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: 0 Contact Hours (1 contact = 1 credit hour)
- Blended: 0 Contact Hours (1 contact = 1 credit hour)

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.]

<table>
<thead>
<tr>
<th>Goals</th>
<th>Outcomes</th>
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<tbody>
<tr>
<td><strong>First Goal</strong></td>
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</table>
| Goal # 1 - To apply analytical and problem solving skills to personal, social and professional issues and situations. | - Outcome 1: Identify potential obstacles to reasoning well and making good decisions  
- Outcome 2: Distinguish between knowledge and opinion on the basis of an understanding of the sources of knowledge  
- Outcome 3: Recognize and understand the limitations of our means of gaining knowledge  
- Outcome 4: Distinguish different forms of argumentation and understand both their structure and the different criteria for evaluating them  
- Outcome 5: Evaluate reasoning for a number of common informal reasoning fallacies  
- Outcome 7: Identify potential cognitive and motivational biases in decision making  
- Outcome 8: Apply the above to improve your reasoning skills |
| **Second Goal** | |
| Goal #2 - To communicate successfully, both orally and in writing, to a variety of audiences. | - Outcome 5: Evaluate reasoning for a number of common informal reasoning fallacies  
- Outcome 6: Understand the role of language and imagery in promoting or inhibiting good reasoning  
- Outcome 7: Identify potential cognitive and... |
motivational biases in decision making

- Outcome 8: Apply the above to improve your reasoning skills

Third Goal

<table>
<thead>
<tr>
<th>COURSE TOPICS AND CONTENT REQUIREMENTS:</th>
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</thead>
<tbody>
<tr>
<td>Obstacles to Critical Thinking</td>
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<tr>
<td>Sources of Knowledge</td>
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<tr>
<td>General Guidelines for Arguments and Analysis</td>
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<tr>
<td>Deductive Reasoning</td>
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<tr>
<td>General Inductive Reasoning</td>
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<tr>
<td>Causal and Statistical Reasoning</td>
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<tr>
<td>Analogies</td>
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<tr>
<td>Explanatory Reasoning</td>
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<tr>
<td>Informal Reasoning Fallacies</td>
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<tr>
<td>Uses and Misuses of Languages in Critical Thinking</td>
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<td>Effect of Storytelling on Critical Thinking</td>
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<tr>
<td>Cognitive Fallacies</td>
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<td>Motivational Influences on Belief</td>
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</tbody>
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<tr>
<th>INSTRUCTIONAL METHODS:</th>
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<tbody>
<tr>
<td>Course lecture</td>
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<tr>
<td>Group work focusing on practical application and evaluation of cases</td>
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<tr>
<td>Some A/V material</td>
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<tr>
<th>INSTRUCTIONAL MATERIALS:</th>
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<tbody>
<tr>
<td>Wanda Teays; Second Thoughts</td>
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<tr>
<td>Tom Gilovich; How We Know What Isn’t So</td>
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</tbody>
</table>
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
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
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
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 21st-Century Ethical Toolbox; Creativity for Critical Thinkers; A Rulebook for Arguments
## Course Competency/Assessment Methods Matrix

### Course Prefix, Number and Name

|-------------------------------|---------------|--------------|----------------|---------|-------------------|---------------|---------|---------------|---------------------------------|------------------|-------------------------------|----------------------|------------|----------------|-------------------------|------------------|----------------|---------------------------------|------------------|---------------------------|------------------------|----------------|----------------|--------------------------------|--------------|-----------------|-----------|----------|-------------|------------|

For each competency/outcome place an “X” below the method of assessment to be used.

### Assessment Measures – Are direct or indirect as indicated. List competencies/outcomes below.

<table>
<thead>
<tr>
<th>Competency/Outcome</th>
<th>Direct/Indirect</th>
<th>Article Review</th>
<th>Case Studies</th>
<th>Group Projects</th>
<th>Lab Work</th>
<th>Oral Presentations</th>
<th>Pre-Post Tests</th>
<th>Quizzes</th>
<th>Written Exams</th>
<th>Artifact Self Reflection of Growth</th>
<th>Capstone Projects</th>
<th>Comprehensive Written Exit Exam</th>
<th>Course Embedded Questions</th>
<th>Observation</th>
<th>Writing Samples</th>
<th>Portfolio Evaluation</th>
<th>Real World Projects</th>
<th>Reflective Journals</th>
<th>Applied Application (skills) Test</th>
<th>Oral Exit Interviews</th>
<th>Accreditation Reviews/Reports</th>
<th>Advisory Council Feedback</th>
<th>Employer Surveys</th>
<th>Graduate Surveys</th>
<th>Internship/Practicum /Site Supervisor Evaluation</th>
<th>Licensing Exam</th>
<th>In Class Feedback</th>
<th>Simulation</th>
<th>Interview</th>
<th>Written Report</th>
<th>Assignment</th>
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<td>Recognize limitations on gaining knowledge</td>
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<td>Distinguish argument forms</td>
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<td>Evaluate different styles of argument appropriately</td>
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<td>Improve one’s own critical thinking skills</td>
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