INHO proposal for Amanda Braverman: PSY 164 (Cognition), Fall 2008

For selected topics within the course syllabus, Amanda and I will read empirical articles and discuss them during biweekly meetings. Prior to each meeting, Amanda will write a one-to-two page reaction paper using the guiding questions in the attachment "guidelines for writing a reaction paper." Each reaction paper will consist of two related components: (1) a summary of the journal article, and (2) an evaluation of the research described in the article. The purpose the reaction paper assignment is to foster Amanda's critical thinking skills - to encourage a thorough and critical evaluation of the research topic and methodology. Also, as Amanda works her way through the paper and written assignment, she will have the opportunity to highlight questions she has and also attempt to answer them using information from class and external sources. Finally, Amanda and I will meet to share our comments about the reading, using the points raised in her reaction paper as a starting point.

Selected readings:

Topic 1: The brain

Galambos, R. (2002). Four favorite experiments and why I like them. *International Journal of Psychophysiology, 48*, 133-140.

Topic 2: The interface between perception and cognition

Biran, I., & Steiner, I. (2006). Abnormal musical pacemaker in a patient with musical hallucinations. *European Journal of Neurology, 13*, 1378-1380.

Johnson, A., Jepma, M., De Jong, R. (2007). Colours sometimes count: Awareness and bidirectionality in grapheme-colour synaesthesia. *The Quarterly Journal of Experimental Psychology, 60*, 1406-1422.

Topic 3: Attention

Strayer, D.L, & Drews, F.A. (2007). Cell-phone-induced driver distraction. *Current Directions in Psychological Science, 16*, 128-131.

Topic 4: Memory

Herlitz, A., & Rehnman, J. (2008). Sex differences in episodic memory. *Current Directions in Psychological Science, 17*, 52-56.

Addis, D.R., Wong, A.T., & Schacter, D.L. (2008). Age-related changes in episodic simulation of future events. *Psychological Science, 19*, 33-41.

Topic 5: Language

Duffy, S.A., & Keir J.A. (2004). Violating stereotypes: Eye movements and comprehension processes when text conflicts with world knowledge, *Memory & Cognition, 32*, 551-559.

Wu, S., & Keysar, B. (2007). The effect of culture on perspective taking. *Psychological Science, 18*, 600-606.

Guidelines for writing a reaction paper

Your reaction paper should consist of two related components: A summary of the journal article, and your evaluation of the research described in the article. Every article can be broken down into sections (Abstract, Introduction, Method, Results, Discussion). The best approach to understand and evaluate an article is to work your way through it section by section. Below are some important points that you should focus on as you do this, as well as some questions that should guide you. The best approach for writing up each reaction paper is to address all of these points/questions.

Abstract:

Abstracts necessary for conducting an efficient Lit search. But given that the articles for your INHO were pre-selected, my advice is that you ignore the abstract. Why? Because with every paper, the author's agenda is to convince you of the argument they are trying to make. The abstract is a tool for the author to draw you into their agenda right away. Because the goal for this assignment is to critically evaluate the article, you want to avoid getting "drawn in."

Introduction:

1. State the author's research question/goal.
2. Describe how the author links the background literature he/she reviewed with the question addressed in the current paper.
3. Describe the purpose of the current experiment (or experiments).
4. Describe the general research design.
5. Describe the prediction(s).

Method:

Before you read the Method section, answer the following question: "If I had to design an experiment to test this hypothesis, what would I do?" Give it some serious thought. Think about the best way to address the author's research question

1. Describe the IV (or IVs) used by the author.
2. Describe the DV (or DVs) used by the author.
3. Mention any important characteristics about the procedure or about the participants.
4. How does the author's method compare to the design that you thought up before reading this section? Comment on whether the author's methods were appropriate/adequate to test the predictions, and if there were any weaknesses with the method, comment on them.

Results:

1. Describe the important information from the results section. Mention the important comparisons between conditions, and state whether they were statistically significant.

Discussion:

Before you read the Discussion section, build your own interpretation of the results. Do you think the pattern(s) supports the author's prediction(s)?

1. State how the results relate to the prediction/research hypothesis.
2. How does the author's interpretation of the results compare the interpretation you built before reading this section?
3. If the results don't support the prediction, mention any potential sources of error (e.g., extraneous variables and confounders), characteristics about the method that might have masked (or exaggerated) an effect of the IV.
4. Describe the general applications of the findings – what is the relevance of the findings beyond this one experiment?
5. Describe any possible directions for future research.

Psy 164-9A: Cognition
Tuesday & Thursday, 6:30 - 7:55, 105 Breslin Hall

Instructor: Kristin M. Weingartner
Office: 115 Hauser Hall
Office hours: Monday, 2- 4

Phone: 3-5623
e-mail: kristin.weingartner@hofstra.edu

Textbook (required):
Anderson, John R. (2005). *Cognitive Psychology and its Implications* (6th Edition). New York, NY: Worth Publishers.

Departmental Goals and Objectives for Psychology 164
Learning Goal 1: Psychology students in introductory psychology and cognitive courses will develop an understanding of the critical concepts and theories associated with human cognition.

Specific Objectives: Students will demonstrate an understanding of a range of cognitive processes, with an emphasis on attention, pattern recognition, memory, and language; Students will demonstrate an appreciation of the strengths and weaknesses of alternative theoretical accounts for the cognitive processes listed in (a); Students will demonstrate an appreciation of the centrality of the cognitive processes listed in (a) to their lives; Students will demonstrate an understanding of specific research methodologies used to study cognitive processes.

Learning Goal 2: Through extensive exposure to and experience with scientific methodology, psychology students in these courses will develop the critical thinking skills necessary to interpret fundamental research findings in the area of cognition and learning. In addition, these skills will be useful in students' other areas of study and will contribute to the ability to make rational, informed decisions in everyday life.

Specific Objectives: Students will demonstrate an ability to critically evaluate experimental research designs with respect to their appropriateness for evaluating a particular theory; Given an experimental design, students will demonstrate an ability to identify the contrasting predictions derived from alternative theoretical accounts; Students will demonstrate a clear understanding of the relationship between variables used in research, with a specific emphasis on understanding the relationship between the independent and dependent variable; Students will be able to clearly and concisely present research to others. The format for presentation will include either a written paper or a verbal presentation.

Pre-Requisites: PSY 40 (formerly PSY 140): Statistics. (You may find it helpful to have a copy of a statistics textbook available throughout the class).

Tests (80%): There will be three non-cumulative tests throughout the semester and a cumulative final exam (the final exam will be given during finals week). The tests will cover concepts discussed in class and in the text. Each test will consist of a number of multiple choice, fill in the blank, and short answer essay questions. The three tests and the final exam will each count toward 20% of your final grade for the course.

Make-up tests: Make-up tests will be in essay format, and will be given during finals week. You will be eligible to take a make-up test *only* if you can prove that there was a valid reason for your absence from the test (e.g., with a doctor's note). Otherwise, you will receive a grade of 0% for the missed test.

Research Proposals (20%): You will be required to write two mini research proposals related to topics of your choice from the text or from class material. Each proposal is worth 10% of your course grade. For each proposal, you must: 1) state the research topic, 2) provide a brief background description of the research topic, 3) describe the research question/hypothesis that your proposal addresses, 4) describe the design of an experiment that would address this hypothesis, 5) describe the predictions generated from your hypothesis (i.e., given your hypothesis, what pattern of data would you expect if you actually conducted the experiment?), and 6) provide a references section. Attached to this syllabus is a template that you should use when writing your proposals. The deadline for turning in research proposals is Monday, December 17th, at 5 pm. You may hand in your proposals any time before that deadline if you wish to do so.

Plagiarism policy: Plagiarism from a journal article or from another student will lead to a grade of zero on that assignment for all of the individuals involved. Please read the attached "Plagiarism" sheet for a definition of plagiarism and tips on how to prevent it from happening. Based on Hofstra University's procedures for handling violations of academic honesty, instructors must inform the Provost and the Dean of Students of each violation by completing the "Report Form on Violations of Academic Conduct." A student who commits a second violation of academic honesty shall be subject to suspension or dismissal. The Office of the Provost shall inform the student by letter of both their status and his or her right to appeal. For more details about Hofstra University's procedures for handling violations of academic honesty, see Faculty Policy Series #11 http://www.hofstra.edu/PDF/Senate_FPS_11.pdf.

Blackboard: You can access blackboard by logging into my.hofstra.edu (there is a link from the portal). I will use Blackboard to post lectures slides and the occasional handout. All of these documents will be posted in "Course Documents." The lecture slides will be posted in powerpoint format. If you do not have access to powerpoint on your home computer, you can download an application that will read the files. Typing in "PowerPoint Viewer" in any search engine will get you to the link.

Accommodation for Disabilities: If you have any documented disability-related concerns that may have an impact upon your performance in this course, please meet with me within the first two weeks of the current semester, so that we can work out the appropriate accommodations. Accommodations are provided on an individualized, as-needed basis after the needs, circumstances and documentation have been evaluated by the appropriate office on campus. For more information on services provided by Hofstra, and for submission of documentation of your disability, please contact: Dr. Karin Spencer in 101 Memorial Hall at 516-463-6770 (for physical and/or psychological disabilities) or Linda DeMotta in 202 Roosevelt Hall at 516-463-5840 (for learning disabilities and/or ADHD). All disability-related information will be kept confidential.

Date	Topic	Reading
September		
Tues – 9/4	Cognition: Introduction & history	Chapter 1 (pp. 1-13)
Thurs – 9/6	Measuring cognitive processes	
Tues – 9/11	The brain and cognition	Chapter 1 (pp. 15-30)
Thurs – 9/13	**No class**	
Tues – 9/18	Approaches and themes in cognition	
Thurs – 9/20	Perception – vision	Chapter 2 (pp. 36-57)
Tues – 9/25	Perception – vision	Chapter 2 (pp. 36-57)
Thurs – 9/27	Perception – audition and context	Chapter 2 (pp. 58-70)
October		
Tues – 10/2	Perception-based mental representations	Chapter 4
Thurs – 10/4	Attention	Chapter 3
Tues – 10/9	**Test 1**	
Thurs – 10/11	Attention	Chapter 3
Tues – 10/16	Meaning-based mental representations	Chapter 5
Thurs – 10/18	Meaning-based mental representations	Chapter 5
Tues – 10/23	Memory - Encoding and storage	Chapter 6

Thurs – 10/25	Memory - Encoding and storage	Chapter 6
Tues – 10/30	**Test 2**	
November		
Thurs – 11/1	Memory – Retention and retrieval	Chapter 7
Tues – 11/6	Memory – Retention and retrieval	Chapter 7
Thurs – 11/8	Reasoning and decision making	Chapter 10
Tues – 11/13	Reasoning and decision making	Chapter 10
Thurs – 11/15	**Test 3**	
Tues – 11/20	Language structure	Chapter 11
Thurs – 11/22	**No Class - Thanksgiving**	
Tues – 11/27	Language structure	Chapter 11
Thurs – 11/29	Language comprehension	Chapter 12
December		
Tues – 12/4	Language comprehension	Chapter 12
Thurs – 12/6	Expertise and individual differences	TBA
Thursday – 12/13	**Final Exam: 6:15-8:15 (105 Breslin Hall)**	
Monday – 12/17	**Both mini-research proposals are due by 5 pm (bring them to my office - 115 Hauser Hall)**	