refer to the SJA's policy and procedure first. Contact me if you are still unsure.

Collaboration on work during the course is permitted only when explicitly stated.

### **Rules for examinations:**

The use of notes, any outside sources, or collaboration with other students will not be permitted for any examinations.

Any student found in violation of these rules will receive a zero on the examination and their case will be forwarded to SJA.

### **Students with disabilities:**

If you have a disability and require accommodations, please contact the Student Disability Center (SDC). Their contact information can be found here:

<http://sdc.ucdavis.edu/contact.html>

Appropriate accommodations will be provided once the SDC determines what they are.

### **Extensions:**

Extensions will be granted at the discretion of the instructor. Should you need to request an extension, please do so with ample time prior to the deadline.