Critical Thinking and Methods of Inquiry
LDSP 250. 01, Spring 2012
Prof. Joanne B. Ciulla

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Class: Jepson Hall room 101
M/W 10:30-11:45
Office Hours: By Appointment

Purpose
Critical thinking is about self-knowledge, truth, argumentation, and what constitutes legitimate information. We live in a society that mass-produces information. Since some of it is false or misleading, we need to critically appraise the quality of all the information that we encounter – whether it comes from the Internet, the media, or the classroom. The ability to think critically and solve problems is important for leaders, followers, and life in general. Critical thinking is a fundamental leadership competency. Leaders must often make decisions about things that are outside of their expertise. They must make good judgments the quality of experts, information, and arguments. Leaders also need to know how to develop their own persuasive arguments.

Perhaps the most important feature of critical thinking is that it develops imagination and vision. Some people become leaders because of their personality, desire, or “people” skills.” Others become leaders because of their ideas and ability to create a vision, plan for the future, and anticipate and solve problems. This course aims to teach students how to seek the truth, think, and communicate using persuasive well-grounded written and oral arguments.

Course Objectives
In this course students will learn how to:

• Critically read, listen, and write
• Separate bad information from good information
• Analyze arguments and construct cogent arguments
• Anticipate and solve problems in complex systems
• Reflect on their own world view
• Develop disciplined methods of inquiry

Course Description
In this course students learn by doing. Class consists of a number of written, oral and in class exercises. The academic components of this course are critical reading, listening and writing, epistemology, informal logic, systems theory, and research methods. Students will analyze ideas in the leadership literature, critique and construct arguments, and apply systems thinking to real world problems. They will examine the ways that powerful groups and people sometimes shape our notions of truth.
Required Texts
4. Blackboard (BB)

Requirements and Grading
(20%) Exam I
(20%) Exam II
(10%) Analysis I
(15%) Analysis II
(15%) Systems Research Paper
(5%) Presentation of Systems Analysis
(15%) Class Participation

Policies for Participation in This Course
Exemplary class participation consists of specific and insightful discussion of the readings, input from homework assignments, good questions concerning the readings, and your overall contribution to the class’s learning. It also includes integrity in the way that you do your assignments; how you work with your paper partner; adherence to class times, due dates, and other conditions and instructions laid out in this syllabus and the attached course assignments. All electronic devices must be turned off at the beginning of class. Unless there is a pressing need to get up during class, students should not leave the room until the class is over. All of the above conditions will affect your participation grade. This syllabus should be regarded as a contract. Due dates for papers and exam dates are set, so please mark them down on your calendar. Late papers will not be accepted, even if they are the result of computer problems. Do not email your papers unless you receive permission from the instructor. Note that all of your grades will be entered as percentages. The values are as follows:

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Course Outline

I. Thinking About Thinking

Jan. 9  Introduction:
Left brain /right brain exercise

Jan. 11  The Nature of Truth
Read: René Descartes, “Meditation I,” From The Meditations, tr. John
Veitch, 1901. BB
“Brain Scams” from Delusions of Gender, by Cordelia Fine (2010) BB
On Bullshit by Harry Frankfort (2005) BB

Jan. 16  Good and Bad Reasoning I
Read: Cavender/Kahane 1-14

Jan. 18  Good and Bad Reasoning II
Read: Cavender/Kahane 15-29

Jan. 23  Inductive and Deductive Reasoning
Read: Cavender/Kahane31-45
Analysis I due

II. Thinking About Fallacious Reasoning

Jan. 25  Fallacious Reasoning I
Read: Cavender/Kahane 47-60

Jan. 30  Fallacious Reasoning I
Read: Cavender/Kahane 60-70 do all of the exercises

Feb. 1  Fallacious Reasoning II
Read: Cavender/Kahane 73-86

Feb. 6  Fallacious Reasoning II
Do exercises: Cavender/Kahane, 86-90

Feb. 8  Fallacious Reasoning III
Read Cavender/Kahane 93-115 do exercises

Feb. 13  Fallacious Reasoning III
Do exercises: Cavender/Kahane 116-121

Feb. 15  Psychological Impediments to Cogent Reasoning
Read Cavender/Kahane 123-148

Feb. 20  Review for Exam I
**Analysis II due**

*Feb. 22*  
Exam I

**III. Thinking About Statistics and Systems**

*Feb. 27*  
Samples, Averages, and Other Misleading Things about Statistics  
Read: Huff 7-59

*Feb. 29*  
Misleading Statistics I  
Huff, 60-99

*Mar. 5&7*  
Spring Break

*Mar. 12*  
Misleading Statistics II  
Huff, 100-142

*Mar. 14*  
The Nature of Systems  
Read: Dietrich Dörner, The Logic of Failure (1996) Chapters 1&2 BB

**IV. Thinking About Methods of Inquiry**

*Mar. 19*  
Scientific Method  
Read: “The Priority of Paradigms,” from The Structure of Scientific Revolutions, by Thomas Kuhn, 1970. BB  
“What is Science?” “Facts,” and “Where do Hypotheses Come From?” by Martin and Inge Goldstein from How We Know, 1978. BB

*Mar. 21*  
Method in the Social Sciences  

*Mar. 26*  
Historical Method  
Readings TBA

*Mar. 28*  
Interpreting Texts  
Read: “Language” in Cavender/Kahane 151-175  
Other readings TBA

*Apr. 2*  
Truth, Belief, and the Leader/Follower Relationship  
Read: Akhenaten (the whole book)
Assignments

Analysis I: The Anti-Hitler Speech

Read the “Nation and Race,” a chapter from Adolf Hitler’s Mein Kampf. It is on pp. 221-223 of Kahane.

Imagine that it is 1939 and you are the mayor of a small town in Germany. You are appalled by the ideas in Mein Kampf because they are immoral and scientifically questionable. The book has become a best seller in your town. *You have called a meeting to explain to the town’s people why Hitler’s argument concerning the master race is fallacious. Write a 3-4-page speech that discusses the major premises of Hitler’s essay and the logical problems with the arguments in the essay.

Unlike the way things often are in real life, the success of your presentation to the community rests on your ability to logically dissect Hitler’s argument. In other words, pretend that the force of reason will prevail. Also, do your best to make the speech interesting and understandable to a broad audience. Use common sense to test out what Hitler says about races and species. Think about simple examples that support what you say or contradict Hitler. Do his claims make sense, given an ordinary person’s observation of the world? Do not use any information about genetics that did not exist prior to 1939. Do not use any outside references.

It is useful to use the margin or summary method to isolate the key premises that need to be examined. (Cavender/Kahane chapter 8 will help you with this.) When you refer to specific passages in Hitler’s essay, put the page numbers in parentheses at the end of the sentence. Your paper should be typed and double-spaced. The pages should be numbered at the bottom. Failure to follow these instructions will result in a lower grade. This paper is due on January 23. Late papers will not be accepted.

Analysis II

The topic of this paper will be handed out in class. This paper is due on February 20.
This project will be done in pairs. You may either pick your partner or be assigned a partner. The project includes a paper and a class presentation of the paper.

1. Find your topic and have it approved by me, either via email, in class, or in my office. The most difficult and important part of doing this assignment is finding a topic. You must have your paper topic approved by the instructor on or before March 21. In this paper, you will have to find a case where, as Dörner says, “things went wrong.” This may be the case of a misguided public policy, an accident, a decision made to improve something that actually made it worse or created another problem, or a well intended but disastrous leadership decision. You may not use a decision from history. It has to be an event in the news that has occurred in the last 5 years and this has to have leaders who are making decisions in it.

2. After you have an approved topic, you will do research on it. Then, using the concepts from the book The Logic of Failure, you will discuss the following:

I. Description
What were the details of the problem that was being addressed?  
Who were the people involved in making the decision?  
What was the decision making process?  
What was the climate of the organization, group, individual, etc. like when the decision was being made?

II. Analysis of the Failure
What made the decision or policy fail? What were its unintended consequences?  
In retrospect, what was wrong with the planning and decision process?  
What was wrong with the way that the way people framed or modeled the problem?  
What was wrong with the way that the way people framed or modeled the solution?  
What, if anything, was wrong with the decision makers’ state of mind?  
What if anything was wrong with the information they used? What issues or variables did they fail to take into consideration?

III. Discussion of How the Failure May have been prevented
Use the material from the book to put together a plan that would have prevented or anticipated the failure. (This part can also be integrated into your discussion in II.)

3. Papers should be 8-10 pages long. You must use at least 8 references for this paper. The paper should be double-spaced, the pages numbered, and you will include footnotes or endnotes. The format for the citations is Turabian/Chicago. This style sheet is on BB. If you use a reference that is not cited in the footnotes, please include your bibliography. Failure to follow any of these instructions will result in a lower grade. This paper is due on April 4. Late papers will not be accepted.