

SYLLABUS

I. General Information:

Office: 205A, Language Hall; Hours: 11:00a-12:30pm TuTh, by appt, DGQ
Phones: (770) 784-8361 (O); (770) 939-3308 (H); (770) 784-8364 (Fax)
Class: 12:30-2:00pm TuTh; Credit Hours: 4.0; Classroom: Language – 201
Email address: JHKiersky@aol.com; or jkiersk@emory.edu; First Day: 8/31/2000
Schedule Change Period: 8/30-9/6/2000; Last Day of Classes: 12/12/00
Final Exam Date: Monday, 18 December 2000, 9am-12pm.

II. Textbooks:

J.H. Kiersky and N.J.Caste, *Thinking Critically: Techniques for Logical Reasoning*, from ITP/West Publishing is the only required textbook. It is available through the school bookstore. Used books and paperback are fine (and cheaper!) All other material will be provided by the professor through reproduced worksheets, puzzles, problems, etc. Assignments, tentatively, from the text, but in greater detail under VI of this Syllabus:

Part One: Chapters 1-4, and Chapter 5; Weeks 1-9; Test# 1 afterwards
Part Two: Chapters 6-9 Weeks 10-16; Test# 2 afterwards
Part Three: Chapters 12-14 Week 17; Test# 3 is Final Exam

III. Nature of the Course:

As an introduction to logic and critical thinking, this course may differ from most college courses you have had, insofar as most of these latter tend to be “content” oriented – teaching you *what* to think and relying chiefly on memory – whereas in this class we will be concentrating primarily on *how* to think. Since, presumably, thinking is something we have all done for a significant portion of our lives, why have a course in something we already know?

First of all, the question contains a gross assumption: just because we may have done it for years, do we “already know” how to think? Can’t we improve upon it? There are many more telling questions involved: do we all think or reason the same way (a course in *logic*, rather than *logics*, seems to suggest that we do. If so, does this mean we should all come to the same conclusions and for the same reasons? Throughout the course we will return to questions such as these; but we will also try to be mindful of some of the positive benefits of studying and refining our critical thinking skills. Some of the major practical benefits include

- (a) a sort of martial arts skill; strengthening our capacities to detect good and bad lines of thinking, both in ourselves and those we are bombarded by every day of our lives,
- (b) increasing our analytical skills which should help us in any field of study or endeavor,
- (c) learning techniques for raising our standardized test scores (especially the LSAT, the GRE, and the GMAT, plus several other ones),
- (d) improving our writing abilities and our organizational habits, to name a few.

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While the processes may be a welcome relief from rote memorization, they may turn out to be a bit unsettling at times, perhaps a bit disorienting, uncertain, and productive of an occasional headache or two. As the educational philosopher and reformer, John Dewey, once put the matter:

Let us admit the case of the conservative: if we once start thinking, no one can guarantee where we shall come out, except many objects, ends, and institutions are doomed. Every thinker puts some portion of an apparently stable world in peril and no one can wholly predict what will emerge in its place.

IV. Course Requirements:

- A. Course requirements will be developed as the class proceeds, altered in response to the demands of time and subject matter, and on the basis of class and individual needs. That being said, tentatively, there will be two equally weighted, mainly non-cumulative examinations, plus two equally weighted papers, as well as a few brief assignments in the areas of argument analysis and fallacies. Included within these examinations and assignments will be several argumentative essays, the nature of which will be explained during the first class period and periodically reinforced thereafter. Each of the four major assignments (the two papers and the two tests) will be worth 22.5 percent of your total grade. The remaining 10 percent will be based upon class participation.
- B. Class participation and attendance: Regarding the class attendance policy for this course, the following points need to be noted. (1) You will not be able to pass this course without attending class; in fact you will not be able to do it with an attendance record of less than 75 percent of the classes. (2) If you must miss more than two classes in a row (i.e., one week of class), you will need to contact the professor before returning to class to see what assignments must be completed and where we are headed. (3) Your class attendance and participation will count heavily in your favor (the ten percent factor) as will be explained during the first class period. Logic and critical thinking are not spectator sports. You must become involved if you are to get the full benefits from this course.
- C. Extra credit for anyone desiring it will be available in at least four different ways: (1) by compiling a "fallacies notebook" – to be explained by the professor, (2) by working additional extra-credit problems on tests and handouts, (3) by opening your mouth in class discussions (no, yawning does not count), and (4) by formulating a critical analysis of the class textbook (again to be explained during class one.)

V. Varia

- Pre-requisites: There are no Pre-requisites courses for this Philosophy 110 class.
- Make-up exams are a privilege, not necessarily a right. If you must miss an exam for some reason, be sure to contact the professor as soon as you become aware of this situation. (P.S. Make-up exams are deadly!)
- This is the general plan for the course. By way of further information, the last day for approved schedule changes, special registration, and for cancellation is September 6th.
- Incompletes may be given by the professor only in special hardship cases. Incompletes will not be used merely for extending the time for completion of course requirements.

- **Plagiarism** – the wrongful use and publication as one's own, of the ideas, or the expression of the ideas, of another person – will be penalized. The extensiveness and the nature of the offense will determine the penalty. Customarily, a student who plagiarizes will receive an "F" grade in the applicable course.
- **Fall Break** (is there such a thing?) occurs from October 16th through 17th. (Mon & Tues)
- Students should consult the general catalogue and the professor in case a hardship withdrawal is required. Hopefully this will not be apposite.
- The last day to withdraw without penalty is October 4, 2000.

VI. Class Assignments (tentatively)

- Week 1:** Introduction. What is logic? Critical Thinking? Syllabus Day. Interest Cards. General Overview of the Course.
Assignments: Paper# 1 and Worksheet# 1
- Week 2:** Disagreements and Arguments; Indicator Words, The "So-Because" Test,
Assignments: Skim Chapter 1; Read Chapters 2.1 and 2.2; Worksheets# 2, 3, and 4.
- Week 3:** Chapter Two in greater depth. Analyzing Arguments, Inductive and Deductive Reasoning; Logical Assumptions and Implications, Diagramming Techniques, Assignments: Finish reading Chapter 2; begin Chapter 3; Worksheet # 5; Chapter Exercises in 1, 2, and 3.
- Week 4:** Chapter Three; Assumptions and Implications; The Critical Technique in Greater Detail; Review the Exercises in Chapters One through Three; Finish Chapter 3; Worksheets 6 and 7.
- Week 5:** Analyzing and Diagramming more complex arguments; Worksheet# 9
Discussion in class of examples; finish exercises in Chapter 3.
Assignments: Read Chapter Five, beginning with the Case Study, Worksheets 8, 8-A, and finishing 9.
- Week 6:** Finish off first three chapters and the analysis of arguments; general Characterization of Fallacies; Liar's Paradox Problems and Self-Referential Problems. Assignments: Chapter 5.1 and exercises in 5.1
- Week 7:** Fallacies of Irrelevant Premises; both psychological and grammatical More Paradoxes of Self-Reference; Chapter Exercises in Class
Assignments: Worksheets #10 and 11; Chapters 5.2 and 5.3
- Week 8:** Chapter 5.2: Fallacies of Inadequate Premises and 5.3 Fallacies of Unfair Premises. Another angle on standardized test questions.
Assignments: Finish all exercises in Chapter 5; Worksheet# 12.
- Week 9:** Finish working problems with Fallacies; back to Chapter 4: Reasoning, Content and Meaning. Theories of Linguistic Meaning; Ambiguity and Vagueness; Types of Definitions; Criteria for Evaluating Definitions
Assignments: Exercises in Chapter 4.

- Week 10:** Review and Mid-Term Examination. Going over old test questions, Recapping the first nine weeks; in class practice and preview.
Exam #1
- Week 11:** Preview of Deductive Reasoning: Preview of Coming Attractions in Chh. 6 Through 9. Types of Formal Logic. Validity and Soundness.
Begin Chapter Six on Categorical Syllogisms
Assignment: Worksheet# 13, and Chapter 6.1, plus exercises.
- Week 12:** Categorical Statements and Categorical Syllogisms; Quantifiers, Class Terms, Relationships. Working exercises in class from chapter 6.
Assignments: Chapter 6.2 and the A-Level and B-Level exercises.
- Week 13:** Categorical Syllogisms and the Rule Method for Evaluating them
Analysis and understanding of the rules themselves.
Assignments: Finish 6.2, read 6.3 and Case Study
- Week 14:** Diagramming Techniques for Evaluating Categorical Syllogisms
Wider Applications of Diagramming Techniques;
Work Exercises in 6.3, A-Level and B-Level
Assignments: Finish working all problems and read Chapter 7.
- Week 15:** Immediate Inferences and Syllogisms in Greater Depth; The Square of Opposition; Inferences from Known Truth Conditions.
Assignments: Chapter 7.1; Worksheets 14 and 15.
- Week 16:** Immediate Inferences Continued: Conversion, Obversion, Contraposition
Enthymemes, Sorities, and Syllogisms in Ordinary Language.
Finish Chapter Seven, Read Chapters 8 and 9.
- Week 17:** Other Syllogistic Forms: Hypothetical or Conditional Syllogisms, Disjunctive Syllogisms, Conjunctive Argument Forms. Intertranslatability among diverse Forms; Valid and Invalid Forms; Wrap up of Deductive Techniques. Review for Test #2.
Assignments: Chapters 8 and 9; Worksheets 16, 17, and 18.
- Week 18:** Review; Test# 2
- Last Week:** Wrap Up, Argumentative Writing, Logic in Ordinary Life, Course Evaluations, Discussions of Final Paper, Last Minute Business
- Final:** Final Exam is scheduled for Monday, 18 December 2000, 9am – 12pm.

**** Whether you were in class for syllabus day or not, you are responsible for knowing the information contained hereupon.**

Deductive Logic in Analytical Reasoning and Puzzle Solving

Mr. Smith, Mr. Jones, and Mr. Robinson live in Chicago, Omaha, and Detroit, but not necessarily respectively. They are passengers on a train run by a three person crew, whose names are also Smith, Jones, and Robinson. They are the engineer, the fireman, and the brakeman, but again, not necessarily in that order. In addition, we know the following six facts:

1. Mr. Robinson lives in Detroit.
2. Mr. Jones never studied algebra in his life.
3. Smith beat the fireman at billiards.
4. The passenger whose name is the same as the brakeman's lives in Chicago.
5. The brakeman lives in Omaha.
6. The brakeman's nearest neighbor, one of the passengers, is a math professor.

Questions:

1. The passenger from Chicago is
(A) Mr. Robinson, (B) Mr. Smith, (C) Mr. Jones, (D) Jones, (E) Cannot be determined from the information given.
2. The passenger from Omaha is
(A) Mr. Robinson, (B) Mr. Smith, (C) Mr. Jones, (D) Could be A or B, (E) Not enough information to tell
3. The engineer has to be
(A) Smith, (B) Jones, (C) Robinson, (D) Mr. Robinson, (E) Mr. Smith
4. The fireman must be
(A) Smith, (B) Jones, (C) Robinson, (D) Mr. Robinson, (E) Mr. Jones
5. The brakeman must be
(A) Smith, (B) Jones, (C) Robinson, (D) Mr. Smith, (E) Mr. Jones
6. The engineer is from
(A) Chicago, (B) Omaha, (C) Detroit, (D) Either A or C, (E) Cannot be determined now