

SYLLABUS

Course Title: **Critical Reasoning**

Course Number: **PHIL 200 (Fall 2011)**

Ticket Number: **17265**

Prerequisites: Completion of GE Analytical Reading/Expository Writing; either GE Mathematics or MATH 210.

CONTACT INFORMATION:

Instructor: Dr. Weimin Sun
Office: Sierra Tower 505
Phone: 818-677-6461 (voice mail available at this number)
Email: weimin.sun@csun.edu (email checked everyday)
Office Hours: Tues. & Thurs. 2.00-3.30 PM, or by appointment

CATALOG DESCRIPTION:

Not open to students who have completed PHIL 100. Examination of the relationship between logic and language. Accelerated introduction to the concepts essential to the identification, analysis and evaluation of arguments, with attention to deduction, induction and common fallacies. Emphasis on the application of these concepts. (Available for **General Education, Basic Skills, Critical Thinking**)

INSTRUCTOR'S DESCRIPTION:

This course satisfies the Critical Thinking component of the Basic Skill section of the General Education Program, which recognizes critical reasoning as a fundamental competence. Courses in this section of General Education take reasoning itself as their focus. Their goals are to provide students with criteria and methods for distinguishing good reasoning from bad and to help students develop basic reasoning skills that they can apply both within a broad range of academic disciplines and outside the academic environment. Students are expected to acquire skill in recognizing the logical structure of statements and arguments, the ability to distinguish rational from non-rational means of persuasion, skill in applying the principles of sound reasoning in the construction and evaluation of arguments, and an appreciation of the value of critical reasoning skills in the pursuit of knowledge.

GOAL:

Students will analyze information and ideas carefully and logically from multiple perspectives and develop reasoned solutions to problems.

STUDENT LEARNING OUTCOMES:

Students will:

1. Explain and apply the basic concepts essential to critical examination and evaluation of argumentative discourse;
2. Use investigative and analytical thinking skills to examine alternative, explore complex questions and solve challenging problems;
3. Synthesize information in order to arrive at reasoned conclusions;
4. Evaluate the logic and validity of arguments, and the relevance of data and information;
5. Recognize and avoid common logical and rhetorical fallacies.

COURSE OBJECTIVES:

Students will be able to:

1. recognize an argument, identify its components, and evaluate its strength;
2. evaluate the reliability of various sources of belief, including media, expert, and personal experience;
3. recognize and avoid common logical and rhetorical fallacies;
4. recognize and evaluate deductive reasoning;
5. recognize and evaluate inductive reasoning and statistical reasoning;
6. recognize and evaluate basic scientific reasoning;
7. apply the truth table method and Venn diagram to check validity;
8. develop an attitude of critical thinking when evaluating statements and arguments.

The SLOs are targeted by the corresponding COs as follows:

SLOs	(1)	(2)	(3)	(4)	(5)
Course Objectives	1-6	1-7	2, 5, 6	1, 4-7	3

REQUIRED TEXTS:

The Power of Critical Thinking, 3rd edition, by Lewis Vaughn. Oxford University Press. 2010
ISBN: 978-019537792-7.

Course Requirements:

1. Studying the course materials diligently and regularly;
2. Working at the problem sets to master the materials;
3. Finishing all the required assignments.

Academic Honesty

Academic honesty is heavily emphasized at CSUN. Students are not allowed to consult textbooks and lecture notes during quizzes and exams. Students are encouraged to form study groups to study the course materials together. However, students cannot help each other out while taking the exam. In particular, **students cannot copy other students' quizzes/exams or**

let their quizzes/exams be copied, and cannot disclose the content of quizzes or exams to any other students under any circumstances. Any violation of such policies may result in failing the class and is subject to further disciplinary actions from the University.

For detailed information on CSUN policy on academic dishonesty, please refer to catalog: <http://www.csun.edu/catalog/appendices.html#E2>.

Strategies for Success in this class:

1. Study the book and the lecture slides **carefully** and study them **regularly**: critical reasoning courses have a strong degree of continuity – if you are not doing well in the beginning, it will be very difficult for you to do well on the later part of course materials as they rely on your earlier knowledge.
2. Attempt all the quizzes. Take the quizzes seriously. Even though they won't count a lot toward your grade, they are the best preparation for the exams. If you make a mistake in your quizzes, try to figure out why you get it wrong, and then avoid the same mistake in the exams. If you cannot figure out why, come to see me.
3. Come to my office if you have any questions, concerns, or simply feel that you are struggling in class.
 - a. This is a difficult class for many students! Many students have failed in the past. If you feel you are struggling, you are not alone and you need to seek help at the earliest stage.
 - b. From my past experiences, it is quite clear that the students who came to my office often had improved significantly. You may struggle with a question for a couple of hours, yet all you need is a hint to see the light. If you cannot make it to my regular office hours (see the top of syllabus), make an appointment with me.

Course Grading:

- Participation (including attendance) 5%
 - 12 Quizzes 25%
 - Two exams 70 % (35% each)
 - Exams are not cumulative.
 - Quizzes are the best study guide for the exams. There will be no makeups for exams or quizzes.
 - Extra credits may be available.
 - Final grade is a weighted sum of all the above components calculated by percentage.
- The final letter grade will be based on the following table:

Final %	≥92	90-91.9	88-89.9	82-87.9	80-81.9	78-79.9	72-77.9	70-71.9	68-69.9	62-67.9	60-61.9	<60
Letter Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	F

COURSE SCHEDULE and READING ASSIGNMENTS

Date	Content	Reading Assignment (page numbers refer to the Vaughn Textbook)
Week 1: 8/30	Introduction to the course;	Course Syllabus;
9/2	Introduction to Critical Thinking: Basic Notions	Ch. 1: pp. 3-17;
Week 2: 9/6	Psychological obstacles to Critical Thinking	Ch. 2: pp. 36-49
9/8	Quiz 1 Philosophical obstacles to Critical Thinking	Ch. 2: pp. 49-53
Week 3: 9/13	Quiz 2 Argument Basics and Validity	Ch. 3: pp. 68-79
9/15	Argument Forms (logic forms) Argument Analysis	Ch. 3: pp. 82-109
Week 4: 9/20	Quiz 3 Evaluating reasons: who is a true expert?	Ch. 4: pp.124-139
9/22	Pitfalls in Personal Experience Analyzing Media	Ch. 4: pp.139-161
Week 5: 9/27	Quiz 4 Common Fallacies in the Reasoning-1	Ch. 5: pp.176-188
9/29	Common Fallacies in the Reasoning-2	Ch. 5: pp. 189-202
Week 6: 10/4	Quiz 5 Statistical Reasoning-1: basic concepts	Ch. 8: pp. 284-297
10/6	Statistical Reasoning-2: fallacies in statistical reasoning	Ch. 8: pp. 284-297
Week 7: 10/11	Quiz 6 Analogical reasoning	Ch. 8: pp. 302-307
10/13	Causal Reasoning	Ch. 8: pp. 311-327

Week 8: 10/18	Quiz 7 Midterm Exam Review	Recommended: all above
10/20	Midterm Exam	
Week 9: 10/25	Propositional Logic-1: Logical connectives and the Truth table	Ch. 6: pp. 217-228
10/27	Propositional Logic-2: Symbolization	Supplementary Lecture
Week 10: 11/1	Quiz 8 Propositional Logic-3: Validity check with Truth Table	Ch. 6: pp. 231-238
11/3	Categorical Logic-1: Categorical Statements	Ch. 7: 251-262
Week 11: 11/8	Quiz 9 Categorical Logic-2: Venn Diagram Syllogism	Ch. 7: pp. 264-270
11/10	Validity check with Venn Diagram	Ch. 7: pp. 271-276
Week 12: 11/15	Quiz 10 Scientific Reasoning-1: Inference to the Best Explanation	Ch. 9: pp. 341-349
11/17	Scientific Reasoning-2: Five Criteria of Adequacy	Ch. 9: pp. 353-370
Week 13:	Thanksgiving Break;	
Week 14: 11/29	Quiz 11 A Primer on Scientific Method	Ch. 10: pp. 390-400
12/1	Judging Scientific Theories Evolution vs. Creation	Ch. 9: pp. 372-380 Ch. 10: pp. 401-411
Week 15: 12/6	Quiz 12 Judging Weird Theories: Crop circle and Talking with the Dead	Ch. 10: pp.416-436
12/8	Exam II review	All since Midterm Exam
TBA	Final Exam (Final Exam Week)	

Note: This schedule is tentative and is up to revision. Such revisions (if any) will be announced in class.