SYLLABUS

Course Title: **Critical Reasoning**

Course Number: **PHIL 200 Online (Spring 2011)**
Ticket Number: **12950**

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:	Wed. & 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.

Earlier editions (such as the 2nd edition) are acceptable.

Online Course:

This is an Online Course with Moodle: all the course materials and assignments will be delivered online via Moodle, accessed at http://moodle.csun.edu/. On each Monday of the week (except the weeks when we have an exam) I will post a new lecture, and on Wednesday I will pose a practice quiz, and on Friday I will post the actual quiz. Discussion forums are also available for you to post questions and concerns.

This course will be available to you once you are enrolled in this class. Periodically you will also get email notifications about class news, and all emails will be sent to your CSUN account. Please check it regularly or have it forwarded to your regular email.

If you are not familiar with Moodle, please visit http://www.csun.edu/at/teaching/tools/moodle.html for more information. In particular, visit http://www.csun.edu/at/training/moodle/lynda.com/students/ for a two-hour video training class.

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.

Strategies for Success in this class:

1. This is an **Online Logic** class, which is unique in a couple of aspects. Logic is a difficult subject that needs a lot of your time and attention to details. To make the class online does not imply that this class does not need an equal amount of work.
    a. The online aspect of class has two benefits: it fits your schedule better, and it gives more chance of practices. Logic is about skill development, and practices are of crucial importance for skill developments.
    b. Yet some students may find it better to learn logic in person. If that is the case, please do consider taking a regular critical reasoning class, instead of an online one.
    c. In order to succeed in this class, be sure to follow the following strategies.
2. 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 materials since they rely on earlier knowledge.
    a. Find your pace of work in the week. Work out your schedule with this class. Finish everything by the end of the week. Do not procrastinate!
3. Study the lecture and textbook first; then work on the practice quizzes; analyze your answers, and pay particular attention to the parts you have got wrong. It is very important to be able to learn from one's own mistakes. If you still could not understand, come to my office or post your questions to Moodle forum. After you feel completely confident, attempt the actual quiz.
    a. Make sure you finish all the assignments on time. With the online classes, self-discipline is a necessity.
4. 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. I have taught this class many times, and my experiences say that the students who did come to my office often came away with clear improvements. Sometimes you may struggle with a question for a couple of hours, yet all you need is just one hint to get it right.

Course Grading:

- 12 Quizzes 30%
- 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 might 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 (Chapters refer to the Vaughn Textbook; lectures are online)**
Week 1: 1/24	Introduction to the course;	Ch. 1 The Power of Critical Thinking Recommended: Course Syllabus; Lecture 1;
Week 2: 1/31	Basic Notions Quiz 1	Ch. 2: Obstacles to Critical Thinking Lecture 2;
Week 3: 2/7	Argument Basics & Argument Analysis Quiz 2	Ch. 3 Making Sense of Arguments Lecture 3;
Week 4: 2/14	Reasons for Belief (and Doubt) Quiz 3	Ch. 4 Reasons for Belief and Doubt Lecture 4;
Week 5: 2/21	Common Fallacies in the Reasoning Quiz 4	Ch. 5 Faulty Reasoning Lecture 5;
Week 6: 2/28	Statistical Reasoning Quiz 5	Ch. 8: Inductive Reasoning – Enumerative Induction (pp. 284-297) Lecture 6;
Week 7: 3/7	Analogical Induction; Causal Reasoning Quiz 6	Ch. 8: : Inductive Reasoning – Analogical and Causal (pp. 302-327) Lecture 7;
Week 8: 3/14	**Exam I**	Recommended: All above Lecture 8 (review);

Week 9: 3/21	Propositional Logic-1: Logical connectives and the Truth table Symbolization Quiz 7	Ch. 6 Propositional Logic- Part I: (pp. 217-228) Lecture 9;
Week 10: 3/28	Propositional Logic-2: Validity check Quiz 8	Ch. 6 Propositional Logic- Part II (pp. 231-238) Lecture 10;
Spring Break	No class.	No Reading required;
Week 11: 4/11	Categorical Logic-1: Categorical Statements Quiz 9	Ch. 7 Categorical Logic – Part I (pp. 251-268) Lecture 11;
Week 12: 4/18	Categorical Logic-2: Validity check with Venn Diagram Quiz 10	Ch. 7 Categorical Logic – Part II (pp. 269-276) Lecture 12;
Week 13: 4/25	Scientific Reasoning—Inference to the Best Explanation Quiz 11	Ch. 9: Inference to the Best Explanation Lecture 13;
Week 14: 5/2	Evaluation of Hypothesis Quiz 12	Ch. 10: Judging Scientific Theories Lecture 14;
Week 15: **5/9**	**Prep for Exam II**	Recommended: everything since Exam I; Lecture 15 (review);
5/14-15	**Exam II**	

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