

Syllabus

Psy 330 Thinking Spring 1992

1.0 Goal

Our goal is to improve your thinking skills. We try to do this in two ways. One is to inform you about what psychologists have learned about thinking and to acquaint you with techniques based on this knowledge. The second way is to provide you with exercises in applying these techniques. The exercises will be four short papers which apply the tools you will be learning to specific issues, claims, or problems.

2.0 Catalog Information

Psy 330 Thinking CRN 4532 03 Credits
Approved for Social Science group
8:00-9:20am UH 150 Columbia

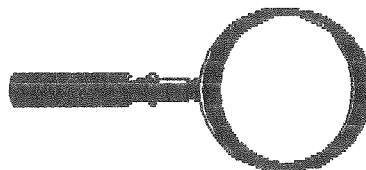
3.0 Instructors

Instructor: Ray Hyman, 323 Straub, 64910
Office Hours: M 2:00-3:30pm
F 1:00-2:30pm

TA: David McCone, 383 Straub,
64964 (x0)
Office Hours: TBA

4.0 Text

Zechmeister, E.B., & Johnson, J.E. (1992).
Critical Thinking: A Functional Approach. Pacific
Grove, CA: Brooks/Cole.



5.0 Requirements

Exercises: The exercises consist of four short papers. The first three papers should be two to three pages in length. The last paper should be 3-5 pages long. Each paper will deal with an assigned example that you will evaluate according to the framework given at the end of this syllabus. You will also find Exercise #1 at the end of this syllabus.

Examinations: Both the Midterm [April 30, 1992] and the Final Examination [Friday, June 12, 1992 @ 8:00 a.m.] will consist of multiple choice items.

Please note that the Final Examination is on Friday, the last day of examination week. If you cannot take the final at that time, please do not take this course. No alternatives will be available.

Research Participation: The Psychology Department requires students in this course to participate as subjects in three psychology experiments. However, you have the option of using this requirement in the place of one the first three exercises. In other words, if you do the first three exercises you do not have to participate in the research requirement. If you participate in the research requirement, you only have to do two of the first three exercises.

6. Grading

You can achieve a total of 200 points in the course. Your grade will be based on your total number of points. The points can be earned in the following ways:

Exercises: You can earn up to 50 points for the set of four exercises. Each of the first three exercises is worth up to 10 points each. If you substitute the research participation for one of your first three exercises, you can earn 10 points for that participation by submitting a one-page description of what you learned from your participation. The fourth exercise is worth up to 20 points.

Examinations: The midterm is worth up to 50 points and the

final examination is worth up to 100 points¹

7. Important Considerations

Because of the size of the class and of limited person power, 1) late exercises will receive no credit; 2) no makeups will be given; 3) no incompletes will be allowed.

Course Calendar and Assignments

<u>Dates</u>	<u>Topics</u>	<u>Assignment</u>
Mar 31, Apr 2	Causes and Critical Thinking	Ch 1,2 / Exercise 1
Apr 7, 9	Attributing Causes	Ch 3
Apr 14,16	Self-Deception	Ch 4 Exercise 1 due Exercise 2 given
Apr 21,23	Beliefs and Chance	Ch 5
Apr 28	Review	Exercise 2 due
Apr 30	MIDTERM	Bring #2 pencils
May 5, 7	Metacognition	Ch 6 Exercise 3 given
May 12,14	Solving Problems	Ch 7
May 19,21	Decision Making	Ch 8 Exercise 3 due Exercise 4 given
May 26,28	Arguments	Ch 9
Jun 2, 4	Review	Ch 10 Exercise 4 Due
June 12	FINAL EXAM 8:00 A.M.	Bring #2 pencils

¹ The number of points for each examination will not necessarily equal the number of questions. For example, if the midterm consisted of 100 questions, each correct answer would be worth one-half point. We have not yet determined the exact number of questions in each examination.

Friday

EXERCISE #1

Each of the four exercises will present you with a case or claim to evaluate. This first exercise is due April 16, 1992. For your report, please answer each question listed after the exercise. These questions will provide the general framework for coping with all the claims encountered in this course. Try to keep each answer short and to the point. Your report should be no more than four pages. The reports do not have to be typed, but they should be legible. We will give no credit for illegible reports. We will downgrade late reports, or assign them zero. In answering the questions, use what you have learned from the text and the lectures when possible. For example, the information in chapter 2 should help you with this exercise.

The following is excerpted from Christopher Bird (1977), "Applications of Dowsing: An Ancient Biopsychological Art," in J. White & S. Krippner (Editors), Future Science: Life Energies and the Physics of Paranormal Phenomena (pp. 346-365). Garden City, NY: Anchor Books:

"The late John Shelley, Jr., former president of the American Society of Dowsters, during a summer tour of duty as a reserve naval aviator at the Pensacola Naval Air Station in Florida, began to get on the nerves of his fellow officers with his constant proselytizing about the dowsing art at which he was a master. They decided to put John into what they thought would be 'his place.'

"On the last day of the tour, the reserve pilots lined up at the paymaster's window to collect their checks. When John stepped up to the window, he was puzzled by the guffaws and snickers of his fellow fliers who began to crowd around him in obvious anticipation of what John felt was going to be a joke at his expense.

"The paymaster, a smirk on his face, leaned back in his chair. 'John, you've been talking so much about locating things with that silly rod of yours,' he intoned sarcastically. 'Well, now's your chance. Your paycheck is hidden somewhere in this building and, if you want to cash it, you'll just have to find it.'

"The building in question had three floors each with a long corridor and rooms branching off from them on both sides. Unhesitatingly Shelley whipped out a small plastic Y-rod which he

perennially carried in the breast pocket of his tunic and began silently to ask himself a series of specific questions.

"The rod dipped. Trailed by his still snickering companions he went up to the second floor. He walked along the corridor until, just as he was passing the door to one of the rooms, the rod dipped again. Shelley strode to the middle of the room, his witnesses surging through the door behind him. Rod in his hands, it rotated in an arc until it dipped a third time. It was pointing straight toward a black briefcase on the edge of a table.

"The snickering suddenly stopped as John began to open the briefcase. He looked inside but it contained nothing. The silence was broken with loud laughing. Undaunted, Shelley held the rod over the briefcase. It dipped downward with a violent jerk. Perplexed, Shelley studied the problem for a moment, then noticed a thin gray-black rubber mat underneath the briefcase itself. After removing the case he gingerly took one corner of the mat between thumb and forefinger and raised the mat upwards. There was a U.S. Government check made out to John Shelley, Jr., lying beneath it."

INSTRUCTIONS

Evaluate this report by answering each of the following questions. Repeat the questions in your report so that we know which answers go with each question. Keep in mind that no general set of questions applies exactly to every situation. Some modifications may be necessary depending upon the context. Also, remember that your goals may differ from those of the narrator.

1. What is the problem or claim?

The first step in thinking about an issue is to identify the claim or problem. Sometimes the claim is explicit. Often the claim is implicit and you will have to supply it in your analysis. Often both explicit and implied claims are involved. You will also have to decide whether you are dealing with a specific claim about one concrete instance or a general claim involving an entire system.

2. What support is provided for the claim?

Is evidence cited to support the claim? What sort of support is offered? Hearsay, testimonials, anecdotes, experimental results, analogies, etc.

3. How strong is the support?

Here you try to evaluate the support. Is it relevant? Is it trustworthy?

4. What would be adequate support?

What kinds of arguments and evidence would adequately support the claim?

5. How could you find or get such support?

Who could you consult? Where you could you look? What sorts of investigations would be appropriate?

6. What alternate reasons might account for the results and evidence provided by the claimant?

For a psychologist, this is the most important question. It focuses on how people can believe what isn't so. As you read the text and listen to the lectures, try to generate a master checklist of the various biases, fallacies, and other factors that can trick us into believing false claims.