

# ILLINOIS VALLEY COMMUNITY COLLEGE



## COURSE OUTLINE

DIVISION: Humanities, Fine Arts and Social Sciences

COURSE: PHL 1005 (Logic)

Date: 5/12/2016

Credit Hours: 3

Prerequisite(s): none

Delivery Method:  **Lecture**                    **0 Contact Hours (1 contact = 1 credit hour)**  
 **Seminar**                    **0 Contact Hours (1 contact = 1 credit hour)**  
 **Lab**                            **0 Contact Hours (2 contact = 1 credit hour)**  
 **Clinical**                    **0 Contact Hours (3 contact = 1 credit hour)**  
 **Online**  
 **Blended**

Offered:  **Fall**     **Spring**     **Summer**

IAI Equivalent – **Only for Transfer Courses**–go to <http://www.itransfer.org>: H4906

### CATALOG DESCRIPTION:

A study of the methods and principles used to recognize, analyze and evaluate arguments. The course focuses on formal methods of evaluating arguments, the language used in argumentation, and the fallacies of reasoning made in everyday arguments.

## GENERAL EDUCATION GOALS ADDRESSED

*[See last page for Course Competency/Assessment Methods Matrix.]*

### Upon completion of the course, the student will be able:

*[Choose up to three goals that will be formally assessed in this course.]*

- To apply analytical and problem solving skills to personal, social, and professional issues and situations.
- To communicate successfully, both orally and in writing, to a variety of audiences.
- To construct a critical awareness of and appreciation for diversity.
- To understand and use technology effectively and to understand its impact on the individual and society.
- To develop interpersonal capacity.
- To recognize what it means to act ethically and responsibly as an individual and as a member of society.
- To recognize what it means to develop and maintain a healthy lifestyle in terms of mind, body, and spirit.
- To connect learning to life.

## EXPECTED LEARNING OUTCOMES AND RELATED COMPETENCIES:

*[Outcomes related to course specific goals. See last page for more information.]*

### Upon completion of the course, the student will be able to:

The primary goal of the course is to provide you with the tools to become better thinkers and decision-makers. By the end of this course, you should be able to:

1. Identify potential obstacles to reasoning well and making good decisions
2. Distinguish between knowledge and opinion on the basis of an understanding of the sources of knowledge
3. Recognize and understand the limitations of our means of gaining knowledge
4. Distinguish different forms of argumentation and understand both their structure and the different criteria for evaluating them
5. Evaluate reasoning for a number of common informal reasoning fallacies
6. Understand the role of language and imagery in promoting or inhibiting good reasoning
7. Identify potential cognitive and motivational biases in decision making
8. Apply the above to improve your reasoning skills

## MAPPING LEARNING OUTCOMES TO GENERAL EDUCATION GOALS

*[For each of the goals selected above, indicate which outcomes align with the goal.]*

Goals	Outcomes
First Goal	
Goal # 1 - To apply analytical and problem solving skills to personal, social and professional issues and situations.	<ul style="list-style-type: none"> <li>• Outcome 1: Identify potential obstacles to reasoning well and making good decisions</li> <li>• Outcome 2: Distinguish between knowledge and opinion on the basis of an understanding of the sources of knowledge</li> <li>• Outcome 3: Recognize and understand the limitations of our means of gaining knowledge</li> <li>• Outcome 4: Distinguish different forms of argumentation and understand both their structure and the different criteria for evaluating them</li> <li>• Outcome 5: Evaluate reasoning for a number of common informal reasoning fallacies</li> <li>• Outcome 7: Identify potential cognitive and motivational biases in decision making</li> <li>• Outcome 8: Apply the above to improve your reasoning skills</li> </ul>
Second Goal	
Goal #2 - To communicate successfully, both orally and in writing, to a variety of audiences.	<ul style="list-style-type: none"> <li>• Outcome 5: Evaluate reasoning for a number of common informal reasoning fallacies</li> <li>• Outcome 6: Understand the role of language and imagery in promoting or inhibiting good reasoning</li> <li>• Outcome 7: Identify potential cognitive and</li> </ul>

	motivational biases in decision making <ul style="list-style-type: none"> <li>• Outcome 8: Apply the above to improve your reasoning skills</li> </ul>
Third Goal	

**COURSE TOPICS AND CONTENT REQUIREMENTS:**

Obstacles to Critical Thinking  
 Sources of Knowledge  
 General Guidelines for Arguments and Analysis  
 Deductive Reasoning  
 General Inductive Reasoning  
 Causal and Statistical Reasoning  
 Analogies  
 Explanatory Reasoning  
 Informal Reasoning Fallacies  
 Uses and Misuses of Languages in Critical Thinking  
 Effect of Storytelling on Critical Thinking  
 Cognitive Fallacies  
 Motivational Influences on Belief

**INSTRUCTIONAL METHODS:**

Course lecture  
 Group work focusing on practical application and evaluation of cases  
 Some A/V material

**INSTRUCTIONAL MATERIALS:**

Wanda Teays; Second Thoughts  
 Tom Gilovich; How We Know What Isn't So

reserve material at library and occasional handouts  
power point presentations  
occasional A/V material  
some online material recommended to students

### **STUDENT REQUIREMENTS AND METHODS OF EVALUATION:**

Written assignments of various types

    Some assignments evaluative—students must evaluate and assess arguments

    Some assignments reflective—students asked to look at and reflect on/evaluate their own beliefs and experiences through the lens of the course material

In-class group work on cases

Final article analysis that draws together all the of disparate topics into a full evaluation of a single work

### **OTHER REFERENCES**

Mahzarin R. Banaji & Anthony G. Greenwald; Blindspot

John A. Bargh; “Automaticity in Social Psychology”

Michael A. Bishop & J.D. Trout; Epistemology and the Psychology of Human Judgment

Judith Butler; Excitable Speech

Christopher Chabris & Daniel Simons; The Invisible Gorilla

Robyn M. Dawes; Everyday Irrationality; House of Cards; Rational Choice in an Uncertain World

Rene Descartes; Meditations on First Philosophy

David Faust et al; “Neuropsychologist’s Training, Experience, and Judgment Accuracy”

Tom Gilovich et al; Heuristics and Biases

Stephen Jay Gould; Full House

David Hume; An Enquiry Concerning Human Understanding

Daniel Kahneman; Thinking, Fast and Slow

Daniel Kahneman et al, eds.; Judgment Under Uncertainty

Berel Lang; “Language and Genocide”; “On the ‘the’ in ‘the Jews’”

Peter Lipton; Inference to the Best Explanation

Elizabeth Loftus; Eyewitness Testimony; Memory; “Memory for a Past That Never Was”; “When a Lie Becomes Memory”

Elizabeth Loftus & C. Laney; “Emotional Content of True and False Memories”; “Traumatic Memories Are Not Necessarily Accurate”

Logical Fallacies Information: [www.logicalfallacies.info](http://www.logicalfallacies.info)

Paul Meehl; Clinical versus Statistical Prediction

Paul Meehl et al; “Clinical versus Actuarial Judgment”

Paul K. Moser, ed.; Rationality In Action

Paul K. Moser & Arnold vander Nat, eds.; Human Knowledge

Paul K. Moser et al; The Theory of Knowledge

Richard Nisbett; The Geography of Thought

Richard Nisbett & Lee Ross; Human Inference

Richard Nisbett & Timothy DeCamp Wilson; The Person and the Situation; “Telling More than We Can Know”

Massimo Piattelli-Palmarini; Inevitable Illusions

Project Implicit: [www.implicit.harvard.edu/implicit/education.html](http://www.implicit.harvard.edu/implicit/education.html)

Willard Quine & Joe Ullian; The Web of Belief

Vincent Ryan Ruggiero; Beyond Feelings; Making Your Mind Matter

Theodore Schick & Lewis Vaughn; How to Think about Weird Things

Michael Shermer; Why People Believe Weird Things

Anthony Weston; A 21<sup>st</sup>-Century Ethical Toolbox; Creativity for Critical Thinkers; A Rulebook for Arguments

### Course Competency/Assessment Methods Matrix

Course Prefix, Number and Name	Assessment Options																															
<p>For each competency/outcome place an "X" below the method of assessment to be used.</p>	<b>Assessment of Student Learning</b>	Article Review	Case Studies	Group Projects	Lab Work	Oral Presentations	Pre-Post Tests	Quizzes	Written Exams	Artifact Self Reflection of Growth	Capstone Projects	Comprehensive Written Exit Exam	Course Embedded Questions	Multi-Media Projects	Observation	Writing Samples	Portfolio Evaluation	Real World Projects	Reflective Journals	Applied Application (skills) Test	Oral Exit Interviews	Accreditation Reviews/Reports	Advisory Council Feedback	Employer Surveys	Graduate Surveys	Internship/Practicum /Site Supervisor Evaluation	Licensing Exam	In Class Feedback	Simulation	Interview	Written Report	Assignment
<p>Assessment Measures – Are direct or indirect as indicated. List competencies/outcomes below.</p>	<b>Direct/ Indirect</b>	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	I	I	I	I	D	D							
<p>Identify obstacles to critical thinking</p>										X																	X					X
<p>Distinguish knowledge from opinion</p>		X								X																						X
<p>Recognize limitations on gaining knowledge</p>										X																						X
<p>Distinguish argument forms</p>		X																								X						X
<p>Evaluate different styles of argument appropriately</p>		X	X																							X						X

