COURSE	PHILOSOPHY 180: INTRODUCTORY LOGIC
INSTRUCTOR	J. Dmitri Gallow ✉: jdmitrig@umich.edu
MEETING TIMES	Tuesdays and Thursdays, 16:00–18:00 1401 Mason Hall
OFFICE HOURS	Monday and Tuesday, 11:00–12:00 1156 Angell Hall

DESCRIPTION   People often attempt to persuade one another by putting forward arguments. That is, they attempt to persuade one another by providing reasons (or *premises*) to believe that some conclusion is true. For this reason, figuring out what to believe about a wide variety of subjects requires you to be able to evaluate these arguments, to figure out which are good and which are bad. In this course, we will study some theories about which arguments are good and which are bad. In particular, we will study two theories of which arguments are such that the premises provide conclusive reason to believe their conclusion and a theory of which arguments are such that their premises provide strong, though not conclusive, reason to believe their conclusion. We will also learn to recognize and diagnose some common informal fallacies and to reason with Venn diagrams. The successful student will leave the course

1. with a solid understanding of the basic concepts of logic
2. with the ability to recognize and diagnose various informal fallacies
3. with the ability to reason with Venn diagrams
4. with the ability to successfully translate sentences into, and out of, both propositional and predicate logic
5. with the ability to construct both propositional and predicate logic derivations
6. with a familiarity with some of the fundamentals of probability theory

TEXT   Unfortunately, you are going to have to either purchase Patrick J. Hurley's inaptly named 700-page tome *A Concise Introduction to Logic* (12th edition), or (better) purchase online access to the book and the online *aplia* software (instructions are included at the end of the syllabus). Without this software, you will not be able to submit your problem sets.

EVAULATION   Your final grade in this course will be determined by 4 components:

Problem Sets	30%
In-class Exercises	10%
Midterm	30%
Final	30%

PROBLEM SETS: Each Tuesday, a problem set on the material from the previous week will be due at the start of class (except just before the midterm and final, when the problem set will be due on Friday). Many of these will be submitted online, through *aplia*. You are allowed, and even encouraged, to work through these problems with other students in the course. However, be sure to not fall into the trap of simply copying the answers of your fellow students.

The problems sets are *for your benefit*, to help you learn the material. If you simply copy the homework of your fellow students, you'll be in a bad position for the in class exercises, midterm, and final, which make up a much larger percentage of your final grade.

IN-CLASS EXERCISES: Occasionally, you will be given exercises to complete in class on the material we are covering. If you don't attend, of course, you will not be able to complete these assignments.

MIDTERM: There will be an in-class midterm on Tuesday, 6/3. The midterm will cover all the material covered up to that point, including propositional logic derivations. I will provide a practice midterm at least a week ahead of time.

FINAL: There will be a final on 6/23, from 8:00–10:00, in 1401 Mason Hall. The final will be cumulative, covering everything in the course. I will provide a practice final at least a week ahead of time.

SCHEDULE
5/6: Basic Concepts, day 1

Hurley, 1.1–1.4

5/8: Basic Concepts, day 2

Hurley, 1.5–1.6

5/13: Informal fallacies, day 1

Howard-Snyder *et. al.*, 4.1
1st problem set due

5/15: Informal fallacies, day 2

Howard-Snyder *et. al.*, 4.2–4.3

5/20: Propositional Logic, day 1

Hurley, 6.1–6.3
2nd problem set due

5/22: Propositional Logic, day 2

Hurley, 6.4 *&* 6.6

5/27: Propositional Logic Derivations, day 1

Hurley, 7.1–7.4
3rd problem set due

5/29: Propositional Logic Derivations, day 2

Hurley, 7.5–7.7

5/30: **4th problem set due**

6/3: **midterm**

6/5: Paradoxes and Predicate Logic

Hurley, 8.1–8.3

6/10: Predicate Logic, day 2

Hurley, 8.4–8.7
5th problem set due

6/12: Predicate Logic, day 3

6/17: Probability, day 1

Hurley, 11.1–11.3
6th problem set due

6/19: Probability, day 2

6/20: **7th problem set due**

6/23: **final**

ACADEMIC
INTEGRITY

Cheating and Plagiarism will not be tolerated. If you are found cheating on any assignment, you will automatically receive a failing grade for the course.

How to access your Aplia course

Instructor: J. Dmitri Gallow
Start Date: 05/06/2014
Course Key: W54T-4WTN-NQ7J

Registration

Aplia is part of CengageBrain, which allows you to sign in to a single site to access your Cengage materials and courses.

1. Connect to http://login.cengagebrain.com/
2. **If you already have an account, sign in.** From your Dashboard, enter your course key (**W54T-4WTN-NQ7J**) in the box provided, and click the *Register* button.
   If you don't have an account, click the *Create a New Account* button, and enter your course key when prompted: **W54T-4WTN-NQ7J**. Continue to follow the on-screen instructions.

Payment

Online: After registering, you can buy access to Aplia from myhome.cengagebrain.com.

Bookstore: Purchase access to Aplia from your bookstore. Check with the bookstore to find out what they offer for your course.

If you choose to pay later, you can use Aplia without paying until 11:59 PM on 05/26/2014. After paying, you will have the option to purchase a physical book at a discounted price.

For more information on registering for Aplia, please visit http://www.cengagebrain.com/aplia/.