Philosophy 110-01J: Introduction to Logic   Dr. J.H. Kiersky
Oxford College; Spring, 2002
Professor

SYLLABUS

General Information:
Office: 205A, Language Hall; Hours: 10:00am-11:30pm Tu-T, by appt, DGQ
Phones: (770) 784-8361 (O); (770) 939-3308 (H);(770) 784-4660 or -8364 (Fax)
Class: 1:00-2:15pm TuTh;   Credit Hours: 4.0;   Classroom: Language 201
Email address: JHKiersky@aol.com; **or** jkiersk@emory.edu: **First Day: 01/17/2002**
Schedule Change Period: 1/15-1/23/2002;   Last Day of Classes: 4/30/02
Final Exam Date: Tuesday, 7 May 2002, 2pm to 5pm;   OPUS# 3896

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 1-8; Test# 1 afterwards
Part Two: Chapters 6-9   Weeks 9-13; Test# 2 afterwards
Part Three: Chapters 12-14   Weeks 14-15; then, Final

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 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,
increasing our analytical skills which should help us in any field of study or
endeavor,

learning techniques for raising our standardized test scores (especially the LSAT , the GRE, and the GMAT, plus several other ones),
improving our writing abilities and our organizational habits, to name a few.

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.

Course Requirements:

Course requirements subject to change and revision:
two examinations each worth 25% of your total grade
two papers each worth 20% of your total grade
quizzes or other assignments which may figure into 4. below
class participation, worth 10% of your total grade (see B. below and discussion)
The total here is 100 points, with 92.5 to 100 = A; 90-92.49 = A-; 87.5-89.9 = B+; 82.5-87.49 = B; 80-82.49 = B-; etc. However, class attendance and participation may override part of the above as explained in B. below.
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 70 percent of the classes. For example, once you have missed four class periods, you will lose a letter grade. Eight missed class periods costs another letter grade, again regardless of test and paper scores. (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.
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 -- neither does disrupting class), and (4) by formulating a critical analysis of the class textbook (again to be explained during class one.)

Varia

<u>Pre-requisites</u>: There are no Pre-requisites courses for this Philosophy 110 class.
<u>Make-up exams</u> 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 quite difficult!)
This is the <u>general plan for the course</u>. By way of further information, the last day for approved schedule changes, special registration, and for cancellation is January 23rd.
<u>Incompletes</u> 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.

<u>Plagiarism</u> the wrongful use and publication as ones 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.
<u>The Student Honor Code</u> is made a part of this Syllabus by attachment and discussion.
<u>Spring Recess</u> occurs March 11th through 15th (as if you needed reminding.)
Students should consult the general catalogue and the professor in case a <u>hardship withdrawal</u> is required. Hopefully this will not be apposite.
<u>The last day to withdraw without academic penalty</u> is February 20, 2002.
Mid-Term Reports are due into Records and Registration by March 6, 2002.

<u>Class Assignments (tentatively)</u>

Week 1: Introduction. What is logic? Critical Thinking? Syllabus Day.
Interest

Cards. General Overview of the Course.
Assignments: Writing Assignment# 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
Deduc-

tive Reasoning; Logical Assumptions and Implications,
Diagramming Tech-
niques, 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

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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

Techni-
  Analysis and understanding of the rules themselves. Diagramming

  Ques; Wider Applications; Assignments: Finish 6.2 and 6.3 and
Case Study

Week 14:   Immediate Inferences and Syllogisms in Greater Depth; The Square of

  Opposition; Inferences from Known Truth Conditions.
  Assignments: Chapter 7.1 and 7.2, all exercises; Worksheets 14 and
15.

Week 15:   Finishing Immediate Inferences and Chapter 7, then Other Syllogistic Forms, from Chh. 8 and 9. Read Chapters 8 and 9; Worksheets 16, 17, and 18.

Week 16:   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.
  Test #2

Week 17:   Wrap Up, Argumentative Writing, Logic in Ordinary Life, Course Evalua-

  tions, Discussions of Final Paper, Last Minute Business

Final: Final Exam is scheduled for Tuesday, 7 May 2002, 2   5pm.

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

RECAP of important dates:

Paper 1:   February 21st, 2002
Exam 1:   March 5th or 7th, 2002
Exam 2:   April 25th, 2002
Paper 2:   May 6th, 2002

Introduction to Logic   Dr. J.H. Kiersky
Worksheet #1
Professor

<u>Deductive Logic in Analytical Reasoning and Puzzle Solving</u>

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:

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

Questions:

The passenger from Chicago is
Mr. Robinson, (B) Mr. Smith, (C) Mr. Jones, (D) Jones, (E) Cannot be determined from the information given.

The passenger from Omaha is
Mr. Robinson, (B) Mr. Smith, (C) Mr. Jones, (D) Could be A or B, (E) Not enough information to tell

The engineer has to be
Smith, (B) Jones, (C) Robinson, (D) Mr. Robinson, (E) Mr. Smith

The fireman must be
Smith, (B) Jones, (C) Robinson, (D) Mr. Robinson, (E) Mr. Jones

The brakeman must be
Smith, (B) Jones, (C) Robinson, (D) Mr. Smith, (E) Mr. Jones

The engineer is from
(A) Chicago, (B) Omaha, (C) Detroit, (D) Either A or C, (E) Cannot be determined now