Cognitive Psychology (PSY 366) Spring 2007; MWF 9-9:50 a.m.; DeGarmo 463 Welcome to our course!

Instructor: Alycia M. Hund, Ph.D.

Office: DeGarmo 446 Telephone: 438-7863 E-mail: amhund@ilstu.edu Office Hours: Mondays 2-3 p.m., Wednesdays 8-9 a.m., and by appointment Instructor Website: <u>www.psychology.ilstu.edu/amhund/</u> Course Website: <u>www.psychology.ilstu.edu/amhund/cogpsych.htm</u> (review questions, assignments) WebCT Login Website: <u>https://webct.ilstu.edu</u> (see course website for help getting started or login via iCampus) Textbook Website: <u>www.wadsworth.com/cgi-</u> wadsworth/course_products_wp.pl?fid=M20b&product_isbn_issn=0534577261&discipline_number=24 (study aids)

Undergraduate Teaching Assistant: Elyse Knapcik

Desk 12 (outside DeGarmo 446) E-mail: erknapc@ilstu.edu Office Hours: Mondays 10:30-11:30 a.m. and Wednesdays 10-11 a.m.

Required Readings:

Goldstein, E. B. (2005). *Cognitive Psychology: Connecting Mind, Research, and Everyday Experience*. Belmont, CA: Thomson Wadsworth.

Nine articles on electronic reserve through Milner Library: <u>http://library.ilcso.illinois.edu/isu/cgi-bin/Pwebrecon.cgi?DB=local&PAGE=rbSearch</u>

PREREQUISITES

The prerequisites for this course are PSY $110/\overline{111}$ and PSY 231.

COURSE OBJECTIVES AND OVERVIEW

Cognitive psychology is the scientific study of thought processes and mental life. The purpose of this course is to explore the basic processes, mechanisms, and models of cognition in order to increase understanding and appreciation of cognitive psychology. Topics will include visual perception, memory, categorization, language, problem solving, decision-making, and cognitive development. This course will provide an overall understanding of the basic issues and findings in cognitive psychology, as well an appreciation of the applications of cognitive psychological research to everyday settings. Please see http://www.psychology.ilstu.edu/undergrad/objectives/index.html for a complete listing of course objectives will be assessed through exams, written assignments, and class activities.

The course includes three class meetings each week. There will be overlap in the material discussed in class and in the readings; however, some material will only be discussed in class or in the readings. To do well in the course, you should attend and actively participate in class, complete all assigned readings and assignments by the designated date, and review course information regularly (i.e., avoid cramming).

GRADING PROCEDURES AND DETAILS

Your course grade will be based on the <u>total number of points</u> you earn during the semester (<u>without</u> <u>rounding or curving</u>): A = 450-500, B = 400-449, C = 350-399, D = 300-349, F = 299 and below. If you withdraw from the course, your course grade will be based on the points earned up to the official date of withdrawal.

| | Number | Points Each | Total |
|------------------|--------------|-------------|-------|
| Unit Exams | 2 | 100 | 200 |
| Final Exam | 1 | 130 | 130 |
| Class Activities | 6 (out of 7) | 20 | 120 |
| Paper | 1 | 50 | 50 |

The unit exams will be held during the normal class period, and the final exam will be held during the final exam period. The final exam will include questions concerning the last set of classes and readings (100 points) and questions from earlier in the semester (30 points). Exams will include a combination of multiple choice and short answer/essay questions.

Class activities will involve reading an article (on electronic reserve at Milner Library), completing a short exercise related to the article, and discussing the main points during class time. All answers must be typed. You are expected to turn in a hard copy of each class activity at the *end of class* on the date due. You will earn up to 20 points for each activity. Your 6 highest (out of 7) class activity grades will be used in calculating your course grade. Specific instructions regarding the class activities will be given in class.

The paper will be an analysis of a research article chosen from several alternatives. It must be approximately 5 to 8 pages of type written, double-spaced text. Grading will be based on content and writing style. Detailed instructions and the grading rubric for the paper are available on the course website.

You will be given the opportunity to earn a maximum of 10 points of extra credit by two methods:

(a) You may volunteer to participate in psychological research. You will earn 2 extra credit points for each half hour of participation if you choose to volunteer, for a maximum of 10 points (e.g., 2 1/2 hours = 10 points). Participation as a research participant is entirely voluntary. To sign up for an experiment, go to the basement of DeGarmo Hall and sign up on the sheets posted on the bulletin boards. Please respect the sign-up process by keeping appointments and only signing up for each experiment once. Additional details regarding the sign up process are available on the department website: www.psychology.ilstu.edu/research/SubInstruct.html.

(b) You may read scientific journal articles and write short summaries. The articles may be on a topic of your choice, but must come from peer-reviewed, scientific journals in psychology and *must be approved by me at least one week before the due date*. Summaries must be 2 pages in length and typed with double spacing. A hard copy of the article must accompany each printed summary, and the article must have my initials of approval to receive credit. Each summary may earn a maximum of 5 points of extra credit. You will not earn any extra credit points for summaries written on articles not approved by me ahead of time.

Blue cards and summaries must be turned in *by class time on the due date* to be eligible for extra credit. *Late extra credit work will not be accepted*. Please turn in ALL of your extra credit at one time. Make sure that your name is included, and that your blue cards and/or written summaries are stapled together in one bundle. Extra credit points will be added to your point total in the determination of your course grade. Your grade will not be affected if you choose not to participate in one of the extra credit options. Extra credit assignments will be held to academic integrity standards.

POLICY FOR MISSED EXAMS, LATE PAPERS, ETC.

Makeup exams will be allowed *only* for university-mandated and/or officially documented reasons (e.g., illness, family emergency, mandatory religious obligation). If the absence can be anticipated, you must notify me in writing at least one week before the exam date so the exam can be taken early. If you are ill or have an emergency on the day of the exam, you must contact me before the exam time (an e-mail or voice mail message is sufficient). Failure to follow these procedures will result in a score of 0 for the exam. Make up exams must be completed in a span of time less than or equal to the documented absence. Make up exams may differ in format from those given on the assigned exam days. The final exam must be taken at the assigned time unless arrangements consistent with university policy have been made at least one week in advance (http://www.arr.ilstu.edu/students/current/academics/final.shtml).

You will lose 10% of the possible points for each day your paper is late. Late class activities and extra credit work will not be accepted (no exceptions).

UNIVERSITY POLICIES

Active Participation in Learning

Learning is not a spectator sport. It is facilitated by active participation and training, much like physical endeavors (e.g., running a marathon) require training and participation. Thus, you are expected to attend all class meetings, to arrive on time, and to participate actively in learning for the entire class period. You are also expected to complete all readings and assignments according to the timeline outlined below. You are responsible for obtaining notes from a classmate if your absence from class is unavoidable.

Academic Integrity: Plagiarism and Cheating

Assignments in this course should be completed by you alone and should represent your best effort. Plagiarism and cheating in any form will not be tolerated and may result in disciplinary action and failure of this course. Please consult the *Student Code of Conduct* for details regarding University academic integrity policies: <u>http://www.deanofstudents.ilstu.edu/crr/</u>.

Civility and Respect

We will respect one another and the learning environment. You are expected to treat classmates, our teaching assistant, and me with civility and respect. For complete details, please consult the *Student Code of Conduct* and the Department of Psychology civility guidelines (<u>www.psychology.ilstu.edu/diversity/civility.htm</u>).

Students with Disabilities

Any student in need of special accommodation should contact 438-5853 (voice), 438-8620 (TDD).

| TENTATIVE SCHEDULE OF TOPICS | | | | | | |
|------------------------------|---------------|---|--|--|--|--|
| <u>Week</u> | <u>Date</u> | <u>Topic</u> | Reading | | | |
| Week 1 | Mon., Jan. 15 | No Classes – Martin Luther King, Jr. Day | | | | |
| | Wed., Jan. 17 | Introduction | none | | | |
| | Fri., Jan. 19 | History of Cognitive Psychology | Ch. 1 (p. 1-14) | | | |
| Week 2 | Mon., Jan. 22 | Themes, Theories, & Methods | Ch. 1 (p. 14-22) | | | |
| | | Getting to Know You WebCT discussion post due by noon (see course website) | | | | |
| | Wed., Jan 24 | Cognition & the Brain | Ch. 2 (p. 23-44) | | | |
| | Fri., Jan. 26 | Cognitive Neuroscience | Ch. 2 (p. 44-54) | | | |
| Week 3 | Mon., Jan. 29 | Class Activity A | E-reserve | | | |
| | | D'Esposito, M., Aguirre, G. K., Zarahn, E., Ballard, D., Shin, R. K., & Lease, J. (1998). Functional MRI studies of spatial and nonspatial workin | | | | |
| | | | | | | |
| | | memory. Cognitive Brain Research, 7, 1-13. | | | | |
| | Wed., Jan. 31 | Perception Object Recognition | Ch. 3 (p. 55-74) | | | |
| | Fri., Feb. 2 | Object Recognition | Ch. 3 (p. 75-97) | | | |
| Week 4 | Mon., Feb. 5 | Class Activity B | E-reserve and Web | | | |
| | | Wang, Q., Cavanagh, P., & Green, M | M. (1994). Familiarity and pop-out in | | | |
| | | visual search. Perception & Psychophysics, 56, 495-500. | | | | |
| | Wed., Feb. 7 | Selective Attention | Ch. 4 (p. 99-112) | | | |
| | Fri., Feb. 9 | Inattention | Ch. 4 (p. 113-134) | | | |
| Week 5 | Mon., Feb. 12 | Divided Attention | Ch. 4 (p. 113-134) | | | |
| | Wed., Feb. 14 | Exam 1, in class | | | | |
| | Fri., Feb. 16 | Sensory & Short-Term Memory | Ch. 5 (p. 135-161) | | | |
| Week 6 | Mon., Feb. 19 | Working Memory | Ch. 5 (p. 162-178) | | | |
| | Wed., Feb. 21 | Class Activity C | E-reserves | | | |
| | | (1) Cowan, N. (1993). Activation, at | tention, and short-term memory. | | | |
| | | Memory & Cognition, 21, 162-167. | | | | |
| | E: E1 00 | | addeley, A. (1992). Working memory. <i>Science</i> , 255, 556-559. | | | |
| | Fri., Feb. 23 | Long-Term Memory | Ch. 6 (p. 179-203) | | | |

| Week 7 | Mon., Feb. 26 Wed., Feb. 28 Fri., Mar. 2 | Implicit Memory Memory Retrieval Class Activity D Furnham, A., & Bradley, A. (1997). M differential distraction of backgroun performance of introverts and extrav 445-455. | | | |
|---------|---|--|---|--|--|
| Week 8 | Mon., Mar. 5 Wed., Mar. 7 Fri., Mar. 9 | Memory Errors False Memory Eyewitness Testimony Paper due at beginning of class | Ch. 7 (p. 223-245) Ch. 7 (p. 245-264) Ch. 7 (p. 245-264) | | |
| Week 9 | No Classes – Spring Break – Have fun and stay safe! | | | | |
| Week 10 | Mon., Mar. 19 Wed., Mar. 21 Fri., Mar. 23 | Categorization Categorization Semantic Nets & Connectionism | Ch. 8 (p. 265-286) Ch. 8 (p. 265-286) Ch. 8 (p. 286-307) | | |
| Week 11 | Mon., Mar. 26 Wed., Mar. 28 Fri., Mar. 30 | EXAM 2, in class Language Comprehension Language & Thought | Ch. 10 (p. 345-369) Ch. 10 (p. 369-386) | | |
| Week 12 | Mon., Apr. 2 Wed., Apr. 4 | Language Acquisition none Class Activity E E-reserve Bradlow, A. R., Akahane-Yamada, R., Pisoni, D. B., & Tohkura, Y. (1999). Training Japanese listeners to identify English /r/ and /l/: Long-term retention of learning in perception and production. <i>Perception &</i> <i>Psychophysics, 61</i> , 977-985. | | | |
| | Fri., Apr. 6 | Visual Imagery & Perception | Ch. 9 (p. 309-344) | | |
| Week 13 | Mon., Apr. 9 Wed., Apr. 11 Fri., Apr. 13 | Problem Solving Expertise Decision Making | Ch. 11 (p. 387-407) Ch. 11 (p. 407-426) Ch. 12 (p. 468-477) | | |
| Week 14 | Mon., Apr. 16 | Class Activity F Kahneman, D., & Tversky, A. (1984) <i>American Psychologist, 39,</i> 341-350. | E-reserve . Choices, values, and frames. | | |
| | Wed., Apr. 18 Fri., Apr. 20 | Deductive Reasoning Inductive Reasoning | Ch. 12 (p. 427-454) Ch. 12 (p. 454-468) | | |
| Week 15 | Mon., Apr. 23 | Cognitive Development: Piaget Flavell, J. H. (1996). Piaget's legacy. | E-reserve Psychological Science, 7, 200-203. | | |
| | Wed., Apr. 25 Fri., Apr. 27 | Piaget Vygotsky | none | | |
| Week 16 | Mon., Apr. 30 | Class Activity G | E-reserve 1999). Change and continuity in early radical middle." <i>Infant Behavior &</i> | | |
| | Wed., May 2 | Contemporary Issues | none | | |
| | Fri., May 4 | Extra Credit due at beginning of cla Conclusions and Future Directions | | | |
| Week 17 | Wed., May 9, 7:50 a.m., FINAL EXAM (in our regular classroom) | | | | |

Congratulations on a semester well done. Enjoy the summer and the rest of your life journey.