

**Psychology 7020 - Survey of Cognitive Aging**  
**Fridays 10:05 AM - 12:55 PM**  
**Room 285 - Psychology Bldg.**

**INSTRUCTOR:** Dr. Wendy A. Rogers  
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**OFFICE HOURS:** By appointment  
**REQUIRED TEXTS:** 1. Craik, F. I. M., & Salthouse, T. A. (2000). The Handbook of Aging and Cognition (second edition). Mahwah, NJ: Erlbaum  
2. Set of Readings

### **COURSE OVERVIEW**

This will be a survey course on cognition and aging. The goal is to provide students with a sound theoretical and empirical framework for evaluating and conducting research in cognitive aging. To that end, we will cover a broad range of topics such as attention, memory, intelligence, language, neuropsychology, and applied cognitive research. My goal is for each member of the class to be conversant in the current topics of study in cognition and aging. Thus, we will follow a seminar format wherein students will be expected to participate. In addition, students will have the opportunity to make a presentation on a particular topic as well as to write a research proposal.

The first two weeks will focus on theoretical and methodological issues. For the third week we will read two review chapters in the area of neuropsychology and aging to provide an overview of this nascent area. In weeks 4-11 & 16 we will cover a specific topic each week - the readings will consist of an overview chapter on each topic accompanied by a current empirical article. The goal will be to understand the main issues, concerns, and current state of knowledge (from the review chapter), and to acquire an in-depth insight into how research is conducted in each area (from the empirical article). Weeks 12-15 will consist of student-led discussions on a topic of their choice that is not otherwise covered in the course. Students will each assign an empirical article for all class members to read. By the end of the semester, students in the class should have both breadth and depth of knowledge of research in cognition and aging. In addition each student will have a solid understanding of how to conduct research on a wide variety of topics in the field of cognitive aging.

### **EVALUATION**

Your course grade will be determined by:

- (1) Brief discussion with questions prepared for each class (20%). For each class (including student presentation days) you will prepare a one-page discussion of the readings (not a summary). You should extract the important issues of the readings, and, more importantly, propose discussion questions for class. The questions can be points of confusion, issues for further consideration, follow up research ideas, and so on.
- (2) Class participation (20%). You will be expected to participate in the class discussions by sharing your discussion questions and by participating in the general discussion.

(3) Presentation (25%). Students will be assigned as Discussion Leaders for a topic of their choice (either from the list below or another topic approved by me – the topic must be one that we are not scheduled to cover in the class). You will have 50 minutes for your discussion. Each topic must be related to *cognition and aging*. Your task as discussion leader will be to give a brief (20-25 minutes) tutorial on the topic - what are the major theoretical issues, methodological concerns, points of controversy, unresolved issues. Then you will lead the discussion of an empirical study in this area. You will assign the empirical study as the reading for the class for that topic. You will tell me your topic at the beginning of class on **Week 4 (9/15)** – be sure to have an alternate choice in case someone else picks your topic (if you don't want to pick, I'll pick for you!). Reading assignments must be made by **Week 10 (10/27)** – **at the beginning of class on this day you are to provide me and each member of the class with a copy of the reading for your discussion.**

Potential topics:

Activities of Daily Living	Emotion & Cognition	Practical Intelligence
Alzheimer's Disease	Environmental Support	Problem Solving
Animal Models	Episodic Memory	Prospective Memory
Arousal	Expertise/Skill	Psychosocial Factors
Autobiographical Memory	Gender Differences	Reasoning
Automatic Processing	Health Factors	Schemata
Biodata	Implicit Memory	Self-efficacy
Cautiousness	Individual Differences	Skill Acquisition
Centenarians	Inhibition	Spatial Cognition
Cohort Effects	Learning	Speed of Processing
Compensation	Measurement Equivalence	Strategies
Complexity Hypothesis	Memory for Activities	Stress and Coping
Conditioning	Mnemonics	Terminal Drop
Creativity	Motivation	Training
Decision Making	Neural Noise	Vigilance
Dementia	Neural Plasticity	Wisdom
Depth of Processing	Personality	Working Memory
Disuse Theory	Post-formal Reasoning	

(4) Research Proposal (35%). A 15-25 page research proposal is due on the last day of class (**Friday, December 8 at 10:00 AM**). The paper will propose an experiment (or a series of experiments). The topic of the experiment is open to any area of cognitive aging. The paper should be in APA format (see the 1994 *Publication Manual of the American Psychological Association*, 4th Edition, Washington, DC: American Psychological Association). Your research proposal should have an introduction, a detailed method section, and a discussion section. An abstract (100-150 words) of your paper is due at the beginning of class in **Week 10 (10/27)**. The abstract is a description of your idea. Thus you must have thought about your topic and done some reading by this time to be able to write a reasonable abstract. You cannot change the topic of your proposal after you have turned in your abstract unless you have permission from me.

**NOTES:**

- Remember what plagiarism is and how to avoid it (see next page).
- I will not read more than 25 pages (not including references)

- *Papers will be docked a full letter grade for each calendar day late.*

## Writing Papers on Topics in Psychology

### 1) Plagiarism

- Webster's Ninth New Collegiate Dictionary (1986). Springfield, MA: Merriam-Webster  
"plagiarize: to steal and pass off (the *ideas or words* of another) as one's own; use (a created production) without crediting the source; to commit literary theft - present as new and original *an idea or product* derived from an existing source" (p. 898, emphasis added)
- APA Ethical Principles of Psychologists and Code of Conduct: 6.22: "Psychologists do not present substantial portions or elements of another's work or data as their own, even if the other work or data source is cited occasionally." (p.13)

### 2) Primary Sources

- ALWAYS go to the primary source, if available.
- In other words, don't trust anyone but yourself to interpret an article. If you are going to reference it, you (or one of your co-authors) should have read it.
- Exceptions - reference is in a foreign language; reference is a technical report that is not accessible (may be classified)

### 3) Use of References

- To support an assertion (ex. "Females are better at solving verbal word problems than are males" What research is this claim based on? A reference must be provided to support it).
- ALL references cited in the text MUST be listed in the reference list (in APA format - which includes the author(s), year, title, journal or book, volume, page numbers, and for books, the publisher).
- The ONLY references in the reference list are those that are referenced in the text. It doesn't matter if you read 30 other articles - if you didn't reference them in any way, they don't belong in the reference list.
- It is the author's responsibility to ensure that the references are complete and ACCURATE; It is therefore irresponsible not to double-check all of your references.



## READING LIST

### Week 1 – Welcome and Organization

### Week 2 – Theoretical and Methodological Issues

Cavanaugh, J. C. (1999). Theories of aging in the biological, behavioral, and social sciences. In J. C. Cavanaugh and S. K. Whitbourne (Eds.), Gerontology: An interdisciplinary perspective (pp. 1-32). New York: Oxford University Press.

Cavanaugh, J. C., & Whitbourne, S. K. (1999). Research methods. In J. C. Cavanaugh and S. K. Whitbourne (Eds.), Gerontology: An interdisciplinary perspective (pp. 33-64). New York: Oxford University Press.

Salthouse, T. A. (2000). Methodological assumptions in cognitive aging research. In F. I. M. Craik and T. A. Salthouse (Eds.), The handbook of aging and cognition (second edition, pp. 467-498). Mahwah, NJ: Erlbaum.

### Week 3 – Neuropsychology

Raz, N. (2000). Aging of the brain and its impact on cognitive performance: Integration of structural and functional findings. In F. I. M. Craik and T. A. Salthouse (Eds.), The handbook of aging and cognition (second edition, pp. 1-90). Mahwah, NJ: Erlbaum.

Prull, M. W., Gabriele, J. D. E., & Bunge, S. A. (2000). Age-related changes in memory: A cognitive neuroscience perspective. In F. I. M. Craik and T. A. Salthouse (Eds.), The handbook of aging and cognition (second edition, pp. 91-153). Mahwah, NJ: Erlbaum.

### Week 4 – Perception

Schneider, B. A., & Pichora-Fuller, M. K. (2000). Implications of perceptual deterioration for cognitive aging research. In F. I. M. Craik and T. A. Salthouse (Eds.), The handbook of aging and cognition (second edition, pp. 155-219). Mahwah, NJ: Erlbaum.

Andersen, G. J., Cisneros, J., Saidpour, A., & Atchley, P. (2000). Age-related differences in collision detection during deceleration. Psychology and Aging, 15, 241-252.

### Week 5 – Attention

McDowd, J. M., & Shaw, R. J. (2000). Attention and aging: A functional perspective. In F. I. M. Craik and T. A. Salthouse (Eds.), The handbook of aging and cognition (second edition, pp. 221-292). Mahwah, NJ: Erlbaum.

Atchley, P. & Kramer, A.F. (2000). Age-related changes in the control of attention in depth. Psychology and Aging, 15, 78-87.

### Week 6 – Memory

Zacks, R. T., Hasher, L., & Li, K. Z. H. (2000). Human memory. In F. I. M. Craik and T. A. Salthouse (Eds.), The handbook of aging and cognition (second edition, pp. 293-357). Mahwah, NJ: Erlbaum.

Hay, J. F., & Jacoby, L.L. (1999). Separating habit and recollection in young and older adults: Effects of elaborative processing and distinctiveness. Psychology and Aging, 14, 122-134.

### Week 7 – Metacognition

Hertzog, C., & Hultsch, D. F. (2000). Metacognition in adulthood and old age. In F. I. M. Craik and T. A. Salthouse (Eds.), The handbook of aging and cognition (second edition, pp. 417-466). Mahwah, NJ: Erlbaum.

Connor, L. T., Dunlosky, J., & Hertzog, C. (1997). Age-related differences in absolute but not relative metamemory accuracy. Psychology and Aging, 12, 50-71.

### **Week 8 – Language**

Wingfield, A., & Stine-Morrow, E. A. L. (2000). Language and speech. In F. I. M. Craik and T. A. Salthouse (Eds.), The handbook of aging and cognition (second edition, pp. 359-416). Mahwah, NJ: Erlbaum.

McGinnis, D., and Zelinski, E. M. (2000). Understanding unfamiliar words: The influence of processing resources, vocabulary knowledge, and age. Psychology and Aging, 15, 225-350.

### **Week 9 – No Class Meeting**

### **Week 10 – Intelligence**

Schaie, K. W., & Willis S. L. (1996). Psychometric intelligence and aging. In F. Blanchard-Fields & T. M. Hess (Eds.), Perspectives on cognitive change in adulthood and aging (pp. 293-322). New York: McGraw-Hill.

Berg, C. A., & Klaczynski, P. A. (1996). Practical intelligence and problem solving: Searching for perspectives. In F. Blanchard-Fields & T. M. Hess (Eds.), Perspectives on cognitive change in adulthood and aging (pp. 323-357). New York: McGraw-Hill.

Sinnott (1996). The developmental approach: Postformal thought as adaptive intelligence. In F. Blanchard-Fields & T. M. Hess (Eds.), Perspectives on cognitive change in adulthood and aging (pp. 358-383). New York: McGraw-Hill.

Ackerman, P. L., & Rolfhus, E. L. (1999). The locus of adult intelligence: Knowledge, abilities, and nonability traits. Psychology and Aging, 14, 314-330.

### **Week 11 – Social Cognition**

Staudinger, U. M., & Pasupathi, M. (2000). Life-span perspectives on self, personality, and social cognition. In F. I. M. Craik and T. A. Salthouse (Eds.), The handbook of aging and cognition (second edition, pp. 633-688). Mahwah, NJ: Erlbaum.

Hess, T. M., Bolstad, C. A., Woodburn, S. M., & Auman, C. (1999). Trait diagnosticity versus behavioral consistency as determinants of impression change in adulthood. Psychology and Aging, 14, 77-89.

### **Week 12 – Student Presentations**

Student discussion leaders will assign the readings.

### **Week 13 – Student Presentations**

Student discussion leaders will assign the readings.

### **Week 14 – No Class Meeting – Thanksgiving Break**

### **Week 15 – Student Presentations**

Student discussion leaders will assign the readings.

### **Week 16 – Applied Cognition and Human Factors**

Rogers, W. A., and Fisk, A. D. (2000). Human factors, applied cognition, and aging. In F. I. M. Craik and T. A. Salthouse (Eds.), The handbook of aging and cognition (second edition, pp. 559-591). Mahwah, NJ: Erlbaum.

Schooler, C., Mulatu, M. S., & Oates, G. (1999). The continuing effects of substantively complex work on the intellectual functioning of older workers. Psychology and Aging, 14, 483-506.