PHL 391.80: ST - Applied Logic

Soazig Le Bihan  
*University of Montana - Missoula*, soazig.lebihan@umontana.edu

Follow this and additional works at: [https://scholarworks.umt.edu/syllabi](https://scholarworks.umt.edu/syllabi)

Let us know how access to this document benefits you.

**Recommended Citation**

[https://scholarworks.umt.edu/syllabi/10352](https://scholarworks.umt.edu/syllabi/10352)

This Syllabus is brought to you for free and open access by the Course Syllabi at ScholarWorks at University of Montana. It has been accepted for inclusion in Syllabi by an authorized administrator of ScholarWorks at University of Montana. For more information, please contact scholarworks@mso.umt.edu.
PHL 391: Applied Logic

Course Information

- Instructor: Soazig Le Bihan
- Contact: (406) 243 6233, soazig.lebihan@umontana.edu, Mailbox in LA 152. I try to always respond to email messages within one business day (24-32h). Students are expected to check their university email daily.
- Office hours: MWF, 1:30-4, in LA 153 – I recommend that you sign-up for an appointment as my office hours are full a week in advance. There will be sign-up sheets on my office door. Please feel free to contact me if you need to arrange an appointment outside of office hours.
- Course website on Moodle

Course Description

Analytical thinking skills involve the ability to assess reasons, arguments, and evidence provided in support of a claim. These skills are of practical value to anyone, and they will be taught here independent of subject matter. The course focuses on basic elements of both deductive and inductive logic. Students will develop their analytical thinking skills in logically assessing various forms of reasoning in various contexts: logic games, short arguments, and more developed reading excerpts.

Most of the course will be relying on LSAT material, so that the course can be seen as an excellent preparation for test-takers. We will survey the various components of the LSAT, which all are concerned with applied logic. My goal is not to teach you any “trick” to “nail” the LSAT, but to train you so that you develop the skills that are needed in order to do well on the LSAT.

Course Material


Course Requirements

The final grade will be based on:

- Attendance and Participation 10%
- Homework 20%
- Pre-Test, Mid- Test, and Final Test: 10% each, total of 30%
- Exam 1, 2: 10% each, total of 20%
- Final Exam: 20%
**Attendance 10%**

Attendance is required, and necessary to succeed in the course. There will be a lot of material covered, and the material covered will be difficult.

You are allowed to miss two classes without penalty.

You are expected to arrive on time and stay for the duration of the class. Three late arrivals count as one absence. If you have to leave early, please tell me at the beginning of class and sit close to the exit to minimize the disturbance to the class.

You are expected to give your full attention to the class. Cell phones or other means of communication should be silenced for the duration of class. You will be asked to leave if you are doing anything not relevant for class, e.g. reading the newspaper, sleeping, doing work for other classes, etc. Three offenses of this type will count as one absence.

That said, absences may be excused in cases of illness or other extreme circumstances. Relevant documentation may be required in such cases.

You also will be expected to work through the material covered during any classes you missed.

Participation in class will not be graded, but consistent and active participation to the class will increase your final grade by half a letter grade.

**Homework – 20%**

Given that the answers to the homework questions are in the book, it would be pointless to grade your work. Instead, you are responsible for your own evaluation on your homework. I will ask you to evaluate your work on a scale from 0 to 2. You should put ‘2’ down if you have done the entire assignment and done it in a focused manner and in such a way that you got the most out of the opportunity. A ‘1’ is appropriate if you did it all but quickly and with little concern about learning anything, or when you only did a few of the problems. A ‘0’ is appropriate for those days when you did not have an opportunity to look at the work at all.

It is often said that, “Cheaters only hurt themselves”. This has never been truer than it is in this course. My aim is to provide you with a regimen of work that will help you to develop skills that you claim to want. You should not waste this opportunity. I will be relying on your INTEGRITY, HONESTY, and COMMITMENT to assure me that you are doing the assigned work.

(Both the idea of self-evaluation and the grading scale, as well as the note about integrity, are borrowed from Dr. Nim Batchelor Elon University Dept. of Philosophy, “The Making of an LSAT Course”)

**Pre-Test, Mid-Test, and Final Test – 10% each, for a total of 30%**

The Pre-test (diagnostic test), Mid-Test, and Final Test are full LSAT Tests. You will receive 100% just for showing up and doing the test in earnest. Your grade will *not* depend on how well you did on the test.
Mid-Term Exams (10% each), and Final Exam (20%)

Contrary to the tests, the Mid-Term and the Final Exam will be graded depending on your performance. The exams will focus on skills that we have learned in class. They will closed-book exams.

Course policies

Responsibilities

My role as an instructor is to provide you an opportunity to learn and master the material. I will do my best to explain things clearly and let you know what is expected of you. I want you to succeed in this course and I am available to help you.

You role as a student is to be proactive and to advocate for yourself. If you do not understand something or are confused, please let me know. It is your responsibility to voice your questions and concerns. We will work together to help you master the material. Be sure to advocate for yourself. In my experience, students who put in effort, attend class regularly, turn in assignments, and ask questions when they are confused can succeed in my classes.

“Show up, Pay attention, Ask for help” (Anonymous on www.ratemyprofessor.com)

Drop Policy

I adhere to the UM policy on dropping courses. Between the first and 45th instructional day, it is entirely your decision whether to drop the course or not. If you want to drop course between the 46th instructional day and the last instructional day prior to finals week, and you want me to recommend the drop, you will have to provide reasons that you should be allowed to drop the course. Acceptable reasons demonstrate that some (post 45th instructional day) circumstance out of your control interferes with your ability to complete the course. Simply not having done the work required of you, or belief that you do not think that you can get the grade you want, or that you need such and such grade to maintain your financial aid, are not sufficient reasons for me to recommend dropping the course after the 45th instructional day, though they might be prior to the 45th day.

The 45th day of instruction is on March 15th this semester.

Academic Misconduct

You are strictly held to the University of Montana Student Conduct Code http://life.umt.edu/vpsa/documents/StudentConductCode1.pdf.

Unless collaborative work is specifically called for, work on assignments and exams is expected to be your own. If you plagiarize, your assignment will receive a zero. You may fail the class altogether depending on the circumstances. Also, I will report the case to the Dean. I will be glad to answer questions you may have about how to document sources properly. Anytime you take a phrase or sentence from someone, you have to quote it. Anytime you take an idea from someone, you have to cite your sources.
University Resources

Writing Center

Students from all levels can take advantage of the writing center (LA 144: drop in or by appointment). The tutors will not write your assignment for you, but they will teach you how to write better. For more information, go the website: http://www.umt.edu/writingcenter/welcome_about.htm

Students with Disabilities

If you are a student with a disability and wish to discuss reasonable accommodations for this course, it is your responsibility to contact me and discuss the specific modifications you wish to request. Please be advised I may request that you provide a letter from Disability Services for Students verifying your right to reasonable modifications. If you have not yet contacted Disability Services, located in Lommasson Center 154, please do so in order to verify your disability and to coordinate your reasonable modifications. For more information, visit the Disability Services website.

Tentative Schedule

Overview

<table>
<thead>
<tr>
<th>Week #</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1 (1/11)</td>
<td>Syllabus, Introduction, Pre-Test</td>
</tr>
<tr>
<td>Week 2 (1/14)</td>
<td>Logic Games I</td>
</tr>
<tr>
<td>Week 3 (1/21)</td>
<td>Logic Games II</td>
</tr>
<tr>
<td>Week 4 (1/28)</td>
<td>Logic Games III</td>
</tr>
<tr>
<td>Week 5 (2/4)</td>
<td>Logic Games IV</td>
</tr>
<tr>
<td>Week 6 (2/11)</td>
<td>Logic Games V – EXAM I</td>
</tr>
<tr>
<td>Week 7 (2/18)</td>
<td>NO CLASS – Mid-Test</td>
</tr>
<tr>
<td>Week 8 (2/25)</td>
<td>Logical Reasoning I</td>
</tr>
<tr>
<td>Week 9 (3/4)</td>
<td>Logical Reasoning II</td>
</tr>
<tr>
<td>Week 10 (3/11)</td>
<td>Logical Reasoning III</td>
</tr>
<tr>
<td>Week 11 (3/18)</td>
<td>Logical Reasoning IV</td>
</tr>
<tr>
<td>Week 12 (3/25)</td>
<td>SPRING BREAK</td>
</tr>
<tr>
<td>Week 13 (4/1)</td>
<td>EXAM 2 – Reading Comprehension I</td>
</tr>
<tr>
<td>Week 14 (4/8)</td>
<td>Reading Comprehension II</td>
</tr>
<tr>
<td>Week 15 (4/15)</td>
<td>Reading Comprehension III</td>
</tr>
<tr>
<td>Week 16 (4/22)</td>
<td>Writing Sample – Final Test</td>
</tr>
<tr>
<td>FINALS WEEK</td>
<td>Final Exam: Thursday, May 2nd, 10:10-12:10</td>
</tr>
</tbody>
</table>
Week 1: Introduction, Syllabus, LSAT Sampler, LSAT Prep by Jacob Petrie

Week 2: Logic Games I
Section 2.2: Wednesday 1/16: Kolby, Linear Ordering. Drills and Exercises.
Section 2.3: Friday 1/18: Kolby, Hybrid Games. Drills and Exercises.

Week 3: Logic Games II
Section 3.1: Monday 1/21: Kolby, Sequential Games. Drills and Exercises.
Section 3.2: Wednesday 1/23: Kolby, Circular Games. Drills and Exercises.
Section 3.3: Friday 1/25: Kolby, Formulas / Paths / Flow Chart. Drills and Exercises

Week 4: Logic Games III
No Class Monday, 1/28:
Section 4.1: Wednesday, 1/30: Kolby, Grouping Games. Drills and Exercises.
Section 4.2: Friday, 2/1: Kolby, Assignment Games. Drills and Exercises.

Week 5: Logic Games IV
Section 5.1: Monday, 2/4: Pure Sequencing:
Foundational Game, PrepTest 38, Section 2, Game 1
Drills – Choose three: PrepTest 52, Section 2, Game 1 - p. 16; PrepTest 54, Section 3, Game 3 - p. 98;
PrepTest 55, Section 4, Game 3 - p. 142; PrepTest 52, Section 2, Game 4 - p. 19; PrepTest 53, Section 2,
Game 2 - p. 53; PrepTest 61, Section 3, Game 2 - p. 349; PrepTest 60, Section 2, Game 2 - p. 305

Section 5.2: Wednesday 2/6: Basic Linear:
Foundational Game, PrepTest 30, Section 1, Game 4, p. 53
Drills – Choose three: PrepTest 57, Section 1, Game 1 - p. 188; PrepTest 56, Section 1, Game 1 - p. 152;
PrepTest 58, Section 3, Game 1 - p. 240; PrepTest 57, Section 1, Game 2 - p. 189; PrepTest 59, Section 1,
Game 2 - p. 261; PrepTest 59, Section 1, Game 4 - p. 263; PrepTest 60, Section 2, Game 3 - p. 306;
PrepTest 61, Section 3, Game 4 - p. 351; PrepTest 55, Section 4, Game 2 - p. 141; PrepTest 54, Section 3,
Game 4 - p. 99

Section 5.3: Friday 2/8: Advanced Linear:
Foundational Game, PrepTest 36, Section 4, Game 2 - p.238,
Drills – Choose three: PrepTest 59, Section 1, Game 1 - p. 260; PrepTest 53, Section 2, Game 3 - p. 54;
PrepTest 52, Section 2, Game 3 - p. 18; PrepTest 60, Section 2, Game 1 - p. 304; PrepTest 60, Section 2,
Game 4 - p. 307; PrepTest 54, Section 3, Game 2 - p. 97; PrepTest 55, Section 4, Game 4 - p. 143; PrepTest
58, Section 3, Game 3 - p. 242

Week 6: Logic Games V – EXAM
Section 6.1: Monday 2/11: Grouping:
Foundational Games, PrepTest 33, Section 4, Game 2 - p.177 and PrepTest 33, Section 4, Game 3 - p.178
Drills – Choose three: PrepTest 54, Section 3, Game 1 - p. 96; PrepTest 58, Section 3, Game 2 - p. 241,
PrepTest 61, Section 3, Game 1 - p. 348; PrepTest 53, Section 2, Game 1 - p. 52; PrepTest 55, Section 4,
Game 1 - p. 140; PrepTest 52, Section 2, Game 2 - p. 17; PrepTest 57, Section 1, Game 4 - p. 191; PrepTest
56, Section 1, Game 2 - p. 153

Section 6.2: Wednesday 2/13: Spliting/Matching/Combination
Foundational Games: PrepTest 29, Section 3, Game 1 - p.32 and Game 3 p.33, PrepTest 38, Section 2,
Game 3, PrepTest 31, Section 1, Game 4 – p.87, PrepTest 32, Section 3, Game 2 – p.134, PrepTest 30,
Section 1, Game 2 – p.51.

Optional Drills: PrepTest 54, Section 3, Game 1 - p. 96; PrepTest 58, Section 3, Game 2 - p. 241; PrepTest
61, Section 3, Game 1 - p. 348; PrepTest 53, Section 2, Game 1 - p. 52; PrepTest 55, Section 4, Game 1 - p.
Friday, 2/15 – EXAM 1

Week 7: NO CLASS – MID TEST DUE

Week 8: Logical Reasoning I
Section 8.1: Monday 2/18: Kolby, Obfuscation, Logic I. Drills and Exercises.
Section 8.2: Wednesday 2/20: Kolby, Logic II. Drills and Exercises.
Section 8.3: Friday 2/22: Kolby, LSAT Section Logic Games.

Week 9: Logical Reasoning II
Section 9.3: Friday 3/8: Logic Games Sections, PrepTests 62 and 63, Timed.

Week 10: Logical Reasoning III
Section 10.1: Monday 3/11: 5 questions of the following types in 52-61: Main Point, Fill in the Blank, Must be true, and Most strongly supported.
Section 10.2: Wednesday 3/13: 5 questions of the following types in 52-61: Weaken/Necessary; Strengthen/Sufficient.
Section 10.3: Friday 3/15: Logic Games Sections, PrepTest 64+65, Timed.

Week 11: Logical Reasoning IV
Section 11.1: Monday 3/18: 5 questions of the following types in 52-61: Method of Reasoning, Role in the Argument, Flaw, Parallel Flaw.
Section 11.2: Wednesday 3/20: 5 questions of the following types in 52-61: Paradox, Principle.
Section 11.3: Friday 3/22: Logic Games Sections, PrepTest 66+67, Timed.

Week 12: SPRING BREAK

Week 13: EXAM – Reading Comprehension I
Section 13.1: Monday 4/1: EXAM
Section 13.2: Wednesday 4/3: Kolby, Intro, Methods, Six Questions, Pivotal Words.
Section 13.3: Friday 4/5: Logic Games + Logical Reasoning Sections, PrepTest 68, Timed.

Week 14: Reading Comprehension II
Section 14.1: Monday 4/8: Kolby, Three Step Method
Section 14.2: Wednesday 4/10: LSAT Sections.
Section 14.3: Friday 4/12: Logic Games + Logical Reasoning Sections, PrepTest 69, Timed.

Week 15: Reading Comprehension III
Section 15.1: Monday 4/15: Kolby, Extra Readings
Section 15.2: Wednesday 4/17: Hard Reading Sections
Section 15.3: Friday 4/19: Logic Games + 1 Logical Reasoning + Reading Comprehension Sections, PrepTest 70, Timed.

Week 16: Reading Comprehension III
Section 16.1: Monday 4/22: Kolby, Writing Samples
Section 16.2: Wednesday 4/24: Writing Samples
Section 16.3: Friday 4/26: FINAL TEST, PrepTest 70, Timed.

Final Exam: May 2nd, 10:10 – 12:10AM.