

# Logic I

PEIMS Code: N1290100 Abbreviation: LOGIC1 Grade Level(s): 9-10

Award of Credit: 0.5

# Approved Innovative Course

- Districts must have local board approval to implement innovative courses.
- In accordance with Texas Administrative Code (TAC) §74.27, school districts must provide instruction in all essential knowledge and skills identified in this innovative course.
- Innovative courses may only satisfy elective credit toward graduation requirements.
- Please refer to TAC §74.13 for guidance on endorsements.

## **Course Description:**

*Logic I* provides course content in informal logic which includes intensive experience with logical fallacies and an emphasis on inductive reasoning, strong versus weak and fallacious arguments, and probability. In *Logic I*, students concentrate on evaluating the content of arguments. The course deals almost entirely with "ordinary language arguments" in the interchange of ideas between people. *Logic I* prepares students for college, careers and military pursuits, as inductive reasoning is integral to thinking well in various aspects of daily life that involve decision-making, problem-solving, and communication with others in civic, work, and other settings.

### **Essential Knowledge and Skills:**

- (a) General Requirements. This course is recommended for students in grades 9 and 10. Students shall be awarded one-half credit for successful completion of this course. There are no prerequisites for this course.
- (b) Introduction.
  - (1) *Logic I* complements thinking, writing, and speaking skill-building that is at the center of language arts and social studies curricula.
  - (2) Logic I provides course content in informal logic which includes intensive experience with logical fallacies and an emphasis on inductive reasoning, strong versus weak and fallacious arguments, and probability. In Logic I, students concentrate on evaluating the content of arguments. The course deals almost entirely with "ordinary language arguments" in the interchange of ideas between people. Logic I prepares students for college, careers and military pursuits, as inductive reasoning is integral to thinking well in various aspects of daily life that involve decision-making, problem-solving, and communication with others in civic, work, and other settings.
  - (3) Statements containing the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.



- (c) Knowledge and Skills.
  - (1) Logic. The student understands the historical development of logic and the differences between informal and formal logic. The student is expected to:
    - (A) identify key figures associated with the historical development of logic;
    - (B) define logic and argument; and
    - (C) describe the differences between informal and formal logic.
  - (2) Ad Fontem Arguments. The student uses knowledge about an audience to employ ad fontem arguments that produce desired reactions. The student is expected to:
    - (A) identify and analyze fallacious arguments, including ad hominem abusive, ad hominem circumstantial, tu quoque, and genetic fallacy;
    - (B) analyze and explain the purposes and effects of using ad fontem arguments; and
    - (C) create speeches and documents using ad fontem arguments.
  - (3) Appeals to Emotion. The student uses knowledge about an audience to employ an appeal that produces a desired reaction. The student is expected to:
    - (A) identify fallacious arguments including appeal to fear (argumentum ad baculum), appeal to pity (argumentum ad misericordiam), mob appeal (argumentum ad populum), snob appeal, appeal to illegitimate authority (argumentum ad verecundiam), and chronological snobbery;
    - (B) analyze the purposes and effects of using appeals to emotion; and
    - (C) create and apply appeals to emotion in speech and in writing.
  - (4) Red Herrings. The student uses knowledge about an audience to employ red herrings that produces desired reactions. The student is expected to:
    - (A) identify and analyze fallacious arguments including appeal to ignorance, irrelevant goals or functions, irrelevant thesis, and straw man fallacy;
    - (B) analyze and explain the purposes and effects of using red herrings; and
    - (C) create speeches and documents using red herrings.
  - (5) Fallacies of Presumption. The student uses knowledge about an audience to employ fallacies of presumption that produce desired reactions. The student is expected to:
    - (A) identify and analyze fallacious arguments, including begging the question (petitio principii), bifurcation (false dilemma), fallacy of moderation, is-ought fallacy, fallacy of composition, and fallacy of division;
    - (B) analyze and explain the purposes and effects of using presumption; and
    - (C) create speeches and documents using fallacies of presumption.
  - (6) Fallacies of Induction. The student uses knowledge about an audience to employ fallacies of induction that produces desired reactions. The student is expected to:
    - (A) identify and analyze fallacious arguments, including sweeping generalization (accident), hasty generalization (converse accident), false analogy, false cause, and fake precision;
    - (B) analyze and explain the purposes and effects of fallacies of induction; and
    - (C) create speeches and documents using fallacies of induction



- (7) Fallacies of Clarity. The student uses knowledge about an audience to employ fallacies of clarity that produces desired reactions. The student is expected to:
  - (A) identify and analyze fallacious arguments, including equivocation, accent, and distinction without a difference;
  - (B) analyze and question the purposes and effects of fallacies of clarity; and
  - (C) create speeches and documents using fallacies of clarity.

### **Recommended Resources and Materials:**

Adler, Mortimer. Ten Philosophical Mistakes. New York: Macmillan Publishing Company. 1997.

Cothran, Martin. Traditional Logic I (charter school edition). Louisville: Memoria Press, 2018

Cothran, Martin. Traditional Logic II (charter school edition). Louisville: Memoria Press, 2018

Hodge, Joelle, Johnson, Shelly, and Larsen, Aaron. *The Discovery of Deduction*. Camp Hill: Classical Academic Press, 2009.

Hodge, Joelle, Larsen, Aaron, and Perrin, Chris. *The Art of Argument: An Introduction to Logical Fallacies*. Camp Hill: Classical Academic Press, 2022.

Kreeft, Peter. 2010. Socratic Logic: A Logic Text using Socratic Method, Platonic Questions, and Aristotelian Principles. South Bend: St. Augustine Press, 2010.

## **Recommended Course Activities:**

Students will engage in class discussions, debates, reading and analysis of philosophical works, speeches, editorials, and other print media and marketing campaigns, and expository writing activities.

#### Suggested methods for evaluating student outcomes:

Formative and summative assessments will be used to evaluate student performance. Assessment will include short written responses, extended essays, multiple-choice items, oral assessment (student interview), debate, and research papers. Rubrics will be used to score essays, papers and projects.

## **Teacher qualifications:**

- English Language Arts and Reading: Grades 7-12
- English Language Arts and Reading: Grades 8-12
- Grades 6-12 or Grades 9-12--English
- Grades 6-12 or Grades 9-12--English Language Arts, Composite
- Secondary English (Grades 6-12)
- All-Level Speech and Drama.
- All-Level Speech Communications/Theatre Arts (Prekindergarten-Grade 12).
- Grades 6-12 or Grades 9-12--Speech Communications.
- Junior High School (Grades 9-10 only) or High School--Speech.
- Junior High School (Grades 9-10 only) or High School--Speech and Drama.

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- Secondary Speech Communications (Grades 6-12 or Grades 9-12).
- Speech: Grades 7-12.
- Speech: Grades 8-12.
- Grades 6-12 or Grades 9-12--History
- Grades 6-12 or Grades 9-12--Social Studies
- Grades 6-12 or Grades 9-12--Social Studies, Composite
- History: Grades 7-12
- History: Grades 8-12
- Secondary History (Grades 6-12)
- Secondary Social Studies (Grades 6-12)
- Secondary Social Studies, Composite (Grades 6-12)
- Social Studies: Grades 7-12
- Social Studies: Grades 8-12
- Grades 6-12 or Grades 9-12—Psychology

# Additional information:

N/A