



BROWARD COLLEGE COURSE OUTLINE

LAST REVIEW: 2010-2011 **NEXT REVIEW: 2015-2016**

(i.e. 2006-2007)

(i.e. 2011-2012)

STATUS: A

(A, I, D)

COURSE TITLE: Introduction to Logic

COMMON COURSE NUMBER: PHI 1100

CREDIT HOURS: 3

CONTACT HOUR BREAKDOWN

(Per 16 week term)

CLOCK HOURS:

(Voc. Course ONLY)

Lecture: **48**

Lab:

Clinic:

Other:

PREREQUISITE(S): NONE

COREQUISITE(S): NONE

PRE/COREQUISITE(S):

COURSE DESCRIPTION *(750 characters, maximum):*

Study of the principles and evaluation of critical thinking including identification and analysis of fallacious as well as valid reasoning. Traditional and symbolic logic will be considered and foundations will be laid for further study in each area.

General Education Requirements – Associate of Arts Degree (AA), meets Area(s): Area 2F
General Education Requirements – Associate in Science Degree (AS), meets Area(s): Area
General Education Requirements – Associate in Applied Science Degree (AAS), meets Area(s): Area

UNIT TITLES

1. Basic Concepts of Logic
2. Language
3. Informal Fallacies
4. Categorical Propositions
5. Categorical Syllogisms
6. Symbolic Logic
7. Induction
8. Rhetoric

*** Complete the following only if course is seeking general education status ***

GENERAL EDUCATION Competencies and Skills *:

In the box to the right of the Competency/Skill, enter all specific **student learning outcome** unit numbers, as indicated in the course outline (i.e. 1.1, 2.7, 4.2, 4.0 and 5.12) that apply.

Course must include <u>all</u> of the following:	
1. Read with critical comprehension**	1.0, 2.0, 3.0, 8.0
2. Write clearly and coherently**	1.0, 2.0, 3.0, 8.0
3. Demonstrate literacy as appropriate within a given discipline**	Quan: 4.0, 6.0, 7.0 Sci: 7.2, 7.3
4. Apply problem solving skills or methods to make informed decisions in a variety of contexts**	4.0, 5.0
Course must include at least <u>one</u> of the following:	
5. Differentiate between ethical and unethical behavior	8.1, 8.2, 8.4
6. Demonstrate an understanding of the physical, biological, and social environments and how individual behaviors impact this complex system.	
7. Demonstrate an understanding of and appreciation for human diversities and commonalities.	8.3
8. Speak and listen effectively.	

**General Education Competencies and Skills endorsed by 2010-2011 General Education Task Force*

****Required Competencies**

1) Read with critical comprehension.

The student will be introduced to the basic texts, concepts, vocabulary, and methods necessary for developing an understanding of the discipline and meeting the required benchmarks as stated in the course outline.

2) Write clearly and coherently.

The student will demonstrate an understanding and mastery of subject matter in a variety of ways, including writing. Writing activities may include both graded and ungraded essays, short answer quizzes, summaries, reactions, journals, and various other reports.

3) Demonstrate and apply literacy across all the disciplines (indicate which ones apply).

- a) **Information literacy** means understanding how to locate needed information, using the appropriate technology for the task, managing and evaluating the extracted information and using it effectively and ethically.
- b) **Technology literacy** is the ability to responsibly and effectively use appropriate technology to access, manage, integrate, or create information, and/or use technology to accomplish a given task.
- c) **Workplace literacy** is having the appropriate knowledge and skills to communicate and work with others effectively and perform job duties, whether it is through the use of computers and/or other technology.
- d) **Cultural literacy** is recognizing, understanding, and appreciating the similarities and differences between one’s own culture and the cultures of others through a study of the arts, customs, beliefs, values, and history that define a culture.
- e) **Quantitative literacy** is having the ability to formulate, solve and interpret mathematical/statistical operations and graphical/tabular representations to make informed decisions.
- f) **Scientific literacy** means understanding the methodology and application of the scientific process, the physical and biological worlds, and recognizing that scientific knowledge is continuously updated or revised as new information is discovered.

4. Apply problem-solving skills or methods to make informed decisions in a variety of contexts.

The student will use acquired skills or methods to recognize, analyze, adapt, and apply critical thinking to solve problems and make informed decisions.

EVALUATION:

In the box to the right of the Methods of Assessment, enter all specific learning outcome numbers (i.e. 1.1, 2.7, 4.0, 4.2 and 5.12) that apply.

1. Portfolio	
2. Short essays	2.0, 3.0, 4.0, 7.0, 8.0
3. Research Papers	
4. Group projects	
5. Discussions (In class and online)	3.0, 7.0, 8.0
6. Multiple Choice tests	1.0, 2.0, 3.0, 4.0, 5.0, 7.0, 8.0
7. Presentations	
8. Service Learning Projects	
9. Quizzes (pop, announced, etc.)	1.0, 2.0, 3.0, 4.0, 5.0, 6.0, 7.0, 8.0
10. Take-home tests	
11. Summaries, critiques, and analyses	3.0, 7.0, 8.0
12. Reaction papers	
13. Surveys	
14. Performance	
15. Short answer tests	1.0, 2.0, 3.0, 5.0, 6.0, 7.0, 8.0
16. Classroom debates and colloquia	
17. Blogs, wikis, web pages	
18. Other (Please explain)	

Common Course Number:

UNITS

Unit 1 Basic Concepts of Logic

General Outcome:

- 1.0** The students should be able to identify the basic components of logic. The students should be able to recognize and evaluate the merit of common language arguments.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 1.1** Define logic.
- 1.2** Identify and understand the nature of argumentation and differentiate it from disciplines such as speech, and rhetoric.
- 1.3** Recognize and identify arguments formal and informal arguments.
- 1.4** Identify premises and conclusions as components of formal and informal arguments in written and verbal arguments.
- 1.5** Distinguish between inductive and deductive argumentation in written and verbal arguments.
- 1.6** Appraise the validity/invalidity of deductive arguments in written and verbal arguments.
- 1.7** Evaluate strong and weak inductive arguments in written and verbal arguments.
- 1.8** Compare the merits and weaknesses of each form of argumentation in written assignments and class discussions.
- 1.9** Evaluate the appropriate use of different forms of argumentation in written assignments and class discussions.

Common Course Number:

Unit 2 Language

General Outcome:

- 2.0** The students should be able to recognize the sundry uses of language in text and discussion.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 2.1** Differentiate between cognitive meaning and emotive meaning in text and oral arguments.
- 2.2** Differentiate between different uses of language.
- 2.3** Recognize the different types of definitions.
- 2.4** Analyze extended verbal and written arguments.
- 2.5** Critique extended arguments in written assignments and class discussion.

Common Course Number:

Unit 3 Informal Fallacies

General Outcome:

- 3.0** The students should be able to identify informal fallacies in written and verbal arguments. The students should be able to analyze informal fallacies in written assignments and class discussions.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 3.1 Recall and describe a variety of fallacies, e.g., fallacies of ambiguity, etc.
- 3.2 Identify a variety of fallacies in written and oral arguments.
- 3.3 Analyze and evaluate a variety of fallacies in both writing and discussion.

Common Course Number:

Unit 4

General Outcome: Categorical Propositions

- 4.0** The students should be able to identify various components of deductive arguments.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 4.1** Identify the quality, quantity, class relationships, and distribution of categorical propositions.
- 4.2** Recognize the traditional square of opposition.
- 4.3** Apply the rules of immediate inference.

Common Course Number:

Unit 5 Categorical Syllogisms

General Outcome:

5.0 The students should be able to determine the validity of deductive arguments.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 5.1** Determine the mood and figure of categorical propositions.
- 5.2** Apply the rules of syllogisms for validity.
- 5.3** Recognize the function of Venn Diagrams.
- 5.4** Identify and determine the validity of hypothetical, disjunctive and alternative syllogisms.
- 5.5** Translate ordinary language arguments into the standard form.
- 5.6** Establish uniform translations.
- 5.7** Explain the nature of enthymemes.

Common Course Number:

Unit 6 Symbolic Logic

General Outcome:

- 6.0** The students should be able to describe and apply the principles involved in symbolic logic.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 6.1** Apply the symbols of propositional logic.
- 6.2** Describe the function of truth tables.
- 6.3** Construct truth tables
- 6.4** Illustrate common valid argument forms on truth tables.
- 6.5** Illustrate common invalid argument forms on truth tables.
- 6.6** Translate English expressions into symbolic form.

Common Course Number:

Unit 7 Induction

General Outcome:

- 7.0** The students should be able to recognize and describe the nature of inductive arguments. The students should be able to analyze and appraise inductive arguments in both writing and class discussion

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 7.1** Identify and appraise analogical arguments.
- 7.2** Identify inductive generalization and hypotheses.
- 7.3** Describe and examine the scientific method.
- 7.4** Identify, compare, and appraise different conceptions of probability.

Common Course Number:

Unit 8 Rhetoric

General Outcome:

- 8.0** The students should be able to recognize and analyze the nature of rhetoric in both writing and class discussion.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 8.1** Describe and analyze devices used in advertising.
- 8.1.1** Describe the need for accuracy in advertising
 - 8.1.2** Identify commonly used fallacies in advertising
 - 8.1.3** Evaluate the appropriate use of rhetorical devices in advertising
- 8.2** Evaluate reported news and analyze the mass media.
- 8.2.1** Describe the need for accuracy in mass media
 - 8.2.2** Identify commonly used fallacies in mass media
 - 8.2.3** Evaluate the appropriate use of rhetorical devices in mass media
- 8.3** Identify, describe, and appraise the manner in which texts effect our world views.
- 8.4** Identify, describe, and appraise the manner in which valid arguments differ from persuasive arguments