I. INTRODUCTION

A. The purpose of this course is to teach students the nature and methods of correct reasoning, deductive proof, inductive proof, fallacies, and arguments.

B. This Logic course is an elective course of considerable value to any student pursuing a liberal education or any student desiring to broaden his or her reasoning powers.

C. This course will meet the requirement for a humanities elective required of most degree plans.

II. OVERALL OR GENERAL ELECTIVES OF THE COURSE

Upon Successful completion of this course, Logic, the student will be able to:

A. Develop powers to evaluate arguments, more accurately, of justifications.

B. Identify the basis elements of deductive and inductive logic on an introductory basis.

C. Discuss distinguishing justification and progressing to argument diagram before proceeding to Modus Ponens, the Genetic Fallacy, and others.

D. Preparing students to learn when a justification is given and what is justifying what.

III. INSTRUCTIONAL MATERIALS

The instructional materials identified for this course are viewable through www.ctcd.edu/books

IV. COURSE REQUIREMENTS

A. Reading Assignments: The student is responsible for readings assigned by the instructor from the textbook. The order and division of the textbook will not
always be followed; therefore, close attention must be paid to what is actually assigned.

B. Research Paper: One research paper is due at the end of the semester. A list of topics will be provided by the instructor, however, if the student has a topic he/she is interested in that is not included on the list, it will be considered.

C. Class Performance: In an introductory course most students are encountering philosophy for the first time. For this reason, not much weight is placed on class performance. Make-up reading assignments can be arranged before or after the next attended class by the consulting instructor.

V. EXAMINATIONS

There will be only two examinations for the course: A mid-term exam and a final exam. Both exams will be objective in direction and consist of true/false, multiple choice and fill-in-the blank questions. The student has the option to take the exam in the written format or orally. The class period prior to each exam will be used as a review. If the student is absent, arrangements can be made for a make-up exam. Exams will be on only the materials covered in the textbook.

VI. SEMESTER GRADE COMPUTATIONS

The final grade is based on how well the student performs on the mid-term and final exam. The research paper is used as a tool by the instructor to differentiate borderline grades and can either lower or raise the final grade.

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<th>Mid-Term</th>
<th>Final</th>
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VII. NOTES AND ADDITIONAL INSTRUCTIONS FROM INSTRUCTOR

A. Withdrawal from Course: It is the student’s responsibility to officially drop a class if circumstances prevent attendance. Any student who desires to, or must, officially withdraw from a course after the first scheduled class meeting must file an Application for Withdrawal or an Application for Refund. The withdrawal form must be signed by the student.

Application for withdrawal will be accepted at any time prior to Friday of the 12th week of class during the 16-week fall and spring semesters. The deadline for sessions of other lengths is as follows:

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<th>Session Duration</th>
<th>Deadline</th>
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<td>16-week session</td>
<td>Friday of the 12th week</td>
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<td>11-week session</td>
<td>Friday of the 8th week</td>
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<td>8-week session</td>
<td>Friday of the 6th week</td>
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<td>5 ½ -week session</td>
<td>Friday of the 4th week</td>
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The equivalent date (75% of the semester) will be used for sessions of other lengths. The specific last day to withdraw is published each semester in the Schedule Bulletin.

Students who officially withdraw will be awarded the grade of “W”, provided the student’s attendance and academic performance are satisfactory at the time of official withdrawal. Students must file a withdrawal application with the college before they may be considered for withdrawal.

A student may not withdraw from a class for which the instructor has previously issued the student grade of “F” or “FN” for nonattendance.

B. **An Administrative Withdrawal:** An administrative withdrawal may be initiated when the student fails to meet College attendance requirements. The instructor will assign the appropriate grade on the Administrative Withdrawal Form for submission to the registrar.

C. **An Incomplete Grade:** The College catalog states, “An incomplete grade may be given in those cases where the student has completed the majority of the course work but, because of personal illness, death in the immediate family, or military orders, the student is unable to complete the requirements for a course…” Prior approval from the instructor is required before the grade of “I” is recorded. A student who merely fails to show for the final examination will receive a zero for the final and an “F” for the course.

D. Disability Support Services provides services to students who have appropriate documentation of a disability. Students requiring accommodations for class are responsible for contacting the Office of Disability Support Services (DSS) located on the central campus. This service is available to all students, regardless of location. Review the website at [www.ctcd.edu/disability-support](http://www.ctcd.edu/disability-support) for further information. Reasonable accommodations will be given in accordance with the federal and state laws through the DSS office.

**VIII. COURSE OUTLINE**

A. **Unit One:** Basic Logical Concepts

1. **Unit Objectives:** Upon successful completion of this unit, the student will be able to:

   a. Describe what Logic is.
   b. Identify arguments.
c. Evaluate arguments
d. Diagram arguments
e. Solve problems using Logic.

2. **Learning Activities**: The student will achieve these objectives by attending class lectures, completing exercises at the end of the chapters, open class discussion. Chapters 1-2.

3. **Unit Outline**: Follow the sequence of the unit objectives.

**B. Unit Two**: The Uses of Language

1. **Unit Objectives**: Upon successful completion of this unit, the student will be able to:
   
   a. Understand the basic functions of language.
   b. Know the focus of discourse
   c. Understand the kinds of definitions.
   d. Determine what a Fallacy is.

2. **Learning Activities**: The student will achieve these objectives by attending lectures, class discussion, and completion of exercises. Chapters 3-4.

3. **Unit Outline**: Follow the sequence of the unit objectives.

**C. Unit Three**: Deduction

1. **Unit Objectives**: Upon successful completion of this unit, the student will be able to:
   
   a. Define categorical propositions.
   b. Understand the theory of deduction.
   c. Explain the concept of existential import.
   d. Devise standard categorical syllogisms.
   e. Construct Venn Diagrams.

2. **Learning Activities**: The student will achieve these objectives by attending lectures, class discussion, completing exercises at the end of the chapters, reading and studying the textbook material. Chapters 5-7.

3. **Unit Outline**: Follow the sequence of unit objectives.

**D. Unit Four**: Symbolic Logic

1. **Unit Objectives**: Upon successful completion of this unit, the student will be able to:
a. Understand what symbolic logic is.
b. Define the basic symbols and use them in a coherent manner.
c. Construct statements using symbolic logic.
d. Relate symbolic logic to the laws of deduction.

2. **Learning Activities:** The student will achieve these objectives by attending lectures, class discussion and exercises using symbolic logic. Chapters 8-10.

3. **Unit Outline:** Follow the sequence of unit objectives.

E. **Unit Five:** Analogy

1. **Unit Objectives:** Upon successful completion of this unit, the student will be able to:

   a. Define an argument by analogy.
   b. Define an argument from analogy.
   c. Make casual connections.
   d. Be acquainted with the theory of John Steward Mill.

2. **Learning Activities:** The student will achieve these objectives by attending lectures, class discussion and completion of exercises at the end of the chapters. Chapters 12-13.

3. **Unit Outline:** Follow the sequence of unit objectives.

F. **Unit Six:** The Logic of Science

1. **Unit Objectives:** Upon successful completion of this unit, the student will be able to:

   a. Understand the values of science and probability.
   b. Distinguish between scientific and unscientific explanations.
   c. Know the seven stages of scientific investigation.
   d. Know the laws of probability.
   e. Know a priori constructs.

2. **Learning Activities:** The student will achieve these objectives by attending class lectures, class discussion and constructing scientific argument. Chapters 13-14.

3. **Unit Outline:** Follow the sequence of the unit objectives.