PHIL 2250: Deductive Logic

Spring 2017

CRN: 12529 CRN: 12530 Instructor: Jonathan Vajda

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9:30am-10:45am | 11:00am-12:15pm | **Office**: 3020 Moore

Sangren Hall

Room: G0111 **Room**: 2120 **Office Hours**: Mondays, 9:30-11:30am & by appt.

Email is the best way to contact me!

Course Description

Moore Hall

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

- 1) *A Concise Introduction to Logic, 12th Ed.* by Patrick J. Hurley (ISBN 978-1-285-19654-1)
 - a. This text is available at the WMU bookstore. It's not cheap.
 - 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. Many students find this an effective and cost-effective strategy. (it is, after all, <u>FREE</u>!!)
 - d. You may use an earlier edition (i.e., 10th-11th eds.). However, if you choose to:
 - i. <u>Do not</u> ask the instructor whether the text corresponds with the 12th edition at any point. If you cannot check with a fellow student, then check the course reserve at the library. You are fully responsible for making sure the assigned pages, sections, and work are completed according to the 12th edition.
- 2) Cellulose pulp, pressed and bound (e.g., college-ruled notebook) and a modern scribal apparatus (e.g., pencil) for taking notes during class.
- 3) Other educational literature will be provided on eLearning website as needed: http://elearning.wmich.edu/

Grading Guidelines

I'll assign final grades with the following interpretations:

100-93	Α	4.0	77-73	С	2.0
92-88	BA	3.5	72-68	DC	1.5
87-83	В	3.0	67-60	D	1.0
82-78	CB	2.5	59-0	E	0.0

Honest warning about course difficulty

This course is notoriously difficult for students. There will be concepts that are just hard to wrap our minds around. It is not that I assign too much reading or too many problems: it is just that the subject matter is hard. If you are not serious student, willing to do several hours of work each week outside of class in order to grasp challenging material, then I encourage you to drop the class. But if you are willing to work, I warmly welcome you to the wonderful world of deductive reasoning.

Assignments

Your final grade will be based on the following assessments:

•	Exams	60%
•	Homework assignments	30%
•	Class participation	10%

Exams (60% of final grade).

There will be two (2) exams throughout the semester. The format will likely include 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.

Homework (30% of final grade).

There will be eleven (11) homework assignments throughout the semester. The instructions/format will vary. The lowest will be dropped (I will count the best 10).

- <u>Hard-copy</u>. Homework is to be submitted in hard-copy at the beginning of class (i.e., before lecture starts) on the date it is due (see **Course Schedule**) in order for the work to be considered "on-time."
- <u>Electronic submissions</u>. Use the **Dropbox** folder on eLearning. Since this is not a hard-copy, even if it is submitted before class, it will not be treated as "on time" and may incur penalty. Thus, only use this if you are unable to provide a hard copy on time. *Never email me your homework unless I indicate otherwise.*

Class Participation (10% of final grade).

Show up to class every day having completed the assigned reading and homework (see the **Course Schedule** for dates and assignments). Be actively engaged: take notes and ask relevant questions. I will note your participation, so make sure you're attending every day and interacting each week in order to ensure full credit. (See **Professionalism Expectations**)

Late Work, Class Absences, and Emergencies

Late submissions.

"On time"

No penalty!

1 minute - 24 hours late (1 day)

10% penalty

24 hours - 48 hours late (2 day)

More than 48 hours late (more than 2 day)

100% penalty

Absent from class.

Absences negatively affect your progress and your participation grade. Apart from excuse, if you are 10 minutes late for class, you will be marked absent for that day.

Emergencies.

If there is an emergency preventing you from attending class or completing assigned work, communicate immediately. Notices *after* class will *not* be honored. E.g., if you miss class due to health, I expect an email before the end of the class period. To accommodate exams, I need verification (doctor's note, obit, etc.).

Professionalism in the Classroom

Expectations of Professionalism.

You are expected to behave in a respectful and professional manner in the classroom. Treat your time in class like you would a business meeting: review content beforehand, be attentive and ask questions. Look for every meeting as a way to make progress: Jot down action items to complete before the next meeting.

Electronic devices.

Phones must be put away and silent (not low volume or vibrate) or off. Use of laptops or tablets is permitted only for note taking and class activities. Breach of either will negatively impact their participation grade.

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

Basic concepts: Arguments and some ways to evaluate them	Hurley, Ch 1	
Categorical Propositions and Venn Diagrams	(supplement)	
Propositional Logic: Symbolic translations, truth tables, argument	Hurley, Ch 6	
forms and fallacies		
Natural Deduction: Inference rules	Hurley, Ch 7	
Predicate Logic: Qualification, identity, and another method	Hurley, Ch 8	