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: Monday, 1:30-4, Fridays 2:30-5pm 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.
- Class meets: MWF, 12-12:50pm, LA 303.
- 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:

- Homework 25%
- Pre-Test 15%
- Mid-test 15%
- Mid-Term 15%
- Final Test 15%
- Final Exam 15%

Homework – 25%

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 – 15% each, for a total of 45%

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, and Final Exam

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 October 29th 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/welcom_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 at www.umt.edu/dss/.
Tentative Schedule

Overview

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<th>Week #</th>
<th>Topic</th>
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<td>Week 1</td>
<td>Syllabus, Introduction, Diagnostic Test; Logic Games I – Untimed Logic Games.</td>
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<tr>
<td>Week 2</td>
<td>Logic Games II – Untimed Logic Games.</td>
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<td>Week 3</td>
<td>Logic Games III. Untimed Logic Games</td>
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<td>Week 4</td>
<td>Logical Reasoning I -- Timed sections of Logic Games. Untimed LR sections.</td>
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<td>Week 5</td>
<td>Logical Reasoning II -- More timed sections of LG. Untimed LR sections.</td>
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<td>Week 6</td>
<td>Logical Reasoning III -- More timed sections of LG. Timed LR sections.</td>
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<td>Week 7</td>
<td>Reading Comprehension -- Untimed RC sections. Timed sections of LG + LR.</td>
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<td>Week 8</td>
<td>Practice Tests; Mid-Test; Review. Writing Samples.</td>
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<td>Week 9</td>
<td>Practice Tests; Review.</td>
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<td>Week 10</td>
<td>Practice Tests; Review;</td>
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<td>Week 11</td>
<td>Practice Tests; Review;</td>
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<td>Week 12</td>
<td>Practice Tests; Review; LSAT TEST DAY 11/17</td>
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<td>Week 13</td>
<td>Reasoning in the Law -- Thanksgiving</td>
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<td>Week 14</td>
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<td>Week 15</td>
<td>Reasoning in the Law</td>
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<td>FINALS</td>
<td>Final Exam : Monday, December 10., 8-10AM</td>
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<td>WEEK</td>
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Unit 1: Introduction, Syllabus, Overview of the test


PRE-TEST

Unit 2: Logic Games I

Section 2.1:

- Readings: Kolby: Introduction, Linear Games.
- Homework: Kolby, Drills and Exercises.

Section 2.2:

- Readings: Kolby: Hybrid, Sequential Games.
- Homework: Kolby, Drills and Exercises.

If LSAT taker, complete some of the logic games listed on the last page.
Unit 3: Logic Games II

Section 3.1:

- Readings: Kolby: Circular; Formulas; Chart.
- Homework: Kolby, Drills and Exercises.

Section 3.2:

- Readings: Kolby: Grouping; Assignment Games.
- Homework: Kolby, Drills and Exercises.

If LSAT taker, complete some of the logic games listed on the last page.

Unit 4: Logic Games III

Section 4.1: 7 Foundational Games

- PrepTest 38, Section 2, Game 1
- PrepTest 30, Section 1, Game 4 - p.53
- PrepTest 36, Section 4, Game 2 - p.238
- PrepTest 33, Section 4, Game 2 - p.177
- PrepTest 33, Section 4, Game 3 - p.178
- PrepTest 29, Section 3, Game 1 - p.32
- PrepTest 38, Section 2, Game 3

Section 4.2: Combination Games

- PrepTest 29, Section 3, Game 2 - p.33
- PrepTest 31, Section 1, Game 4 - p. 87
- PrepTest 32, Section 3, Game 2 - p.134
- PrepTest 30, Section 1, Game 2 -p. 51
- LSAT section, TIMED.

If LSAT taker, complete some of the logic games listed on the last page.

Unit 5: Logical Reasoning

Section 5.1:

- Readings: Kolby: Obfuscation, Logic I and II
- Homework: Kolby, Drills and Exercises.

Section 5.2:

- Readings: Kolby: Inductive reasoning, Fallacies
- Homework: Kolby, Drills and Exercises.

If test-taker, complete PrepTests 52, 53, 54, 55, 56; LG sections, timed.
Unit 6: Logical Reasoning

Section 6.1:

- 5 Must Be True and Most Strongly Supported questions
- 5 Necessary Assumption questions
- 5 Sufficient Assumption questions
- 5 Strengthen questions
- 5 Weaken questions

Section 6.2:

- 5 Flaw questions
- 5 Parallel Flaw
- 5 Main Point questions
- 5 Fill-in-the-Blank questions
- 5 Point at Issue questions

If LSAT taker, complete:

- 5 more questions in each category above
- PrepTest 52 LR sections, untimed. Review. (2 sections)
- PrepTest 57, 58 LG sections, timed. Review.

Unit 7: Logical Reasoning

Section 7.1:

- 5 Paradox questions
- 5 Method of Reasoning questions
- 5 Role of a Statement questions
- 5 Principle questions

Section 7.2:

- LSAT section in Kolby.

If LSAT taker, complete:

- 10 more questions in each category above
- LG sections from PrepTests 59, 60, 61, timed. Review.
- Complete PrepTest 53 LR sections back to back, untimed. Review.

Unit 8: Reading Comprehension

Section 8.1:

- Readings: Kolby: Reading Methods, Six Questions, Pivotal Words.
- Homework: Kolby, Drills and Exercises.
Section 8.2:

- Readings: Kolby: The Three Steps Method
- Homework: Kolby, Drills and Exercises.
- Hard RC Passages: Dworkin, Maize, Basins of Attraction.
- LSAT section.

If LSAT taker, complete:

- PrepTests 52, 53, 54 RC sections, untimed. Review.
- PrepTests 55, 56, 57 RC sections, timed. Review.
- PrepTests 62, 63, 64 LG + 2LR sections, timed. Review.

### Unit 9:

Section 9.1: MID-TERM – OCTOBER 22nd.

Section 9.2: Review Mid-Term

MID-TEST

If LSAT taker, complete:

- Full PrepTests 65, 66 (+ “experimental” PrepTest 58, 59 RC sections), under test conditions

### Unit 10: Writing Sample and Review

Section 10.1:

- Homework: Kolby: Writing Samples.

Section 10.2:

- Review Mid-Test

If LSAT taker, complete:

- Full PrepTests 67, 68 (+ “experimental” PrepTest 60, 61 RC sections), under test conditions

### Unit 11: Review

Section 11.1-2:

- Homework: PrepTest 69 (experimental LG section)

If LSAT taker, complete:

- Full PrepTests 70, 71 (+ “experimental” LR sections)
Unit 12: Review

Section 12.1-2:

- Homework: PrepTest 72 (+ “experimental” LG sections)

If LSAT taker, complete:

- Full PrepTests 73, 74 (+ “experimental” RC sections)

Unit 13: Review

Section 13.1-2:

- Homework: PrepTest 75 (+ “experimental” LG sections)
- FINAL TEST

If LSAT taker, complete:

- Full PrepTests 76 (+ “experimental” LG sections)
- Rest well this week. Full day of rest before test day.

TEST DAY: November 17th.

Unit 14: Logic in the Law: Guidelines

Section 13.1-2:

- Readings:
  - Kerr, “How to Read a Legal Opinion”
  - Savellos and Calvin, Chapter 3.

Unit 15: Logic in the Law: Cases

Section 14.1-2

- Readings:
  - Savellos and Calvin, Chapter 4.
  - Savellos and Calvin, Chapter 5.

Final Exam: December, 10th, 8 – 10AM.
For LSAT Takers – Logic Games -- Extra Practice:

Untimed Logic Games (Week 1-3)

- Sequencing Games:
  - 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

- Basic Linear Games:
  - 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

- Advanced Linear Games:
  - 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

- Grouping Games:
  - 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

- Combination Games:
  - PrepTest 61, Section 3, Game 3 - p. 350
  - PrepTest 56, Section 1, Game 3 - p. 154
  - PrepTest 57, Section 1, Game 3 - p. 190