

# PHIL 2250: Deductive Logic

<b>Term:</b> Fall 2016		<b>Instructor:</b> Jonathan Vajda
<b>CRN:</b> 43148 <b>Meets:</b> Tu/Thur, 9:30am-10:45am	<b>CRN:</b> 44410 <b>Meets:</b> Tu/Thur, 11:00am-12:15pm	<b>E-mail:</b> jonathan.m.vajda@wmich.edu <b>Office:</b> 3020 Moore <b>Office Hours:</b> Thursdays, 2:00-4:00pm & by appt.
<b>Room:</b> 3201 Dunbar Hall		<b>Email is the best way to contact me!</b>

## Course Description

From the course catalog: "A study of the rules and techniques of deductive reasoning, including truth tables and the propositional calculus. Applications to verbal reasoning and translation from ordinary language into the propositional calculus are emphasized."

This course satisfies "Proficiency 4c: Critical Thinking"

## Course Learning Outcomes

- 1) Students will learn methods of identifying and evaluating deductive arguments
- 2) Students will learn how to represent arguments formally, and apply a system of deriving conclusions ("Natural Deduction")

## Course Materials

You will need one book for this course:

- 1) *A Concise Introduction to Logic, 12<sup>th</sup> Ed.* by Patrick J. Hurley (ISBN 978-1-285-19654-1)
  - a. This text is available at the WMU bookstore
  - b. You can also buy or rent the full text or individual chapters (physically or eText) directly from the publisher (eText for the full semester is under \$40)
    - i. <https://shar.es/1wlIOB>
  - c. The text is also on Course Reserve in the Waldo Library; checkouts are due within a few hours, so that other students may use it too. This is easily the most cost-effective strategy. (that is, FREE!!)
  - d. I have no problem with you using an earlier edition. However, if you plan to use an earlier edition:
    - i. **You** (the student) are fully responsible for making sure the assigned pages, sections, and work are completed according to the 12<sup>th</sup> edition.
    - ii. **You** are responsible for checking with the course reserve or another student who has the 12<sup>th</sup> edition, to make sure the assigned work is available in your text.
    - iii. Do **not** ask the instructor about whether a text corresponds.
- 2) Other materials may be provided on eLearning website as needed  
<http://elearning.wmich.edu/>

## Grading Guidelines

I'll assign final grades with the following interpretations:

100-90	A	4.0	74-70	C	2.0
89-85	BA	3.5	69-65	DC	1.5
84-80	B	3.0	64-60	D	1.0
79-75	CB	2.5	59-0	E	0.0

## Assignments

Your final grade will be based on the following assignments:

Class participation	10%
Homework assignments	30%
Exams – two (2) exams, each worth 30%	60%

Class Participation (10% of final grade). Merely recording attendance only shows that you were in Dunbar 3201 at a certain time on a certain day: it is a poor measure of your class participation. Therefore, show up to class having completed the assigned work (reading, homework, etc.), and be engaged, take notes, and ask relevant questions. I won't record attendance every day, but I will take notes of your participation, so make sure you're interacting each week to ensure full credit. There are a couple days off, so pay attention to the **Course Schedule**.

Homework (30% of final grade). There will be *about* ten (10) homework assignments throughout the semester. The instructions/format will vary.

Exams (60% of final grade). There will be two (2) exams throughout the semester. The format is yet to be determined, but will be a combination of multiple choice, short answer, and other measures. While material builds upon the concepts and tools learned earlier in the semester, the final exam is *not cumulative*. Feel free to celebrate.

Extra Credit. I reserve the right to offer extra credit throughout the semester. (*Pssst! I have a tendency to do so, perhaps to a fault*) If I do, I will announce it in class and on eLearning, and *probably not* via email.

## Late, Absences, and Emergencies

Work Deadlines. Any work assigned on the course schedule must be submitted to me in hard-copy on the day it is listed, at the beginning of class (before lecture starts) in order for it to be considered "on time." I will only accept electronic copies as "on time" if prior arrangements have been made (see Emergencies section). There's a **Dropbox** folder for you to submit work online – use this if you can't provide a hard copy on time (i.e., at the beginning of class), rather than emailing it to me.

Late submissions. Work handed in same-day but not before class starts may be accepted with penalty of 10%. In such cases, submit via the **Dropbox** on eLearning. Outside of this window work will not be accepted.

Absent from class. Absences from classes will negatively affect your learning as well as your participation grade.

Emergencies. If there is some (real) emergency that prevents you from attending class or completing assigned work, let me know via email as soon as possible – the more notice I have, the better. However, notices after the deadline will *not* be honored. E.g., if you miss class due to health, I expect an email before the end of class period. For accommodating exams, I need verification (a doctor's note, an obit, etc.). We'll sort out a reasonable accommodation, but most important is that you communicate ASAP.

## **Professionalism in the Classroom**

Expectations. You are expected to behave in a respectful and professional manner at all times in the classroom. This includes attendance, punctuality, preparedness, attentiveness, participation, and courtesy to your classmates. Treat your time in class like you would a business meeting – prepared ahead of time, attentive, and ready to ask questions so you can complete action items.

Electronic devices. No phones or music players may be used in class. They must be off or set to silent. I highly encourage you to bring your textbook, a pencil, and paper (notebook) to write notes. While you are permitted to use a laptop, for most people it hinders their ability to focus on course content. Furthermore, there will be some diagrams, symbols, and other presentation styles that will be more efficiently taken down manually rather than trying to type in a Word processor. If your use of electronic devices conflicts with the goals of this course, I may penalize you on your attendance or ask you to leave the room.

## **Academic Dishonesty**

You are responsible for making yourself aware of and understanding the policies and procedures in the Undergraduate and Graduate Catalogs that pertain to Academic Honesty. These policies include cheating, fabrication, falsification and forgery, multiple submission, plagiarism, complicity and computer misuse. [The policies can be found at <http://catalog.wmich.edu> under Academic Policies, Student Rights and Responsibilities.] If there is reason to believe you have been involved in academic dishonesty, you will be referred to the Office of Student Conduct. You will be given the opportunity to review the charge(s). If you believe you are not responsible, you will have the opportunity for a hearing. You should consult with your instructor if you are uncertain about an issue of academic honesty prior to the submission of an assignment or test.

## **Students With Disabilities**

Any student with a documented disability (e.g., physical, learning, psychiatric, vision, hearing, etc.) who needs to arrange reasonable accommodations must contact the Disabilities Services for Students center at the beginning of the semester; contact information is here: <http://www.wmich.edu/disabilityservices/index.html>. A disability determination must be made by this office before accommodations are provided by the instructor.

## Religious Observances

The following constitutes university policy with respect to religious observances and course obligations.

*The University is a diverse, multicultural enterprise and, as a community, we jointly embrace both individual responsibility and dignified respect for our differences. It is our general policy to permit students to fulfill obligations set aside by their faith.*

*It is our intent that students who must be absent from scheduled classes to fulfill religious obligations or observe practices associated with their faith not be disadvantaged. However, it is the student's responsibility to make arrangements with his/her instructors in advance. It is in the student's best interests to approach each instructor expeditiously and with sufficient notice that the rights and responsibilities of the instructor are not disrupted. Instructors should make it known to classes early in the term what they consider reasonable notice for anticipated absences. Without specifying a fixed notification time, we acknowledge in this policy joint responsibility: instructors will inform students of their requirements and students will make every effort to cause no disruption in the instructors' plans and duties.*

*Instructors should assume that a claim of religious observance has veracity, especially when advance notice is provided by the student. Students likewise must recognize that it is their responsibility to meet all their course obligations. Instructors are not obligated to provide materials to students unless these materials would have normally been distributed to the entire class. For example, if an instructor does not normally post notes, a student cannot expect notes to be provided for lectures missed.*

## Basic overview/outline of course content

If you're using an electronic edition of the text, you will need to get these chapters.

Basic concepts: Arguments and some ways to evaluate them	Hurley, Ch 1
Formal Logic: Important components, Square of Opposition, Venn Diagrams	Hurley, Ch 4
Propositional Logic: Symbolic translations, truth tables, argument forms and fallacies	Hurley, Ch 6
Natural Deduction: Inference rules	Hurley, Ch 7
Predicate Logic: Qualification, identity, and another method	Hurley, Ch 8

(A schedule will be made available to you separately, but this is the gist and order)