GROSSMONT COLLEGE

 Official Course Outline

PHILOSOPHY 125 – CRITICAL THINKING

 1. Course Number Course Title Semester Units Semester Hours

 PHIL 125 Critical Thinking 3 3 hours lecture: 48-54 hours

 96-108 outside-of-class hours

 144-162 total hours

 2. Course Prerequisites

None

Corequisite

None

Recommended Preparation

None

3. Catalog Description

Students will focus on the development of fundamental critical reasoning skills and the application of those skills to important areas of life. The analysis and construction of both inductive and deductive arguments are emphasized. Students learn how to use reasoning skills to make sound decisions, evaluate claims and assertions and to avoid logical errors.

 4. Course Objectives

 The student will:

 a. Recognize components of arguments, types of arguments, and validity and soundness of arguments.

 b. Distinguish correct from fallacious forms of reasoning.

 c. Analyze and critique both inductive and deductive arguments.

 d. Construct arguments in symbolic form.

 e. Graphically represent abstract concepts.

 f. Internalize systems of symbolic representation.

 g. Deconstruct abstract concepts using systems of quantification.

 h. Evaluate ideas by way of measurable functions.

 i. Recognize and evaluate patterns in extensive arguments likely to be encountered daily.

 j. Analyze and defend against various forms of pseudo-reasoning and persuasion encountered in moral reasoning, casual arguments, explanations and psychological inducements.

 k. Utilize techniques for enhancing critical reading and writing skills.

 5. Instructional Facilities

 Standard lecture classroom

 6. Special Materials Required of Student

 None.

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7. Course Content

 a. The fundamentals of critical thinking in formal and informal contexts.

 b. Linguist components of arguments.

 (1) Sentences, statements, propositions.

 (2) Simple, complex statements.

 (3) Statement relations.

 c. The elements of arguments.

 (1) Premises, conclusions, indicator words.

 (2) Inductive and deductive arguments.

 d. Deductive reasoning.

 (1) Categorical logic.

 (a) Quality, quantity and distribution.

 (b) Square of opposition.

 (i) Contradictories.

 (ii) Contraries.

 (iii) Subcontraries.

 (iv) Subalteration.

 (c) Syllogism

 (i) Term, mood, figure.

 (ii) Venn diagrams.

 (iii) Exposition of valid forms.

 (iv) Enthymemes, sorites, hypothetical and disjunctive forms, dilemmas.

 (2) Symbolic logic.

 (3) Truth table construction.

 (4) Determining validity.

 (5) Tautology, contradiction, contingency.

 (6) Bioconditionals and material equivalence.

 (7) Formal proofs, rules of inference.

 e. Inductive reasoning.

 (1) Analogical arguments.

 (a) Probable inference

 (b) Refutation.

 (2) Inductive generalizations.

 (3) Cause and effect.

 (a) Method agreement.

 (b) Method of disagreement.

 (c) Method of residues.

 (d) Method of concomitant variation.

 (4) Science and hypothesis.

 (a) Evaluating explanations.

 (b) Ad hoc hypotheses.

 (5) Probability.

 (a) A priori theory.

 (b) Relative frequency theory.

 (c) Probability calculus.

 (d) Joint occurrences, alternative occurrences.

 f. Reconstructing and evaluating arguments.

 (1) Diagramming arguments.

 (2) Validity, soundness, weakness/strength

 (3) Strength, cogency.

 g. Common errors in arguments.

 (1) Formal fallacies.

 (2) Informal fallacies.

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 8. Method of Instruction

 a. Lecture.

 b. Group discussion.

 c. Field trip such as a visit to San Diego State University’s Philosophy Department.

 d. Individual instruction.

 e. Field observation. For example, students meet with their counterparts at Cuyamaca.

 9. Methods of Evaluating Student Performance

 a. Essays.

 b. Written assignments on a given topic while avoiding emotive language.

 c. Analyses of extended arguments.

 d. Periodic quizzes.

 e. Midterm exam and final exam, both of which will contain objective and essay components.

10. Outside Class Assignments

 a. Read text and supplementary materials.

 b. Writing assignments may take the form of exercises which apply critical thinking concepts, the construction of argumentation, analyses of essays, editorials, articles in various current publications.

11. Texts

 a. Required Text(s) one or more of the following:

 **(**1) Chaffee, John, *Thinking Critically*, 11th ed., Mason Ohio, Cengage Learning, 2015

 (2) Chatfield, Tom, *Critical Thinking*, Thousand Oaks, CA, Sage Publications, Ltd, 2018.

 (3) Moore, Brooke and Richard Parker. *Critical Thinking.* 9th edition. Mountain View, CA: Mayfield Publishing Co, 2016.

 (4) Copi, Irving M. and Carl Cohen. *Introduction to Logic*. 14th edition. Upper Saddle River, NJ: Prentice Hall, 2011.

 b. Supplementary texts and workbooks:

 (1) Graybosch, Anthony J., et al. *The Philosophy Student Writer’s Manual,* Boston, MA, Pearson, 2013

 (2) Waller, Bruce N. *Critical Thinking: Consider the Verdict.* 5th Edition. Upper Saddle River, NJ: Prentice Hall, 2004.

 (3) Martin, Robert. *There Are Two Errors in the Title of this Book.* 11th Edition, New York, NY: Broadfield Press, 2002.

 (4) Study guides accompanying any of the above texts.

 (5) Study packets constructed by the instructor which may include examples from everyday publications.

 Addendum: Student Learning Outcomes

Upon completion of this course, our students will be able to do the following:

* 1. Demonstrate their knowledge of the principles of correct reasoning and apply these principles to the evaluation of opinions and prospective beliefs
	2. Identify the basic inductive fallacies.
	3. Understand the distinction between strong and weak arguments.

Date approved by the Governing Board: December 11, 2018