SYLLABUS CLP 7934 Cognitive Bases of Behavior 3 Credits Fall 2008 -G301A HPNP Thursdays 1-4 Russell M. Bauer, Ph.D. (http://www.phhp.ufl.edu/~rbauer)

Course Objectives

The purpose of this course is to familiarize the student with the current body of knowledge in the cognitive bases of behavior. Historical developments and recent trends in cognitive psychology, cognitive neuropsychology, and cognitive neuroscience will be reviewed and applications of findings to research in clinical and health psychology will be explored. Coverage of the topical areas described below will emphasize the study of normal cognition, though some review of cognitive disorders will be undertaken when relevant findings inform or constrain theories of cognitive processes. Completion of the course should enable the student to: (a) understand and critically evaluate theory and research in cognitive psychology, (b) develop technical and conceptual expertise in evaluating cognitive research methods, (c) apply recent developments in cognitive psychology to their own work, and (d) identify and understand sources of individual differences and diversity in cognitive abilities and processes. Students should also be able to understand the relevance of developments in cognitive psychology for basic and applied work in counseling and clinical psychology.

Course Format

The course will be conducted in the form of a graduate seminar. Class will meet Thursdays from 1:00pm - 4:00pm. The majority of each class will consist of lectures or demonstrations given by the course instructor. Three debates/discussions, organized and presented by students, will be undertaken throughout the term. Student participation is expected, and will comprise a portion of the final course grade.

<u>Grading</u>

Course grading will be determined by two in-class quizzes (40%), a final examination (30%) and a brief paper (30%). The schedule for these events and deadline for paper submission can be found in the course plan below. Examinations will consist of both objective and short answer portions covering topics discussed in class and in readings. Study questions will be provided periodically during the semester to assist in learning and in exam preparation. The paper assignment is an opportunity for the student to perform further research on a topic of their choice, and should consist either of an empirical review of the status of a cognitive construct (e.g., spatial attention, reading comprehension, object perception) or of a theory/model (e.g., central capacity theory, feature-integration theory, MEM, ACT). The paper must involve outside reading and must be in APA format. Papers should not exceed 10 pages in length, using double-spacing and at least an 11-point font.

Students will also take part in one of the debates scheduled throughout the semester. In these debates, students are required to advocate a position and support their argument with theory and/or data. More specific information on the format of the debates will be given during the first or second class meeting. Students are expected to participate actively in class sessions by expressing ideas, asking questions, and discussing relevant issues and experiences.

<u>The grading scale will be as follows</u>: A = 90-100; B=80-89; C=70-79; D=60-69; F=below 60. Grades will be weighted according to the number of points available for each component. Decimals will be rounded to the nearest whole number. Final grades will be calculated as a percentage of the highest score.

Class Attendance

Attendance is expected. Students needing to miss class should make prior arrangements with the instructor.

Policy on Make-up Work

Students who miss an examination or a paper deadline because of a conflicting professional or personal commitment must make prior arrangements with the instructor. If an examination must be missed because of illness, a doctor's note is required.

Students with Disabilities

Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation.

Text and Readings

The required text for the course is Eysenck, M.W. & Keane, M.T. (2005). <u>Cognitive Psychology: A Student's Handbook (5th Edition)</u>. New York: Psychology Press. Lecture notes will be available by 8:00am the day of class (in both .ppt and .pdf formats) at the following URL: <u>http://www.phhp.ufl.edu/~rbauer</u>. Scroll down to Cognitive Bases of Behavior and click on the link.

Class Schedule and Reading Assignments

Listed below is a minimally flexible schedule of classes and accompanying reading assignments. Students are asked to complete readings prior to class so that they can maximally benefit from presentations and discussions. I will pop quiz the class if it is detectibly lethargic.

Date	Topic	Reading
Aug 28	Introduction and Historical Background	E & K, Chapter 1
		Posner & Rothbart (2007)
Sept 4	No Class - Bauer at Florida Society of Neurol	
Sept 11	Visual Cognition	E & K, Chapters 2-4
		Peissig & Tarr (2007)
Sept 18	Attention, Effort, and Resource Allocation	E & K, Chapter 5
		Umiltà (2001)
		Knudsen (2007)
Sept 25	Memory I: Basic Findings	E & K, Chapters 6-8
		Baddeley (2000)
		Brown & Craik (2000)
Oct 2	Memory II: Multiple forms of Memory:	Parkin (2001)
QUIZ 1	Systems and Processes	Keane & Verfaellie (2006)
	<i>Debate/Discussion I</i> : Repressed memories are	Ryan & Cohen (2003)
	more likely to represent memory distortions	Dodson & Schacter (2001)
	rather than true, unearthed recollections of	Cabeza & St.Jaques (2007)
	past experience.	Johnson (2006)
		Moskovitch et al (2006)
Oct 9	Representation and Categorization	E & K, Chapter 9
		Goldstone & Kersten (2003)
Oct 16	Language I: Language Perception and	E & K, Chapter 10-11
	Comprehension	
Oct 23	Language II: Language Production; What	E & K, Chapter 12
	Language Disorders Tell us About Normal	Saffran (2003)
	Language	Rapp et al (2001)
	Debate/Discussion II: There is one and only	Shelton & Caramazza (2001)
	one semantic system	Farah & Grossman (2000)
Oct 30	Problem Solving	E & K, Chapter 13-14
QUIZ 2		Kimball & Holyoak (2000)
Nov 6	Reasoning and Decision Making	E & K, Chapter 15-16
	Discussion/Debate III: What cognitive	Leighton & Sternberg (2003)
	psychology has to say about blased	Pham (2007)
	thinking/messaging in advertising, politics, and	
	psychotherapy.	
Nov 13	Guest Lecture: Cognition and Emotion I: TBA	
Nov 20	Cognition and Emotion II: New Developments	Storbeck & Clore (2007)
	in Neuropsychology and Cognitive	Ochsner (2008)
	Neuroscience	Phelps & LeDoux (2005)
	Debate/Discussion IV: There is no emotion	Cacioppo & Gardner (1999)
	without cognition (or, emotion is dependent	
	upon cognition).	
Nov 27	No Class - Thanksgiving	
Dec 4	Final Examination (Papers due 5pm, Dec 8)	

References/Assigned Articles

- Posner, M.I. & Rothbart, M. (2007). Research on attention networks as a model for the integration of psychological science. <u>Annual Review of Psychology</u>, <u>58</u>, 1-23.
- Peissig, J.J. & Tarr, M.J. (2007). Visual object recognition: Do we know more now than we did 20 years ago? <u>Annual Review of Psychology</u>, <u>58</u>, 75-96.
- Umiltà, C. (2001). Mechanisms of attention. In Rapp, B. (Ed.), <u>The Handbook of</u> <u>Cognitive Neuropsychology: What deficits reveal about the human mind</u>, pp. 135-158. Baltimore: Johns Hopkins University Press.
- Knudsen, E.I. (2007). Fundamental components of attention. <u>Annual Review of Neuroscience</u>, <u>30</u>, 57-78.
- Baddeley, A. (2000). Short-term and working memory. In E. Tulving & F.I.M. Craik (Eds.), <u>The Oxford Handbook of Memory</u>, pp. 77-92. New York: Oxford University Press.
- Brown, S.C. & Craik, F.I.M. (2000). Encoding and retrieval of information. In E. Tulving & F.I.M. Craik (Eds.), <u>The Oxford Handbook of Memory</u>, pp. 93-107. New York: Oxford University Press.
- Parkin, A.J. (2001). The structure and mechanisms of memory. In Rapp, B. (Ed.), <u>The</u> <u>Handbook of Cognitive Neuropsychology: What deficits reveal about the human</u> <u>mind</u>, pp. 399-422. Baltimore: Johns Hopkins University Press.
- Roediger, H.L., Balota, D.A., & Watson, J.M. (2001). Spreading activation and arousal of false memories. In H.L. Roediger, J.S. Nairne, I. Neath, and A.M. Surprenant (Eds.), <u>The nature of remembering: Essays in Honor of Robert G. Crowder</u>, pp. 95-115. Washington, DC: American Psychological Association.
- Dodson, C.L., & Schacter, D.L. (2001). Memory distortion. In Rapp, B. (Ed.), <u>The</u> <u>Handbook of Cognitive Neuropsychology: What deficits reveal about the human</u> <u>mind</u>, pp. 445-461. Baltimore: Johns Hopkins University Press.
- Keane, M.M. & Verfaellie, M. (2006). Amnesia II: Cognitive neuropsychological issues. In Farah, M.J., & Feinberg, T.E., Ed; et al <u>Patient-based approaches to</u> <u>cognitive neuroscience</u>. <u>Issues in clinical and cognitive neuropsychology</u>, 2nd Ed. Cambridge MA: MIT Press, p 303-314.
- Ryan, J.D. & Cohen, N.J. (2003). Evaluating the neuropsychological dissociation evidence for multiple memory systems. <u>Cognitive, Affective, and Behavioral</u> <u>Neuroscience</u>, <u>3</u>, 168-185.

Cabeza, R. & St. Jaques, P. (2007). Functional neuroimaging of autobiographical memory. <u>Trends in Cognitive Sciences</u>, <u>11</u>, 219-227.

Johnson, M.K. (2006). Memory and reality. <u>American Psychologist</u>, <u>61</u>, 760-771.

- Moscovitch, M., Nadel, L., Winocur, G., Gilboa, A., & Rosenbaum, R.S. (2006). The cognitive neuroscience of remote episodic, semantic, and spatial memory. <u>Current Opinion in Neurobiology</u>, <u>16</u>, 179-190.
- Goldstone, R.L. & Kersten, A. (2003). Concepts and categorization. In A.F. Healy & R.W. Proctor (Eds.), <u>Handbook of Psychology</u>, Vol. 4: Experimental Psychology, pp. 599-621. Hoboken, NJ: John Wiley & Sons.
- Saffran, E. (2003). Aphasia: Cognitive neuropsychological Issues. In T.E. Feinberg & M.J. Farah (Eds.), <u>Behavioral Neurology and Neuropsychology</u>, (2nd.Ed.).New York: McGraw-Hill, pp. 165-177.
- Rapp, B., Folk, J.R. & Tainturier, M.-J. (2001). Word reading. In Rapp, B. (Ed.), <u>The Handbook of Cognitive Neuropsychology: What deficits reveal about the human mind</u>, pp. 233-262. Baltimore: Johns Hopkins University Press.
- Shelton, J.R. & Caramazza, A. (2001). The organization of semantic memory. In Rapp, B. (Ed.), <u>The Handbook of Cognitive Neuropsychology: What deficits</u> <u>reveal about the human mind</u>, pp. 423-443. Baltimore: Johns Hopkins University Press.
- Farah, M.J. & Grossman, M. (2000). Semantic memory impairments. In Farah, M.J. & Feinberg, T.E. (Eds.), Patient-based approaches to cognitive neuroscience. Issues in clinical and cognitive neuropsychology. Cambridge, MA: MIT Press.
- Kimball, D.R. & Holyoak, K.J. (2000). Transfer and expertise. In E. Tulving & F.I.M. Craik (Eds.), <u>The Oxford Handbook of Memory</u>, pp. 109-122. New York: Oxford University Press.
- Leighton, J.P. & Sternberg, R.J. (2003). Reasoning and problem solving. In A.F. Healy & R.W. Proctor (Eds.), <u>Handbook of Psychology, Vol. 4: Experimental</u> <u>Psychology</u>, pp. 623-648. Hoboken, NJ: John Wiley & Sons.
- Pham, M.T. (2007). Emotion and rationality: A critical review and interpretation of empirical evidence. <u>Review of General Psychology</u>, <u>11</u>, 155-178.
- Phelps, E.A., & LeDoux, J.E. (2005). Contributions of the amygdala to emotion processing: From animal models to human behavior. <u>Neuron</u>, 48-175-187.
- Storbeck, J. & Clore, G.L. (2007). On the interdependence between cognition and emotion. <u>Cognition and Emotion</u>, <u>21</u>, 1212-1237.

Zajonc, R (1984). On the primacy of affect. <u>American Psychologist</u>, <u>39</u>, 117-123.

- Lazarus, R.S. (1982). Thoughts on the relations between emotion and cognition. <u>American Psychologist</u>, <u>37</u>, 1019-1024.
- Cacioppo, J.T. & Gardner, W.L. (1999). Emotions. <u>Annual Review of Psychology</u>, <u>50</u>, 191-214.
- Ochsner, K.N. (2008). The social-emotional processing stream: Five core constructs and their translational potential for schizophrenia and beyond. <u>Biological</u> <u>Psychiatry</u>, <u>64</u>, 48-61.