RARITAN VALLEY COMMUNITY COLLEGE
ACADEMIC COURSE OUTLINE

PHIL 103 – LOGIC AND ARGUMENTATION

I. Basic Course Information

A. Course Number and Title: PHIL 103 – LOGIC AND ARGUMENTATION

B. New or Modified Course: Modified

C. Date of Proposal: Semester: Spring Year: 2025

D. Effective Term: Fall 2025

E. Sponsoring Department: Humanities, Social Science, Social Work, & Education

F. Semester Credit Hours**:** 3

G. Weekly Contact Hours**:** 3 Lecture**:** 3
Laboratory**:** 0
Out of class student work per week: 6

H. ☐ Prerequisite (s):None
☐ Corequisite (s):
☐ Prerequisite (s) and Corequisite (s):

I. Additional Fees**:** None

II. Catalog Description

This course provides a general introduction to the branch of philosophy known as "logic," which deals with questions concerning the nature of reason. Students will learn the basic elements and principles of reasoning that coalesce in arguments, the process of abstracting arguments into symbolic form, how to evaluate the quality of these arguments, and how to apply this content in recognizable contexts. Topics include: Truth and Contradiction; Claims and Verification; Deductive/Inductive Reasoning; Truth Tables and Valid Symbolic Forms; Fallacious Reasoning; Rhetorical/Media Analysis; Critical Thinking.

III. Statement of Course Need

A. This course provides a general induction to philosophical logic. Students will work with rudimentary concepts before engaging with material that gradually increases in complexity until arriving at the level of formal logic. Students will ultimately learn to apply this abstract material "back down" to levels that are concrete and relatable.

The study of logic provides students with a set of critical thinking skills that can be applied interdisciplinarily and cross-contextually in order to understand events holistically, communicate information clearly, construct and evaluate arguments, and make informed decisions. It allows students to perceive the world not as a collection of disjointed occurrences and arbitrary pieces of information, but rather as a set of objectively discernible patterns that are universal, repeatable, predictable, and therefore useful. This utility is applicable not only in formal academic, scientific, mathematical, computational, and cultural discourse, but in other more practical and humanistic parts of our "everyday life" that we engage with constantly — such as advertising, journalism, political debate, and casual conversation.

Logic is a staple within philosophy programs at most universities and colleges; the study of argumentation and reason more broadly has traditionally been at the heart of Liberal Arts education in the Western Tradition.

This course meets the New Jersey General Education Requirements.

As a result of the previous two points, this class is generally transferable.

B. No Lab

C. This course generally transfers as a(n):
   1. Required course in Philosophy
   2. Elective course in Philosophy
   3. General Education Course in Humanities
   4. Free Elective

IV. Place of Course in College Curriculum

This course serves as a:

A. Free Elective (This applies automatically to all college level credit courses in the College.)

B. General Education course in Humanities

C. Program Requirement for Information Systems & Technology A.A.S.

D. Program Elective for Game Development A.A.S

E. To see course transferability: a) for New Jersey schools, go to the NJ Transfer website, www.njtransfer.org; b) for all other colleges and universities, go to the individual websites.

V. Outline of Course Content

1. Introduction
    a. What is Philosophy/Logic?
2. Fundamental Concepts
    a. Definition, Truth, and Laws of Thought
        i. Essential/Accidental Properties; Universals/Particulars
        ii. Identity, Non-Contradiction, and Excluded Middle
    b. Claims, Justification, and Knowledge
        i. Rational vs. Empirical
        ii. A Priori vs. A Posteriori
    c. Arguments
        i. Premises, Conclusions, Inferences; Standard Form
        ii. Deduction/Induction; Mathematical/Scientific Reasoning
    d. Evaluating Arguments
        i. Validity/Soundness; Strength/Cogency
3. Formal Logic
    a. Symbolization
        i. Variables, Operators, and Quantifiers
    b. Truth Tables and Logical Equivalence
    c. Valid/Invalid Argument Forms/Proofs
4. Informal Logic
    a. Fallacies and Cognitive Distortions
    b. Rhetorical Devices
5. Applications
    a. Media: Advertising, Journalism, Political Discourse, and Pop Culture

VI. Learning Outcomes and Assessment:

A. Course Learning Outcomes

Successful completion of the course requires that students can:

1. identify the fundamental elements and principles of reasoning used in arguments from academic conversations, media, and public discourse more broadly (GE 1, 6)
2. demonstrate a holistic understanding of these elements, principles, and arguments both verbally and in writing. (GE 1)
3. apply these elements, principles, and arguments in concrete, relatable, and/or interdisciplinary contexts (philosophical, scientific, mathematical, social-political) both verbally and in writing (GE 1, 2, 3, 6, *)
4. convert claims/arguments into symbolic form using variables/logical operators (GE 2)
5. evaluate arguments objectively using rules of inference, truth tables, and rational/empirical verification methods (GE 1, 2, *)
6. construct original arguments and formal proofs both verbally and in writing (GE 1, *)

* Embedded Critical Thinking

B. Assessment Instruments

Possible methods of assessment include:

1. Written Exams
2. Oral Exams
3. Presentations
4. Debates

VII. Grade Determinants

Possible grade determinants include:

1. Informal Assignments
    a. In-Person
        i. Individual/Group-Based Activities
    b. Outside of Class
        i. Homework
2. Written Exams
3. Oral Exams
4. Presentations
5. Debates
6. Class Participation

Possible formats, modes, and methods for teaching/learning:

1. Lecture
2. Group/Class Discussion
3. Guided Reading
4. Informal Assignments
    a. Individual/Group-Based Activities
5. Online Videos
6. Independent Research

VIII. Texts and Materials

Suggested materials include:

1. Aristotle, *Categories*
2. Aristotle, *On Interpretation*
3. Aristotle, *Metaphysics*
4. Aristotle, *On Rhetoric*
5. Hume, *Enquiry Concerning Human Understanding*
6. Hurley, *A Concise Introduction to Logic*
7. Kant, *Prolegomena to any Future Metaphysics*
8. Munson and Black, *The Elements of Reasoning*
9. Okasha, *A Brief Introduction to the Philosophy of Science*
10. Wittgenstein, *Tractatus Logico-Philosophicus*
11. OER

Please Note: The course outline is intended only as a guide to course content and resources. Do not purchase textbooks based on this outline. The RVCC Bookstore is the sole resource for the most up-to-date information about textbooks.

IX. Resources

X. Check One: ☐Honors Course ☐Honors Options ☐ N/A