

Course Number Course Title Credits

PHI-112 Critical Thinking 3.0

Hours: Co- or Pre-requisite Implementation
Lecture/Lab/Other --- Semester & Year

3/0/0

FA 2022

Catalog description:

Theory and practice of critical thinking through examples drawn from science, business, politics, media, literature, and art. Students apply logical techniques and attitudes of analysis and communication for constructive assessment, ethical reasoning and creative problem-solving by evaluating definitions, facts, arguments, causes, rhetoric, differences, and plans while avoiding common errors and biases. 3 lecture hours

General Education Category:

Course coordinator:

Goal 6: Humanities

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Required texts & Other materials:

Concise Guide to Critical Thinking, Second Edition, Lewis Vaughn, Oxford, 2020, ISBN: 9780197535790

Handouts & Websites as directed; for updated editions/similar text-check bookstore

Course Student Learning Outcomes (SLO):

Upon successful completion of this course the student will be able to:

- 1. Characterize and have begun developing the qualities, attitudes, and goals of critical Thinking individuals and groups ILGs: 1, 6, 9, 11) (PLOs 1, 2, 3, 4)
- identify, analyze, and evaluate situations using learned techniques and criteria in order to establish the quality, quantity and relevance of information available and needed, to justify forming new knowledge and drawing conclusions ILGs: 1, 6, 9, 11) (PLOs 1, 2, 3, 4)
- 3. Demonstrate knowledge and practice of the principles of good reasoning, including Detecting and avoiding factual errors, logical fallacies and cognitive biases ILGs: 1, 6, 9, 11) (PLOs 1, 2, 3, 4)
- 4. Recognize, assess and synthesize the basic moral dimensions of situations, the relevant

values, diverse stakeholders and ethical commitments, at issue into consistent and feasible judgment and agreement choices ILGs: 1, 6, 9, 11) (PLOs 1, 2, 3, 4)

5. Discover and examine the features of problems in order to offer self-consciously considered, creative and justified, solution options clearly, to effectively serve individual and collective decision-making ILGs: 1, 6, 9, 11) (PLOs 1, 2, 3, 4)

Course-specific Institutional Learning Goals (ILG):

Institutional Learning Goal 1. Written and Oral Communication in English. Students will communicate effectively in both speech and writing.

Institutional Learning Goal. 6. Humanities. Students will analyze works in the fields of art, music, or theater; literature; philosophy and/or religious studies; and/or will gain competence in the use of a foreign language. **Institutional Learning Goal 9. Ethical Reasoning and Action.** Students will understand ethical frameworks, issues, and situations.

Institutional Learning Goal 11. Critical Thinking: Students will use critical thinking skills understand, analyze, or apply information or solve problems.

Program Learning Outcomes for Liberal Arts (PLO)

- 1. Concept Knowledge Understand the vocabulary, methods, and major concepts present in the humanities, the social sciences, and the natural sciences
- 2. Communication Articulate complex ideas clearly and effectively, both verbally and in writing
- 3. Critical Thinking Perform a series of thinking tasks including speculation, analysis, and synthesis (i.e., abstract reasoning)
- 4. Research Methods Utilize research materials and methodologies

Units of study in detail – Unit Student Learning Outcomes:

Unit One: Critical Thinking Basics:

<u>Unit Two: Information - Sources and Relevance:</u> <u>Unit Three: Argument - Reason and Rhetoric:</u> <u>Unit Four: Creative & Ethical Problem-Solving:</u>

Units of Study in Detail

Unit I: Critical Thinking Basics (SLO# 1, 2, 3, 4, 5)

Learning Objectives

The student will be able to ...

- 1. Identify reasons for studying critical thinking, distinguishing it from mere thinking & it's importance
- 2. Distinguish between the general characteristics, skills & habits that critical thinkers develop
- 3. Explain key critical thinking concepts such as objectivity, relevance, validity, etc.
- 4. Identify and use the basic principles and practices of reasoning and evincing

Unit II: Information Sources and Relevance (SLO# 1, 2, 3, 4, 5)

Learning Objectives

The student will be able to ...

- 1. Identify and evaluate different sources of information, regarding issues of expertise and its lack, and accuracy, including Internet material
- 2. Understand how perception and memory function affects evidence recognition, including

social factors

- 3. Explain key truth, fact, and measurement criteria for relevance and application limits
- 4. Apply studied cognitive tactics build more reliability to avoid biases & pitfalls and provide remedies to evincing practices

Unit III: Argument - Reason and Rhetoric: (SLO# 1, 2, 3, 4, 5)

The student will be able to...

- 1. Identify and evaluate different forms and limits of definitions & arguments, including their respective uses, strengths and weaknesses
- Understand how wit, irony, emotion, sarcasm, humor, error, common sense, heuristics, diversity, statistics, pseudo-reasoning and biases can thwart and serve clear conclusions
- 3. Explain how the effects, recognized and not, of context, assumptions, goal-orientation, applied cognitive science and other factors can impede sound reasoning
- 4. Apply studied cognitive tactics, fallacy avoidance, precision in expression and consensus building to build more reliability into and acceptance of logical reasoning

Unit IV: Creative & Ethical Problem-Solving: (SLO# 1, 2, 3, 4, 5)

The student will be able to...

- Identify and evaluate common factual and dispositional sources of errors, problems and disagreements
- 2. Understand the difference between conditioned felt morality and deliberated ethics, the diverse familial and cultural backgrounds, and the major values & approaches to moral reasoning to specify the differences and commonalities between people and groups
- 3. Explain how establishing priorities, risks, tradeoffs, necessary vs, merely preferred means and ends, conformity and obedience patterns, and other factors can preempt moral and practical agreement
- Apply studied cognitive tactics, to creatively brainstorm to open possibilities, uncover Shared purposes, commitments and concerns, bridge needs to opportunities and other ways to build consensus, compromise and agreements

Methods of Instruction and Evaluation of Student Learning: In pursuit of the foregoing objectives, the course is primarily suited for at least a modified 'flipped' classroom. Based upon the reading and exercise work by students out of class, discussion, exercise review and individual and group exercises in class will serve to reinforce the critical thinking knowledge and methods the course covers. Liberal use of timely, germane handouts articles, news reports, and literature and other materials from various sources representing fields across the curriculum will be used to supplement the course's main texts and online exercises. Students are required to do a substantial amount of critical reading and writing both on their own and in class. Student learning of relevant materials and methods will be assessed in two general areas: content knowledge and applied techniques. A range of different assessments is employed to measure each of the four course objectives, particularly #4. The small group work will contribute to the student's ability and competence to work with others on practical knowledge building, and general and ethical decision-making matters.

Citizenship:

Course-long assessment of how students contributions to the class learning environment, that may include such factors as attendance (which will be in strict accordance with college policies), the amount and manner of class participation, helpfulness to other students' understanding, group work contributions, and oral presentations (may be broken out as a separate grading category), etc.

Homework: 6 or more short assignments aimed at having the student demonstrate that they did the

assigned reading assignment and can address the issues covered in their own words and

as exposed in their exercise work both online and not.

Quizzes: 8 or more brief assessments to allow students to demonstrate basic understanding of

course content knowledge in a specific unit of instruction

Tests: 2 or more class-length assessments to allow students to demonstrate mastery of course

content knowledge in covered units of instruction; Includes established & vetted national

CT assessment instruments

Examinations: 1 or more class-length assessments to allow students to demonstrate content knowledge

and philosophical reasoning as applied to units of instruction; includes one comprehensive

final exam.

Essays: 1 or more assessments to allow students to demonstrate critical reasoning and content

knowledge as applied to units of instruction. Well-argued papers are the first goal here, as a demonstration of reasoning informed by the ways and means of Eastern philosophy, though assigning and assessing in part a research dimension to the

assignment is integral.

Course Grade Breakdown:

Citizenship 10-15% (includes participation & presentations)

Homework 10-30% Quizzes 10-30%

Tests/Exams 30-50% (no one test/exam worth more than 20%)

Essays 30-50% (no one paper worth more than 25%)

Course = 100%

The particular grading breakdown is to be determined by each instructor and listed clearly in her/his syllabus.