

## PHIL 4380-01: Lewis Carroll's Logic

Sam Houston State University

Summer II 2022 | CHSS 351 | CRN: 41730

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**Course Description:** Lewis Carroll is the popular author of the *Alice's Adventures in Wonderland*. But it is not widely known that Carroll was the *nome de plume* of Charles Dodgson, a mathematics professor at Christ Church (Oxford). And in addition to making contributions to mathematics, he also made several notable but under-appreciated contributions to logic. This course will survey his work in logic, situating him largely in the context of the development of algebraic logic in the 19th century.

In this seminar, we will explore the algebraic tradition of logic, alongside DeMorgan, Boole and Venn. We will look at two of Carroll's books on logic: *The Game of Logic* (1887) and *Symbolic Logic* (1897), to understand Carroll's contributions to this tradition. This will have an extended focus on the 'logic game' to show validity of syllogisms as well as several logical paradoxes authored by Carroll (1894), (1895 b). The course will culminate in reading *Alice's Adventures* (1865) and *Through the Looking-Glass* (1872), interpreting it as an allegory for reasoning well.

**Course Modality (Hybrid):** This is designed as a class which meets partially in-person and partially synchronous remote. Some (not not all) of the assignments will be completed and graded through the Blackboard system.

**Prerequisites:** N/A

### Required Texts:

1. Lewis Carroll and Martin Gardner, *The Annotated Alice: The Definitive Edition* (W. W. Norton, 1999).
2. Lewis Carroll, *Symbolic Logic and the Game of Logic* (Dover Publications, 1958).

### Readings:

- A. J. Baker, "Incompatible Hypotheticals and the Barber Shop Paradox," *Mind* 64, no. 255 (1955): 384–387, [10.1093/mind/lxiv.255.384](https://doi.org/10.1093/mind/lxiv.255.384).
- Max Black, "Achilles and the Tortoise," ed. Wesley C. Salmon, in *Analysis* (Bobbs-Merrill, 1950).
- Arthur W. Burks and Irving Copi, "Lewis Carroll's Barber Shop Paradox," *Mind* 59, no. 234 (1950): 219–222, [10.1093/mind/lix.234.219](https://doi.org/10.1093/mind/lix.234.219).

- Lewis Carroll, *Alice’s Adventures in Wonderland* (London: MacMillan, 1865).
- Lewis Carroll, *Through the Looking-Glass, And What Alice Found There* (London: MacMillan, 1872).
- Lewis Carroll, *Game of Logic* (London: MacMillan, 1887).
- Lewis Carroll, “What the Tortoise Said to Achilles,” *Mind* 4, no. 14 (1895): [278–280](#), [10.1093/mind/IV.14.278](#).
- Lewis Carroll, *A Tangled Tale* (London: MecMillan, 1895).
- Lewis Carroll, *Symbolic Logic* (London: MacMillan, 1897).
- Lewis Carroll and Margaret Washburn, “A Logical Paradox,” *Mind* 3, no. 11 (1894): [436–440](#), [10.1093/mind/iii.11.436](#).
- W. J. Rees, “What Achilles Said to the Tortoise,” *Mind* 60, no. 238 (1951): [241–246](#), [10.1093/mind/LX.238.241](#).
- J. F. Thomson, “What Achilles Should Have Said to the Tortoise,” ed. Steven Cahn, in *Thinking about Logic: Classic Essays* (Taylor & Francis, 2010).

**Accelerated Schedule:** This is a summer class which is taught on an accelerated 4-week schedule. It is designed to cover the same material a regular semester over a shorter time frame. Please prepare accordingly, as you will be expected to read or work on the course material for several hours a day in order to complete the work for the course,

**Writing Enhanced:** This is a “W” course, which means that at least 50 percent of your course grade will derive from writing activities designed to help you master course objectives. Writing in this course is one of the tools your instructor will use to help you learn course material. Some writing activities will require you to draft and revise your work, with or without instructor feedback. Others may not receive a grade but are designed to assist you in critical reflection of the course material. You should approach writing in this course as a tool to use as part of your learning as well as a tool your instructor will use to assess your level of learning.

**Schedule:**

July 5th	.....	Course Introduction and General Background
July 6th	.....	Aristotle, Euler, DeMorgan, Venn
July 7th	.....	Carroll, <i>Game of Logic</i> , pp. 1-31; Ex. §§1-5
July 8th	.....	<i>Game of Logic</i> , pp. 32-54; Ex. §§6-7
July 11th	.....	Carroll, <i>Symbolic Logic</i> , pp. 1-38; Ex. §1, 1-8
July 12th	.....	<i>Symbolic Logic</i> , pp. 39-56; Ex. §1, 9-16, §2, 1-32, §2, 1-20
July 13th	.....	<i>Symbolic Logic</i> , pp. 56-69; Ex. §1, 17-21, §4, 7-12, §5, 7-12; §6 1-10
July 14th	.....	<i>Symbolic Logic</i> , pp. 70-94; Ex. §4, 12-20; §5 1-12; §6 7-12; §7, 7-12.
July 15th	.....	<b>Exam #1</b>

July 18th	.....	Carroll, "What Tortoise Said" with Rees, Black and Thomson
July 19th	.....	Carroll, "A Logical Paradox" with Burks & Copi and Baker
July 20th	.....	Carroll, <i>A Tangled Tale</i> , Knots 1-5
July 21th	.....	Carroll, <i>A Tangled Tale</i> , Knots 6-10
July 22th	.....	<b>Paper #1 due</b>
July 25st	.....	Carroll, <i>Alice's Adventures in Wonderland</i> , Chapters 1-4
July 26nd	.....	<i>Alice's Adventures</i> , Chapters 5-8
July 27rd	.....	<i>Alice's Adventures</i> , Chapters 9-12
July 28th	.....	Carroll, <i>Through the Looking-glass</i> , Chapters 1-4
July 29th	.....	<i>Through the Looking-glass</i> , Chapters 5-6
Aug 1st	.....	<i>Through the Looking-glass</i> , Chapters 9-12
Aug 2nd	.....	TBA
Aug 3rd	.....	<b>Paper #2 due</b>

**Important Dates:**

Independence Day (no class)	.....	July 4th
Add/Drop Deadline	.....	July 8th
Q-Drop Deadline	.....	July 22nd
Course Final	.....	August 3rd

**Evaluation:**

The following weighting will be used to calculate your course grade:

Exam #1	.....	25%
Paper #1	.....	25%
Paper #2	.....	25%
Course Participation	.....	25%

Your rounded average of these assignments will determine your grade, based on the following scale:

A	.....	100 - 89.5
B	.....	89.4 - 79.5
C	.....	79.4 - 69.5
D	.....	69.4 - 59.5
F	.....	59.4 - 0

**Academic Dishonesty:** Students are expected to maintain honesty and integrity in the academic experiences both in and out of the classroom. Please be aware that plagiarized work and any form of academic dishonesty will result in an "F" on the assignment. [SHSU Academic Policy Statement 810213](#) outlines the definition of academic honesty and the related disciplinary procedures.

You should also familiarize yourself with [Academic Policy Statement 900823](#), which outlines the procedures for students to file an academic grievance should you wish to appeal your grade for reasons other than academic dishonesty. Please read through these policies carefully.

**Course Evaluations:** In accordance with University policy every student will have an opportunity at a specified date and time near the end of the semester to complete a course evaluation form from the IDEA course evaluation system.

For University policies on Student Absences on Religious Holy Days, Students with Disabilities, and Visitors in the Classroom you may view to the official statements on the SHSU Website, <http://www.shsu.edu/syllabus/>

### **Expectations, Suggestions and Mandates for an efficient class:**

1. This is a course which operates at a very rapid pace, due to its compressed format. Skipping a day in a four-week class is equivalent to missing half a week in the regular semester. You should be prepared to log in to Blackboard every week in order to complete the work for the course.
2. Try to complete the week's work early. Waiting until the due date to begin the week's assignment is not advisable. Some of the assignments may take several hours to complete.
3. Please arrive to class on time and expect to stay the entire duration of the class. If this is an impossibility, please make every attempt to notify me in advance of tardiness or absence.
4. Especially true in philosophy more than most other subjects, diligence is important. Some of the reading will be difficult since we are looking at some of the most profound ideas in the history of the world. The difficulty of the subject is indirectly proportional to the amount of work put into the course.
5. Expect to have up to several hours a week of reading and practice in order to earn an "A" for the course. Additionally, for these reasons, attendance is of vital importance. *If you do not regularly log in or keep up with the reading and exercises, do not expect to pass this class!*
6. Please come to class prepared (i.e., any reading assigned read, any questions concerning exercises or lectures prepared, etc.)
7. Due to the great excess of material and limited time in which we must over ground, please do not create a disruption for those people who are attempting to learn. Disruptions include blurting out answers, name calling, chiding each other, snoring, etc. Laughing at the Instructor's jokes is obviously exempted from this policy. In addition, personal audio devices (except those in use to record lectures) and loud crunching snack foods are prohibited from the classroom.
8. Please feel free to make mistakes. We all will from time to time—including your omniscient instructor.
9. Please feel free to make an appointment to discuss the material you do not understand. Waiting until the last moment in the semester to catch up is not advisable. I am excellent at fixing small problems, but horrendous at fixing large ones. The only difference between small and large problems is time.
10. Have fun! The material is only as dry as you make it out to be. Sharpening one's mind can be an exhilarating process.