SYLLABUS

DATE OF LAST REVIEW: 02/2013
CIP CODE: 24.0101
SEMESTER: Departmental Syllabus
COURSE TITLE: Logic
COURSE NUMBER: PHIL-0105
CREDIT HOURS: 3
INSTRUCTOR: Departmental Syllabus
OFFICE LOCATION: Departmental Syllabus
OFFICE HOURS: Departmental Syllabus
TELEPHONE: Departmental Syllabus
EMAIL: KCKCC- “Issued Email accounts are the official means for electronically communicating with our students”

PREREQUISITES: None

REQUIRED TEXT AND MATERIALS: Please check with the KCKCC bookstore, http://www.kckccbookstore.com/, for the required texts for your particular class.

COURSE DESCRIPTION:
Logic is studied in order to develop standards of critical thinking in any area of knowledge that employs inference and argument. Wherever conclusions are supposed to be supported by evidence, logic attempts to distinguish correct from incorrect forms of reasoning. Logic provides guidance for the examination of controversial issues confronting thoughtful people in the late 20th (early 21st) century.

METHOD OF INSTRUCTION: A variety of instructional methods may be used depending on content area. These include but are not limited to: lecture, multimedia, cooperative/collaborative learning, labs and demonstrations, projects and presentations, speeches, debates, panels, conferencing, performances, and learning experiences outside the classroom. Methodology will be selected to best meet student needs.
COURSE OUTLINE:
I. The Problem Areas in Philosophy
   A. Epistemology ("to know")
   B. Metaphysics ("to be")
   C. Axiology ("the good")
   D. Logic ("good reasoning")

II. Basic Concepts
   A. Validity and Soundness
   B. Forms and Counterexamples
   C. Some "Famous" Forms

III. Identifying Arguments
   A. Arguments and Non-arguments
   B. Well-Crafted Arguments

IV. Logic and Language
   A. Logic, Meaning, and Emotive Force
   B. Definitions
   C. Using Definitions to Evaluate Arguments

V. Informal Fallacies
   A. Fallacies Involving Irrelevant Premises
   B. Fallacies Involving Ambiguity
   C. Fallacies Involving Unwarranted Assumptions

VI. Categorical Logic: Syllogisms
   A. Standard Form, Mood, and Figure
   B. The Traditional and the Modern Square of Opposition
   C. Rules for Evaluating Syllogisms

VIII. Statement Logic: Truth Tables
   A. Symbolizing English Arguments
   B. Truth Tables
   C. Using Truth Tables to Evaluate Arguments
   D. Abbreviated Truth Tables

IX. Induction
   A. Inductive and Deductive Logic: Contrasts and Clarifications
   B. Arguments from Authority and Induction by Enumeration
   C. Mill’s Methods and Scientific Reasoning
   D. Arguments from Analogy

XII. Probability
   A. Three Theories of Probability
EXPECTED LEARNER OUTCOMES:

1. The student will be able to discuss a problem in the meaning of “to know.”
2. The student will be able to discuss a problem in the meaning of “to be.”
3. The student will be able to discuss a problem in the meaning of “the good.”
4. The student will be able to discuss a problem in the art of logical reasoning.

5. The student will be able to determine the validity and soundness of deductive arguments.
6. The student will be able to recognize argument forms and construct counterexamples.
7. The student will be able to recognize some “famous” argument forms.

8. The student will be able to distinguish between an argument and an explanation, report, or illustration.
9. The student will be able to identify the premises and the conclusion of an argument.
10. The student will be able to construct a well-crafted argument.

11. The student will be able to relate logic, meaning, and emotive force.
12. The student will be able to distinguish between various types of definitions.
13. The student will be able to use definitions to evaluate arguments.

14. The student will be able to recognize and define fallacies involving irrelevant premises.
15. The student will be able to recognize and define fallacies involving ambiguity.
16. The student will be able to recognize and define fallacies involving unwarranted assumptions.

17. The student will be able to recognize the standard form, mood, and figure of categorical syllogisms.
18. The student will be able to use the traditional and the modern square of opposition as well as Aristotelian rules to evaluate the validity/invalidity of categorical syllogisms.

19. The student will be able to symbolize English arguments in statement logic.
20. The student will be able to construct truth tables for arguments in statement logic.
21. The student will be able to use truth tables to evaluate the validity/invalidity of arguments in statement logic.
22. The students will be able to use abbreviated truth tables to evaluate the validity/invalidity of arguments in statement logic.

_The student will be able to demonstrate an understanding of, and the ability to evaluate, inductive arguments._

23. The student will be able to explain the differences between deductive and inductive logic.
24. The student will be able to evaluate the strength/weakness and cogency/uncogency of arguments from authority and induction by enumeration.
25. The student will be able to demonstrate and understanding of Mill’s Methods.
26. The student will be able to evaluate scientific reasoning and arguments from analogy.

_The student will be able to demonstrate an understanding of probability arguments._

27. The student will be able to explain three theories of probability.
28. The student will be able to use the rules of probability.
29. The student will be able to explain and use Bayes’s Theorem in evaluating philosophical arguments.

**Course Competencies:**

_The student will be able to define the major problem areas of philosophy as an academic discipline of philosophy._

19. The student will be able to discuss a problem in the meaning of “to know.”
20. The student will be able to discuss a problem in the meaning of “to be.”
21. The student will be able to discuss a problem in the meaning of “the good.”
22. The student will be able to discuss a problem in the art of logical reasoning.

_The student will be able to recognize and discuss basic concepts of logical discourse._

23. The student will be able determine the validity and soundness of deductive arguments.
24. The student will be able to recognize argument forms and construct counterexamples.
25. The student will be able to recognize some “famous” argument forms.

_The student will be able to distinguish between arguments and non-arguments._

8. The student will be able to determine the strength and cogency of inductive arguments.
9. The student will be able to distinguish between an argument and an explanation, report, or illustration.
10. The student will be able to identify the premises and the conclusion of an argument.
11. The student will be able to construct a well-crafted argument.

_The student will be able to explain the relationship between logic and language._

12. The student will be able to relate logic, meaning, and emotive force.
13. The student will be able to distinguish between various types of definitions.
14. The student will be able to use definitions to evaluate arguments.

_The student will be able to recognize various types of informal fallacies (errors in reasoning)._ 

15. The student will be able to recognize and define fallacies involving irrelevant premises.
16. The student will be able to recognize and define fallacies involving ambiguity.
17. The student will be able to recognize and define fallacies involving unwarranted assumptions.

The student will be able to recognize and evaluate categorical syllogisms.
18. The student will be able to recognize the standard form, mood, and figure of categorical syllogisms.
19. The student will be able to use the traditional and the modern square of opposition as well as Aristotelian rules to evaluate the validity/invalidity of categorical syllogisms.

The student will be able to demonstrate an understanding of statement logic and truth tables as a method for evaluating arguments.
20. The student will be able to symbolize English arguments in statement logic.
21. The student will be able to construct truth tables for arguments in statement logic.
22. The student will be able to use truth tables to evaluate the validity/invalidity of arguments in statement logic.
23. The student will be able to use abbreviated truth tables to evaluate the validity/invalidity of arguments in statement logic.

The student will be able to demonstrate an understanding of, and the ability to evaluate, inductive arguments.
24. The student will be able to explain the differences between deductive and inductive logic.
25. The student will be able to evaluate the strength/weakness and cogency/uncogency of arguments from authority and induction by enumeration.
26. The student will be able to demonstrate an understanding of Mill’s Methods.
27. The student will be able to evaluate scientific reasoning and arguments from analogy.

The student will be able to demonstrate an understanding of probability arguments.
28. The student will be able to explain three theories of probability.
29. The student will be able to use the rules of probability.
30. The student will be able to explain and use Bayes’s Theorem in evaluating philosophical arguments.

ASSESSMENT OF LEARNER OUTCOMES:
Student progress is evaluated by means that include, but are not limited to, exams, written assignments, and class participation.

SPECIAL NOTES:
This syllabus is subject to change at the discretion of the instructor. Material included is intended to provide an outline of the course and rules that the instructor will adhere to in evaluating the student’s progress. However, this syllabus is not intended to be a legal contract. Questions regarding the syllabus are welcome any time.
Kansas City Kansas Community College is committed to an appreciation of diversity with respect for the differences among the diverse groups comprising our students, faculty, and staff that is free of bigotry and discrimination. Kansas City Kansas Community College is committed to providing a multicultural education and environment that reflects and respects diversity and that seeks to increase understanding.

Kansas City Kansas Community College offers equal educational opportunity to all students as well as serving as an equal opportunity employer for all personnel. Various laws, including Title IX of the Educational Amendments of 1972, require the college’s policy on non-discrimination be administered without regard to race, color, age, sex, religion, national origin, physical handicap, or veteran status and that such policy be made known.

Kansas City Kansas Community College complies with the Americans with Disabilities Act. If you need accommodations due to a documented disability, please contact Director of the Academic Resource Center, in Room 3354 or call at (913) 288-7670.
Learning Outcomes

Discipline knowledge and content mastery is expected of all graduates. More specifically, KCKCC is committed to the Learning Outcomes listed below. We believe that competence in the Learning Outcomes is essential for the success of graduates and will enhance their ability to become contributing members of our increasingly complex world. These areas of knowledge and skills are equally valid for all KCKCC graduates, whether they transfer to a four-year college or pursue a career after leaving college.

General Education Learning Outcomes

Communication Learning Outcomes

The learner will have the ability to express, interpret, and modify ideas/information effectively (both written and oral), including but not limited to reading text accurately and correctly; writing with a clear purpose and effective organization; speaking effectively using appropriate styles that suit the message, purpose, and content; and employing active listening techniques.

Computation Learning Outcomes

The learner will have the ability to understand and apply mathematical concepts and reasoning using numerical data.

Critical Reasoning Learning Outcomes

The learner will understand inductive and deductive reasoning and have the ability to define problems and use data (qualitative and quantitative) to make complex decisions utilizing analysis, synthesis, and evaluation skills.

Technology and Information Management Learning Outcomes

The learner will have the ability to define, collect, organize, analyze, and evaluate information from a variety of sources. The learner will also have the ability to understand basic technology concepts and functionality in order to use technology as a tool to locate and retrieve information.

Community and Civil Responsibility Learning Outcomes

The learner will demonstrate knowledge, awareness, and understanding of diverse ideas, values, and perspectives of a culturally diverse world; an understanding of the ethical issues and values that are prerequisites for making sound judgments and decisions; a recognition of the obligation to become actively involved as a contributing member of the community; and a sensitivity to the awareness of aesthetic expression.

Personal and interpersonal Skills Learning Outcomes
The learner will have the ability to work cooperatively and productively with others; to understand and evaluate his/her capabilities; to manage his/her personal growth by setting realistic and appropriate goals.

SOCIAL AND BEHAVIORAL SCIENCES
STUDENT SUCCESS STRATEGIES

Know your teacher’s name.

Turn off your electronic devices in class/make paying attention to the work of the class your only concern.

Miss class only when you cannot attend/acquire missed information and materials ASAP.

Know your syllabus.

Know the attendance policy.

Know the requirements for tests and assignments.

Know information about final exam and make-up exams.

Know instructor’s position on use of Wikipedia or other online sources.

Know the instructor’s preferred writing style (APA, MLA, etc.).

Always know your grade.

Contact your teacher ASAP with concerns or questions.

Know the benefits of the academic resource center.

Know if your course has a practicum, service learning component, or other exception.

Use an academic planner.

Know the course withdrawal policy.

Know your instructor’s office hours and make appointments when necessary.

Know the school’s scholastic honesty policy.

Be familiar with the course learning objectives, course competencies, and the college’s 21st century learning outcomes for general education.