

Cognition (PSY 435/535)

University of Oregon
Winter 1996

Tuesdays and Thursdays 11:00-12:20; 242 Gerlinger
4 Credits; CRN for 435: 24661 (CRN for 535: 25704)

Prerequisites: 302, 303

WWW Home Page: <URL:<http://dynamic.uoregon.edu/~jfreyd/cognition.html>>

Instructor: Professor Jennifer Freyd
Office: 310 Straub Hall
e-mail: jfreyd@dynamic.uoregon.edu
Phone: 346-4929
Office Hrs: To be announced

Instructor's Assistant: Spark Campbell
Office: Straub Hall
e-mail: spark@dynamic.uoregon.edu
Phone: 346-4950

Instructor's Assistant: Jessica Alvarado
Office: Straub Hall
e-mail: jessica@dynamic.uoregon.edu
Phone: 346-4950

Overview

The purpose of the course is to provide a basic understanding of cognitive psychology. We will be examining how people acquire information from the environment, how that information is represented and processed internally, and how it is used in everyday thinking, communicating and problem solving. The text book will provide background information and breadth, and a course packet with reports of current research on special topics will provide depth. We emphasize thinking critically about issues central to cognition, grasping the logic of research design and understanding how to weigh evidence in evaluating explanations.

Course Requirements

The course requirements include both individually based activities such as doing the reading, attending class, participating in class discussion, participating in an on-line electronic discussion, and taking the examinations, and also small-group based activities including in-class small group participation and a final group project.

Required Readings

Readings are assigned on a weekly basis. "Focus" readings are required; you will be tested on these readings in class quizzes. "Background" readings are strongly recommended; they will help you in many ways, including by comprehending focus readings and classroom lectures and demonstrations. For instance, some quiz questions may ask about a classroom discussion, and your answer may be improved by referring to something from the background readings. Readings are to be completed **BEFORE** the Tuesday class meeting for which they are assigned. There is one required text book and one required packet of readings, available for purchasing at the book store.

- Required Text: Benjafield, J.G. (1993) *Cognition*. Prentice Hall
- Required Course Packet: Psy 435/535 Cognition

Grading — Overview

Your grade will be computed by combining your scores in the following overall categories for a total of 200 points:

Electronic Mail & Web Participation:	20
In-class Small Group Discussion Participation:	20
Quizzes (total of 5 20-point scores):	100
Final Group Project Shared Component:	40
Final Group Project Individual Contribution:	20

Total	200
(Extra Credit Potential:	Up to 20)

Final letter grades will be approximately determined from point totals as follows:

180-200	A
160-179	B
140-159	C
120-139	D
Below 120	F

Based on the actual distribution of final grades, this criterion might be relaxed, but not stiffened. Plusses and minuses will be used for performance near the edge of a range.

Grading and Requirements — More Details

Electronic mail and WWW Participation — 20 points

Participation in on-line discussions is worth 10 points. To get full credit for this part of the course requirement you must post at least two coherent messages to the class listserv. These must be real messages with content and relevant to the course. High quality additional contributions will possibly win you extra credit points (see extra credit section below). There will also be a World Wide Web (WWW) Browsing Assignment worth up to 10 points.

In-class Small Group Discussion Participation (Evaluation A) — 20 points

Participation in class and in small groups is required. Participation grades for in class small groups will be evaluated by considering information provided by each student, by members of the student's small group, and by the instructor and teaching assistants. The self evaluations and evaluations for group members will have the heaviest weight. To get full credit for this part of the course be sure to participate in your group! If everyone in a group participates, and the evaluations reflect that, you may each earn a full 20 points.

Quizzes — 100 points

Seven Quizzes will be given. Each quiz will be worth 20 points. Your five highest quiz scores will be added together to determine your total quiz score. Because you may drop two of your quiz grades, there will be NO MAKE-UP quizzes. The quizzes will be challenging. They will be structured to assess your knowledge of the readings and class discussions. The format will be short-answer. There will be two multi-part questions. Typically one question will pertain to the **focus** readings assigned for the week in which the quiz is given. The other question will usually

pertain to the previous week's readings, classroom discussion, lecture, and/or demonstrations. If you read the background readings you are likely to write better quiz answers. You will be graded on your knowledge of the focus readings, synthesis of the ideas, and also the clarity with which you present your ideas in the examination. Long, wordy answers will not gain you points. Short, to the point answers will. The background reading is likely to help you perform at the A or B level on the quiz questions.

Final Group Project Shared Component — 40 points

The final project will be a research proposal. More details about this are given below on this syllabus, and will be presented in class and on the course Web page. The small group is responsible for a) presenting the project to the class during the final week of classes; and b) turning in a written version of the project. An extra credit option for the group is to publish the project on the World Wide Web. Note: your grade on the final project will be severely lowered if it is at all late. The written version (and the WWW version of the final project if your group does that) is due on Thursday March 7 at 11:00am. Classroom presentations will occur in the Cognition Convention on March 12 and 14, and attendance is required during both classes. To get a B on this part of the course requirement you must complete all requirements for the final project. To get a B+ or A grade you must go a step further. An example A-quality group project from another class will be made available on the World Wide Web for you to visit.

Final Project Individual Contribution (Evaluation B) — 20 points

Small groups will evaluate each member and self on contribution to the group project. If everyone contributed the final project equally and effectively, then full credit will be earned for all group members. If some people contributed less than their fair share, then those people will not earn full credit in this part of the grade. The more the group can work equitably and cooperatively, the more likely it is that high scores will be earned in this category for each person in that group.

Extra Credit — Up to 20 points

Extra Credit can be earned in a variety of ways up to 20 extra points. If you make especially valuable contributions to class discussion (when we are talking as a whole group, or by asking good questions during the group presentations), or if you make especially valuable contributions to the email discussion, you may earn extra points (up to 5 extra points per category of excellent participation). Or your whole group can get extra credit for a particularly terrific project. This might include a special group presentation, publishing your project on the WEB (up to 5 extra points for each group member). If you do something creative, special, contributive, and above-and-beyond the course requirements, you may earn up to 5 extra points.

Additional Notes

Students with Directory Restricted Access

This course includes required on-line participation (electronic mail and World Wide Web). If you have restricted access to your directory information and wish to have special arrangements made for this course, please notify the instructor immediately.

Students with Disabilities

If you have a documented disability and anticipate needing accommodations in this course, please make arrangements to meet with the instructor soon. Also please request that the Counselor for Students with Disabilities send a letter verifying your disability. [Counselor for Students with Disabilities: Hillary Gerdes, 346-3211, TTY 346-1083, hgerdes@oregon.uoregon.edu]

More About Small Groups

Near the beginning of the quarter the class will be divided into small groups that will last throughout the quarter. These groups will be made up of approximately 6 students. The maximum group size is 7 students and the minimum is 4 students. January 30 will be the last day for changing group assignments; you may request on that day to move out of your group and then, based on the instructor's determination, you will be placed in a new group, space permitting. Also on that date the instructor may move around some students if any given group has become smaller than 4 students or other problems have arisen. As a group you will be responsible for writing and presenting a final project to the class (see "More about Final Projects" below).

Small groups will be responsible for maintaining cohesion and equity. Groups may determine on their own how to divide up the work. For instance, some groups may agree to have a single member make the final presentation to the class, while other groups may share that responsibility. The group is responsible for ensuring that everyone is contributing to the small group in as equitable a way as possible. Each student in the course will be required to complete TWO evaluations of every member of the small group he or she is in (including a self evaluation). One evaluation (A) will address the contributions of each member of the group (including oneself) in group discussions. The other evaluation (B) will address the contributions of each member of the group (including oneself) in the final group project. The information on the evaluations will then be used by the instructor for determining course points (see grade above) for those categories. Since a well-functioning, equitable group is likely to have very positive evaluations of each member, produce a superior final project, provide help in studying for the quizzes, and facilitate a friendly learning environment, achieving such a group is in each member's self interest.

More About Final Projects

The final project will consist of a written paper and an in-class presentation describing a hypothetical experiment. You may choose any topic relevant to the topic of cognition.

Your conceptual task is to generate a hypothesis about your topic, and then to design an experiment to test that hypothesis. For example, your hypothesis might be that the perception of a new face involves attentional resources, but that as you become familiar with a face you perceive the face more and more automatically. Your proposed experiment might then be to measure performance on a secondary task while you have subjects perceive familiar and unfamiliar faces. You would then predict certain results. Of course no experiment is perfect or the end result, so you would also need to consider the limitations of your proposed experiment.

The written paper should follow the basic American Psychological Association (APA) style for a research report. That means there should be an abstract, introduction to the issues, a question and hypothesis (or questions and hypotheses) to test, a planned research strategy (or methodology) to gather data to test the hypothesis, a discussion of the possible results and their implications, and a bibliography. The group is responsible for a) presenting the project to the class during the Cognition Convention during the final week of classes; and b) turning in a written version of the project. An extra credit option for the group is to publish the project on the World Wide Web (see "extra credit" section above).

The goal of the project is to design an experiment to test a hypothesis in experimental psychology. Please note that you do not need to carry-out the experiment and collect data. Indeed, some of you may design experiments that would not be practical to carry out without more time and resources. That is fine. However, some of you may decide you do want to collect actual data (which might be a very valuable thing to do!). If your group does want to collect actual data, be sure to discuss your plans with the instructor before actually collecting data, as there are human subjects ethical issues to consider before embarking on research.

The last week of class will be the Cognition Convention. We will follow the format of professional conventions in psychology, with a series of talks. The class presentations will each be about 8 minutes long. You can use mixed media if you would like (video tapes, overhead transparencies, etc.), but you must let us know if you have any special equipment requirements. Each presentation will be followed by a time for questions from the audience. This Cognition Convention is a time to show off what you have learned and accomplished, and to learn from your classmates.

Your grade on the final project will be severely lowered if it is at all late. The written version (and the WWW version of the final project if your group does that) is due on Thursday March 7 at 11:00am. Classroom presentations will occur on March 12 and 14 and attendance is required during both classes. To get a B on this part of the course requirement you must complete all requirements for the final project. To get a B+ or A grade you must go a step further. An example A-quality group project from another class will be made available on the World Wide Web for you to visit.

On-Line discussion

We will have an electronic discussion as part of this course. It is essential that you get an e-mail account immediately if you do not have one. Undergraduate students at the UO can get free accounts on the computer "gladstone" and typically use the "Pine" e-mail system. For instructions on how to get a gladstone account and use Pine, see the Computing Center publication "Getting Started on Gladstone," available as a course packet from the UO Bookstore or from the Computing Center Documents Room. If you have questions related to the use of gladstone or e-mail, contact one of the Computing Center's consultants (CC rooms 233-239; phone 346-1758; e-mail consult@oregon.uoregon.edu) rather than the course instructor or TAs.

On-line discussions will be conducted using a course-wide mailing list (sometimes called a "listserv"). By the second week of class you should subscribe to this mailing list by sending an e-mail message from your e-mail account to the program that manages the list, i.e. to "majordomo@lists.uoregon.edu". In that e-mail message, leave the "Subject" line blank, and in the body of the message include two lines: "subscribe psy435", and "end".

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PINE 3.91      COMPOSE MESSAGE                      Folder: INBOX  0 Messages

To      : majordomo@lists.uoregon.edu
Cc      :
Attachmt:
Subject :
----- Message Text -----
subscribe psy435
end
```

Once you have subscribed to the mailing list, you can post messages to the class by sending e-mail to the address "psy435@lists.uoregon.edu".

You are required to read the on-line discussions as well as post your own messages. Each student is required to post a minimum of two messages to the group. One message must be posted by 5:00 PM February 8 and the second message must be posted by 5:00 PM, March 7. You may earn extra credit for additional thought-provoking messages. However, in order to avoid having the on-line discussion become unmanageable, each student will also have a maximum number of posted messages of 2 per week. (This maximum will be enforced if there is a need for it to be enforced.) Also any given message should be no longer than 50 lines of text. The on-line discussion will include both structured discussion based on materials suggested by the instructor and also open-ended discussion based on student interests and class discussions. The instructor will also use the list to post important course-related information.

Although World Wide Web (WWW) browsing is also a required part of this course, no advance knowledge is required. We will have class instruction on how to use the library on-line resources and the WWW.

For additional information on e-mail and the on-line portion of the course, see the course web pages at [<URL:http://dynamic.uoregon.edu/~jfreyd/cognition.html>](http://dynamic.uoregon.edu/~jfreyd/cognition.html).

Course Packet Contents
Cognition (Psy 435)
University of Oregon --Winter 1996
Professor J. Freyd

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- Wood, N., & Cowan, N. (1995) The cocktail party phenomenon revisited: How frequent are attention shift's to one's name in an irrelevant auditory channel? *Journal of Experimental Psychology: Learning, Memory, and Cognition*, **21**, 255-260.
- Zaidel, D. W. Worlds Apart: Pictorial semantics in the left and right cerebral hemispheres. 1994, *Current Directions in Psychological Science*, **3**, 5-8

Weekly Schedule of Topics, Readings, and Assignments

(additional small assignments may be added)

Week 1 Overview

Background: Chapter 1

Focus: Chapter 14

January 9

January 11

Week 2 Attention and Reading

Background: Chapters 2 & 3

Focus: Wood & Cowan, 1995; Rayner, 1993

January 16

SUBSCRIBE TO PSY435 E-MAIL LIST

January 18

Week 3: Visual Cognition and Imagery

Background: Chapter 7; Hubbard, 1995

Focus: Freyd & Jones, 1994; Futterweit & Beilin, 1994

January 23 **Quiz 1**

January 25 **WWW BROWSING ASSIGNMENT DUE**

Week 4: Face and Body Perception

Background: Shiffrar & Freyd, 1993; Ekman, 1992

Focus: Shiffrar & Freyd, 1990; Ekman & Davidson, 1993; Farah, Tanaka, & Drain, 1995; Newcombe & Lie, 1995

January 30 **Quiz 2**

February 1

Week 5: Memory

Background: Chapters 5 & 6

Focus: Nelson, 1993; Rovee-Collier, 1993

February 6 **Quiz 3**

February 8 **PROJECT TOPIC SUMMARIES DUE**

Week 6: Problem Solving and Reasoning

Focus: Chapter 8 and 9

February 13 **Quiz 4**

February 15 **FIRST EMAIL POSTING DUE**

Week 7: Language and Cognition

Background: Chapter 11; Zaidel, 1994

Focus: Gernsbacher 1993; Gernsbacher & Robertson, 1995; Hamilton, 1995

February 20 **Quiz 5**

February 22

Week 8: Intelligence & Creativity

Background: Chapter 12, p 284-293

Focus: Chapter 12, p 294-341; Freyd, 1994, "Circling Creativity"; Sternberg, 1995

February 27 **Quiz 6**

February 29

Week 9: Personal Cognition

Background: Chapter 13; Jacoby & Kelly

Focus: Freyd, 1994 "Betrayal Trauma"

March 5 **Quiz 7**

March 7 **WRITTEN PROJECTS DUE;
SECOND EMAIL POSTING DUE;
GROUP EVALUATION A DUE**

Week 10: Cognition Convention!

March 12 **Convention Presentations Part 1**

March 14 **Convention Presentations Part 2**

GROUP EVALUATION B DUE

-----*That's All Folks!*-----