PHI2100 - Logic

John Madock, MA
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M-F Period 4 (12:30-13:45)
Matherly 0117

Office Hours T, TR 14:00-15:30 Griffin Floyd Hall 316

Learning Objectives:

This course aims to provide students with the instruction and resources necessary to develop skills in logical reasoning and critical thinking. Through the course readings and in-class instruction students will become familiar with the syntax of classical propositional logic, truth tables, derivation systems in propositional logic, and deductive and non-deductive argument forms. This course fulfills the general education requirement for mathematics (https://undergrad.aa.ufl.edu/general-education/gen-ed-program/subject-area-objectives/).

These learning objectives will be assessed by graded homework assignments and two exams.

Assessment:

Homework assignments: 40%

Midterm Exam: 25% Final Exam: 25%

Class attendance/participation: 10%

Textbook:

The Logic Book, 6th Edition. Merrie Bergmann, James Moor, and Jack Nelson. ISBN: 9780078038419.

Available in the UF bookstore. This textbook can be purchased as an eBook through UF All Access at a more affordable price. Any other readings will be made available on canvas in the course files section.

Grading Scale:

The following grade scale will be used to assign final letter grades for the course. See UF grading policies for assigning grade points at:

https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

A minimum grade of C is required for general education credit.

Grade Scale	Grade Value
100-93=A	4.0
92-90=A-	3.67
89-86=B+	3.33

85-82=B	3.00
81-79=B-	2.67
78-76=C+	2.33
75-72=C	2.00
71-69=C-	1.67
68-66=D+	1.33
65-62=D	1.00
61-60=D-	0.67
59-0=E	0.00

Academic Honesty:

UF students are bound by The Honor Pledge, which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code (http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class. Plagiarism on any assignment will automatically result in a grade of "E" for the course. Plagiarism is defined in the University of Florida's Student Honor Code as follows: "A student shall not represent as the student's own work all or any portion of the work of another. Plagiarism includes (but is not limited to): a. Quoting oral or written materials, whether published or unpublished, without proper attribution. b. Submitting a document or assignment which in whole or in part is identical or substantially identical to a document or assignment not authored by the student." Students found guilty of academic misconduct will be prosecuted in accordance with the procedures specified in the UF honesty policy.

Attendance:

Students are expected to attend class and to have done all assigned reading in advance. Failure to do so will adversely affect students' ability to perform well in this course. Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at:

https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx.

Canvas:

This course is supplemented by online content in the e- Learning environment known as "Canvas." To login to the e-Learning site for this course, go to https://lss.at.ufl.edu/, click the e-Learning in Canvas button, and on the next page enter your Gatorlink username and password. You can then access the course e-Learning environment by selecting PHI2100 from the Courses pull-down menu at the top of the page. If you encounter any difficulties logging in or accessing

any of the course content, contact the UF Computing Help Desk at (352) 392-4537. Do not contact the course instructor regarding computer issues.

Online Course Evaluation:

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.aa.ufl.edu/students/. Students will be notified when the evaluation period opens and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/.

Accommodations for Students with Disabilities:

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565 or using the link below) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

Get Started with the DRC - Disability (ufl.edu)

Counseling and Wellness Center: http://www.counseling.ufl.edu/cwc/Default.aspx, 392-1575. **University Police Department**: 392-1111 or 9-1-1 for emergencies.

U Matter, We Care: If you or someone you know is in distress, please contact umatter@ufl.edu, 352-392-1575, or visit U Matter, We Care website to refer or report a concern and a team member will reach out to the student in distress.

Schedule (Subject to change):

Week 1:

May 15 – Introduction

May 16 – 1.1 Arguments, validity, soundness

May 17 – 1.2 Core concepts of deductive logic

May 18 – 1.3 Special cases, 2.1 Syntax

May 19 – 2.2 Syntax

Week 2:

May 22 – 2.3 Syntax and Symbolization

May 23 – 2.3 Continued

May 24 – 3.1 Truth value assignments and tables

May 25 – 3.2 Functional truth, Falsity, Indeterminacy

May 26 - 3.3 - 3.4 Truth functional entailment and validity

Week 3:

May 29 – Holiday (No Class)

May 30 – 5 Derivations in sentential logic

May 31 - 5 Cont'd

June 1 – 5 Cont'd

June 2 – 5 Cont'd

Week 4:

June 5 – Review Session

June 6 – Mid-Term Exam

June 7 – 7.1-7.2 Predicate logic and quantifiers

June 8 – 7.2 Cont'd

June 9 –7.3 Predicate symbolization

Week 5:

June 12 – Inductive Arguments

June 13 – Inductive Arguments

June 14 – Arguments by analogy

June 15 – Abductive arguments

June 16 – Logically analyzing arguments

Week 6:

June 19 – Informal fallacies

June 20 – Informal fallacies

June 21 – Review Session

June 22 – Final Exam