# BLHV-254 - Basic Logic/Critical Thinking

Fall 2017 – Section 101 – CRN 33022 Georgetown University – Bachelor of Arts in Liberal Studies

June 25, 2017

This is a provisional syllabus. The official version will be available on the course website.

# 1 Course Description and Objectives

This course is about critical thinking. The intended aim is to teach you how to do basic critical thinking. We will spend a good amount of time learning basic logic, as first order logic is an important tool in any kind of critical thinking. We will also spend some time learning about different domains of reasoning, for example: scientific reasoning, vs. legal reasoning. Finally, we will work on critical writing skills through weekly writing assignments.

# 2 Contact Information and Office Hours

- Contact me by email, at jt.paasch@gmail.com.
- Do **not** try to contact me through my georgetown email address (jp475@georgetown.edu). It is not reliable, and it is likely your message will not reach me.
- I have **no office hours**, but we can **schedule a call** any time you would like to talk (we can talk by phone, Skype, or Google Hangouts). Email me to set up a time.

## **3** Class Meetings

- This course is **100% online**.
- You do **not** need to visit any physical classrooms for this course.
- You **do** need to complete all assignments online, each week (see the next section).

### 4 Assignments

We cover a new topic **each week**. For each topic (= each week), you will need to complete four assignments:

- **Reading**: for each topic, you must complete a reading assignment. All required readings can be downloaded from the course website. Links to each week's readings are listed on the course website, and you can find a schedule below in section 13.
- Lectures: for each topic, you must watch a sequence of lecture videos. Each video is short, covering only a single idea, but all together they add up to a full set of lectures for the week. Links to each week's videos are listed on the course website, and you can find a schedule below in section 13.
- Quiz: for each topic, you must complete an online quiz. It will ask you multiple choice questions about the readings and the lectures. Links to each week's quiz are listed on the course website, and you can find a schedule below in section 13. You will take the quiz on the course website, and it will record your score in the grade book. Note that the website will give you a time limit: once you start the quiz, you must complete it in one hour.
- Writing: for each topic, you must submit a writing assignment. There are instructions that tell you exactly what to write each week, and links to these instructions are listed on the course website. You can also find a schedule below in section 13. To submit your writing assignment, you will upload your paper to the course website, and links for this are listed on the course website.

Note: it is a policy of the Georgetown BALS program that all papers are submitted to TurnItIn.com for a plagiarism check. In this course, you do not need to submit your papers to TurnItIn.com yourself. The course website will do that for you, automatically, when you upload each writing assignment.

### 5 Due Dates

- You have the **entire week** to complete each week's assignments.
- This means you can do the readings, watch the videos, work on your writing assignment, and take the quiz, at any time during the week.
- But you must complete all of the week's assignments by **Sunday night** (11:59pm) of that week.
- Late work is **not** accepted. **No exceptions**.

- Here are some rules to help you navigate the "no exceptions" policy:
  - You have a whole week to finish each week's work. Plan ahead.
  - If you will be out of town on a trip for one week, take your work with you, or finish it before you go. You cannot submit your work late.
  - If you will observe a religous holiday, or have other conflicts, you should plan ahead and finish your work before the conflicting time or times.
  - Do not try to submit your work Sunday night at 11:58pm. Computers sometimes fail, and I have no sympathy.
  - Give yourself a buffer and pretend that, say, Sunday afternoon is the absolute latest time you can submit your work.
  - If you're not done and it's Sunday afternoon, submit what you have.
    A partially complete assignment is much better than a zero.
  - To succeed in this class, you must stay on top of the work. If you miss one week's work, it will be very hard to get an A. If you miss two weeks, you cannot get an A. If you miss three weeks, I would advise you to drop the course. It is much better to drop the course than to get a D or an F.

# 6 Final Exam

- You will take a final exam online, during the 15th week of the course.
- Details about the exam will be posted on the course website after the semester begins. You will take the exam on the course website.
- It will be a **multiple choice** exam, with questions similar to those of your quizzes.
- The website will give you a **time limit**: once you start the exam, you must finish it in 2 hours.
- When you take the exam: you may use your notes, you may use your readings, you may use the internet to google things, and you may do anything else that you might do in the real world when you do some critical thinking.
- Note: each student's questions are randomly selected and sorted from a larger pool of questions, so no two students will see the same exam. Also, each question is written in such a way that you have to do some hard thinking to deduce the correct answer (a simple google search will not provide the answer).

# 7 Grading

The points you can earn during this course are as follows:

- Writing: 10 points for each assignment, for 14 weeks (140 pts total).
- Quizzes: 10 points for each quiz, for 14 weeks (140 pts total).
- Final exam: 100 pts
- Total possible points: 380 pts

Grades will be assigned like this:

- A: 93–100% (351–380 total points).
- A-: 90–92% (341–350 total points).
- **B+**: 87–89% (330–340 total points).
- **B**: 83–86% (315–329 total points).
- B-: 80–82% (304–314 total points).
- C+: 77–79% (292–303 total points).
- C: 73–76% (277–291 total points).
- C-: 70–72% (266–276 total points).
- **D**+: 67–69% (255–265 total points).
- **D**: 63–66% (239–254 total points).
- **D-**: 60–62% (228–238 total points).
- **F**: 0–59% (0–227 total points).

# 8 Disabilities

If you are a student with a documented disability who requires accommodations or if you think you may have a disability and want to inquire about accommodations, please contact the Academic Resource Center at 202-687-8354 or arc@georgetown.edu.

# 9 Turnitin.com

Students acknowledge that by taking this course all required papers can be submitted for a Textual Similarity Review to Turnitin.com for the detection of plagiarism. Use of the Turnitin.com service is subject to the terms of use agreement posted on the Turnitin.com site.

## 10 Georgetown Honor System

All students are expected to follow Georgetown's honor code unconditionally. We assume you have read the honor code material located at http://scs.georgetown.edu/academicaffairs/honor-code, and in particular have read the following documents: Honor Council Pamphlet, What is Plagiarism, Sanctioning Guidelines, and Expedited Sanctioning Process. Papers in this course will all be submitted to turnitin.com for checking.

Submitting material in fulfillment of the requirements of this course means that you have abided by the Georgetown honor pledge:

In the pursuit of the high ideals and rigorous standards of academic life, I commit myself to respect and uphold the Georgetown Honor System: To be honest in any academic endeavor, and to conduct myself honorably, as a responsible member of the Georgetown community, as we live and work together.

## 11 Plagiarism

In accord with university policy, all incidents of suspected plagiarism or other Honor Code violations will be reported to the Honor Council without fail.

If the Honor Council finds that a student has plagiarized or has violated the Honor Code in any other way, the student may receive a grade of F for the course.

# 12 Policy Accommodating Students' Religious Observances

The following is university policy:

Georgetown University promotes respect for all religions. Any student who is unable to attend classes or to participate in any examination, presentation, or assignment on a given day because of the observance of a major religious holiday or related travel shall be excused and provided with the opportunity to make up, without unreasonable burden, any work that has been missed for this reason and shall not in any other way be penalized for the absence or rescheduled work. Students will remain responsible for all assigned work. Students should notify professors in writing at the beginning of the semester of religious observances that conflict with their classes.

In this course, you should plan ahead for religious holidays and submit your work earlier, exactly as you would if you had a business trip, a family party, or anything else that might occur in the course of a week. (Here is an exercise: how is this consistent with the university policy?)

## 13 Schedule

### • Week 1: What is Reasoning?

Dates: Begins Sep 4th – Ends (assignments due) Sep 10th, 11:59pm. Topics: Consistency, Consequence, Judgments, Good and Bad Evidence, Levels of Confidence, Persuasion vs Proof, Refutation, Counterexamples.

- Reading: See course website, under Assignments Week 1 Reading
- Writing: See website, Assignments Week 1 Writing
- Lecture: See website, Assignments Week 1 Lectures
- Quiz: See website, Assignments Week 1 Quiz

### • Week 2: Claims, Arguments, Thinking like Machines

Dates: Begins Sep 11th – Ends (assignments due) Sep 17th, 11:59pm. Topics: Claims, Statements, Arguments, Proofs, Consequence, Formal Languages, Translation, Semantics.

- Reading: See course website, under Assignments Week 2 Reading
- Writing: See website, Assignments Week 2 Writing
- Lecture: See website, Assignments Week 2 Lectures
- Quiz: See website, Assignments Week 2 Quiz

### • Week 3: Logic: Saying Things about Individuals

Dates: Begins Sep 18th – Ends (assignments due) Sep 24th, 11:59pm. Topics: Predicate Logic, Syntax, Semantics.

- Reading: See course website, under Assignments Week 3 Reading
- Writing: See website, Assignments Week 3 Writing
- Lecture: See website, Assignments Week 3 Lectures
- Quiz: See website, Assignments Week 3 Quiz

### • Week 4: Logic: Saying Things about Individuals

Dates: Begins Sep 25th – Ends (assignments due) Oct 1st, 11:59pm. Topics: Predicate Logic, Validity, Soundness, Completeness.

- Reading: See course website, under Assignments Week 4 Reading
- Writing: See website, Assignments Week 4 Writing
- Lecture: See website, Assignments Week 4 Lectures
- Quiz: See website, Assignments Week 4 Quiz
- Week 5: Logic: Saying Things about Many Individuals Dates: Begins Oct 2nd – Ends (assignments due) Oct 8th, 11:59pm. Topics: Predicate Logic, Quantification, Syntax, Semantics.
  - Reading: See course website, under Assignments Week 5 Reading

- Writing: See website, Assignments Week 5 Writing
- Lecture: See website, Assignments Week 5 Lectures
- Quiz: See website, Assignments Week 5 Quiz
- Week 6: Logic: Saying Things about Many Individuals Dates: Begins Oct 9th – Ends (assignments due) Oct 15th, 11:59pm. Topics: Predicate Logic, Quantification, Validity, Soundness, Complete-

ness.

- Reading: See course website, under Assignments Week 6 Reading
- Writing: See website, Assignments Week 6 Writing
- Lecture: See website, Assignments Week 6 Lectures
- Quiz: See website, Assignments Week 6 Quiz

### • Week 7: Logic: Sentence Connectors.

Dates: Begins Oct 16th – Ends (assignments due) Oct 22nd, 11:59pm. Topics: Predicate Logic, Connectives, Syntax, Semantics.

- Reading: See course website, under Assignments Week 7 Reading
- Writing: See website, Assignments Week 7 Writing
- Lecture: See website, Assignments Week 7 Lectures
- Quiz: See website, Assignments Week 7 Quiz

### • Week 8: Logic: Sentence Connectors

Dates: Begins Oct 23rd – Ends (assignments due) Oct 29th, 11:59pm. Topics: Predicate Logic, Connectives, Validity, Soundness, Completeness.

- Reading: See course website, under Assignments Week 8 Reading
- Writing: See website, Assignments Week 8 Writing
- Lecture: See website, Assignments Week 8 Lectures
- Quiz: See website, Assignments Week 8 Quiz

#### • Week 9: Conditionals

Dates: Begins Oct 30th – Ends (assignments due) Nov 5th, 11:59pm. Topics: Conditionals, Paradoxes, Strict Conditionals, Counterfactuals, Relevance.

- Reading: See course website, under Assignments Week 9 Reading
- Writing: See website, Assignments Week 9 Writing
- Lecture: See website, Assignments Week 9 Lectures
- Quiz: See website, Assignments Week 9 Quiz

### • Week 10: Fallacies

Dates: Begins Nov 6th – Ends (assignments due) Nov 12th, 11:59pm. Topics: Ad Hominem, Circularity, Straw Man, False Dilemma, Faulty Comparison, Appeal to Authority, Slippery Slope, Genetic Fallacy, Non Sequitur, Equivocation, Scope Change.

- Reading: See course website, under Assignments Week 10 Reading
- Writing: See website, Assignments Week 10 Writing
- Lecture: See website, Assignments Week 10 Lectures
- Quiz: See website, Assignments Week 10 Quiz

### • Week 11: Inductive Reasoning, Statistics and Probability

Dates: Begins Nov 13th – Ends (assignments due) Nov 19th, 11:59pm. Topics: Generalizing from a Sample, Reliability of Data, Varieties of Inductive Arguments, New Information.

- Reading: See course website, under Assignments Week 11 Reading
- Writing: See website, Assignments Week 11 Writing
- Lecture: See website, Assignments Week 11 Lectures
- Quiz: See website, Assignments Week 11 Quiz

#### • Week 12: Reasoning about Causes and Effects

Dates: Begins Nov 20th – Ends (assignments due) Nov 26th, 11:59pm. Topics: Correlations, Causes, Explanations.

- Reading: See course website, under Assignments Week 12 Reading
- Writing: See website, Assignments Week 12 Writing
- Lecture: See website, Assignments Week 12 Lectures
- Quiz: See website, Assignments Week 12 Quiz

#### • Week 13: Scientific Reasoning

Dates: Begins Nov 27th – Ends (assignments due) Dec 3rd, 11:59pm. Topics: Principles of Scientific Reasoning, Explanations, Testing.

- Reading: See course website, under Assignments Week 13 Reading
- Writing: See website, Assignments Week 13 Writing
- Lecture: See website, Assignments Week 13 Lectures
- Quiz: See website, Assignments Week 13 Quiz

#### • Week 14: Legal Reasoning

Dates: Begins Dec 4th – Ends (assignments due) Dec 10th, 11:59pm. Topics: Positive Law, Common Law, Sources of Law, Case Procedure, Interpretation, Judgment.

- Reading: See course website, under Assignments - Week 14 - Reading

- Writing: See website, Assignments Week 14 Writing
- Lecture: See website, Assignments Week 14 Lectures
- Quiz: See website, Assignments Week 14 Quiz
- Week 15: Final Exam

Date: Dec 12th.

– Exam: you will take it online. Details on website, under *Final Exam*