University of Florida College of Public Health & Health Professions Department of Clinical and Health Psychology <u>Course Syllabus</u>

CLP 7934, Special Topics: Directed Reading-Neuropsychology of Aging Fall, 2013, Section # 1A45, 3 credit hours Online class; new materials released/assignments due each Wednesday *No physical room/time* Materials in UF Sakai: <u>http://lss.at.ufl.edu</u>

Instructor Information

Course Coordinator:	Instructors (alphabetical)	Contact
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Office Hours: Thursdays 10:30		
am-11:30 am and by appointment		

Course Overview or Purpose

This directed reading course introduces students to contemporary theory, method, and findings regarding normal cognitive aging, neuropsychology (based mainly on research with braindamaged individuals) and cognitive neuroscience. The readings will consider normal and pathological cognitive changes, potential etiologies and comorbidities, as well as recent thinking on intervention approaches for late life cognition. The selection of topics and instructors also reflects the unique profile of expertise among University of Florida Division of Neuropsychology faculty.

Course Objectives and/or Goals

- 1. The student will be able to describe and synthesize major normal and pathological cognitive changes in later life
- 2. The student will have familiarity with the major behavioral and neuroscience approaches used in the study of neuropsychological aging
- 3. The student will explore major explanatory models and potential co-morbid factors in the prediction of late life cognitive change

4. The student will become familiarized with contemporary approaches to intervening with late life cognition, and will be able to summarize emerging data needs in this nascent area.

Course format

This is a directed reading course. Students will access personal-use electronic copies of all assigned readings in this course (online, in the UF Sakai system). Each week, students will be expected to summarize, synthesize and integrate readings (along with outside material they choose to bring in) so that they can explain readings to others. This will take the form of a weekly teaching PowerPoint presentation produced by the student (see "Assignments" below for details). Powerpoints must be uploaded by 4:05 pm (Eastern time) each week, as described below.

Prerequisite:

Students must be registered graduate students in good standing at the University of Florida. The course is open to students from all disciplines, although some of the material may be challenging for students without basic coursework in cognitive/developmental psychology or neuropsychology. Students are expected to seek out additional foundational reading and materials in areas that are challenging for them; students are invited to ask course instructors for recommendations.

Course materials:

Each week is associated with readings (empirical articles, meta-analyses, review chapters, theoretical papers, fact sheets, consensus statements). These are detailed below in the weekly calendar, and electronic copies will be provided at the class Sakai site.

Course website:

The course will be delivered entirely via the UF Sakai system at <u>http://lss.at.ufl.edu</u>. Weekly homework assignments (student-produced PowerPoint presentations) will be distributed via Sakai, and should be submitted by the student as an attachment to the class Sakai site ("Assignments" tab).

Course Requirements/Evaluation/Grading

Percentage grades in this class are earned on the basis of points (described below), and then converted to letter grades (as shown in this chart). Letter-grade GPA equivalents are shown in the second table below.

Percentage or points earned in class	93%- 100%	90%- 92%	87%- 89%	83%- 86%	80%- 82%	77%- 79%	73%- 76%	70%- 72%	67%- 69%	63%- 66%	60%- 62%	Be- low 60%				
Letter Grade	Α	A-	B+	В	B-	C+	С	C-	D+	D	D-	Е	WF	I	NG	S-U
equivalent																
	4.0	3.67	3.33	3.0	2.67	2.33	2.0	1.67	1.33	1.0	0.67	0.0	0.0	0.0	0.0	0.0

For greater detail on the meaning of letter grades and university policies related to them, see the Registrar's Grade Policy regulations at <u>http://www.registrar.ufl.edu/catalog/policies/regulationgrades.html</u>

On the course schedule below is listed the date on which each assignment is distributed to the class. Assignments are always due, in e-learning, on the Wednesday designated below, by 4:05 pm.

The grade for the class will be based on the weekly Powerpoints. Each Powerpoint presentation will be weighted to count for the exact same proportion of your final grade, even if varying numbers of pages-to-read are given to each week. The sole exception is the "Dementias" module, which spans two weeks, and has double weight.

1. *Submitted Powerpoint presentations*. (100% of grade) – Each week, a Powerpoint will be required (details below). Each powerpoint is worth 6.67% of the final grade (except for the "Dementias" module, which spans two weeks, and is worth 13.33%). *Submit via Sakai*.

The Powerpoint should:

- a. Start with **OBJECTIVES** and a list of key terms and their definitions. See the appendix of this document for more details on how to write objectives
- b. The final slides should be labeled SUMMARY/WRAPUP or something like that, and should strive to constitute an INTEGRATIVE SUMMARY of the week, along with future directions.
- c. Your approach to reviewing the articles to to provide a summary/synthesis/integration/analysis of what you have read
 - the powerpoint should not be a point-by-point review of each article, but should provide the "big picture"
 - the powerpoint should take the form of lecture slides you would use if teaching an upper-division undergraduate or lower-division graduate course
- d. Draw on good teaching practice
 - Good teaching powerpoints usually use informative headers that summarize key points
 - Are not text-dense

- Supplement text with illustrative graphics, figures, tables, charts, video/sound clips
- e. Draw on knowledge outside of the required readings
 - Sometimes complex ideas will need definitions/explanations/etc.
 - You may consult outside references, websites, textbooks etc (this is encouraged)
 - Any outside materials included should be properly references/cited on the slide itself
- f. Have sufficient/adequate content
 - A typical class involves 3 hours of lecture per week; thus the number of slides must be sufficient to cover a class of this length
 - Consequently, there is a FIFTY SLIDE MINIMUM (50) for each week.
 - Students may use more than fifty slides, especially if it is useful for reducing the density of single slides
 - There is a ONE HUNDRED AND FIFTY SLIDE MAXIMUM (150) for each week.

The grading rubric for each powerpoint is as follows. (The "Dementia" module is a doublemodule spanning two weeks, and point values will be doubled in that week.

Item	Points	Illustrative breakdowns (these are examples only, and do not constitute hard-and-fast rules; there is always some instructor subjectivity in this kind of rating)
Accuracy/thoroughness of coverage	20	 20 – all <i>major</i> concepts/ideas from the readings have been covered (with redundancies eliminated) 18 – most major concepts covered; some concepts left uncovered or unclearly discussed or redundancies exist 16 – several major concepts uncovered or left unclear 14 – whole readings clearly given short schrift or left out 12 – significant gaps in coverage or clarity Point values below 12 would be assigned for absent or wholly inadequate presentations

Item	Points	Illustrative breakdowns (these are examples only, and do not constitute
		hard-and-fast rules; there is always some instructor subjectivity in this kind of rating)
Good pedagogical practice	20	 20 – key points are highlighted and summarized (main ideas, not details); text density is not overwhelming; good supplementation with figures/tables/graphs/charts, media, etc. 18 – key ideas are sometimes lost in too much detail; dense slides; excessive reliance on text 16 – slides seem too much like summary of readings; not much evidence of reduce or "teach" content 14 – simple summaries of articles; no major organizational framework 12 – inaccurate, incomplete, disorganized material Point values below 12 would be assigned for absent
Use of outside sources	10	 or wholly inadequate presentations 10 – extensive evidence of outside sources used to illustrate, amplify, define, add new ideas 9 – substantial inclusions of outside sources 8 – students clearly drew on materials outside of the assigned readings; clear areas where more work could have been done 7 – some attempt to illustrate at least some points with additional sources 6 – limited (3 or fewer) uses of outside sources Point values below 6 would be assigned for fewer than three outside references
Evidence of effort in design/summary	10	 10 – outstanding attention to design/sensory appeal/interest value/systematic organization (without distraction) 9 – clear attention to design/sensory appeal/interest value/systematic organization (possibly with some clutter/distraction) 8 – evidence of attention to design, etc., but with substantial reliance on textual summaries of read materials 7 – limited attention to design/etc. 6 – minimal (3 or fewer) attention to design/etc. Point values below 6 would be assigned for less than minimal/absent attention to design etc, or substantial distractibility/clutter (e.g., cartoons characters on every page; blinking lights on every page)

Item	Points	Illustrative breakdowns (these are examples only, and do not constitute hard-and-fast rules; there is always some instructor subjectivity in this kind of rating)
Evidence of synthesis/analysis/providing higher-order summaries	10	 10 – outstanding attempt to <i>teach</i> the material ("main ideas", "why is this important?", "how do we pull this together?", "what does this all mean?", "what's next for the field?") 9 – substantial/extensive attempt to <i>teach</i> material 8 – significant <i>teach</i> attempts, but with frequent lapses into summary only 7 – limited attention to <i>teaching</i>; preponderance of summary 6 – minimal attention to <i>teaching</i> Point values below 6 would be assigned for less than minimal/absent attention to <i>teaching</i>

When you submit your assignments to Sakai, it is essential that the first word of your assignment Powerpoint title be your <u>LAST NAME</u> (e.g.,

Marsiske_Week01_NormalAging.ppt]. After 2 reminders about this, a 2-point deduction will be made on each homework_for which these naming conventions are forgotten. See below for additional policy on late submissions.

Note that after your PowerPoint has been graded, it may be submitted to other class members for review and mutual learning.

Incomplete grades:

An incomplete grade may be assigned at the discretion of the instructor as an interim grade for a course in which the student has 1) completed a major portion of the course with a passing grade, 2) been unable to complete course requirements prior to the end of the term because of extenuating circumstances, and 3) obtained agreement from the instructor and arranged for resolution (contract) of the incomplete grade. Instructors assign incomplete grades following consultation with Department Chairs.

For extra help:

For technical/administrative questions, please always contact Course Coordinator Michael Marsiske, using any of the modalities indicated on the first page of this syllabus.

For substantive issues/clarifications regarding *content*, please contact the instructor-of-record for each given week (week-by-week instructors are shown below; contact information is above).

Software/computing resources:

All students must be able to access the UF Sakai portal (<u>http://lss.at.ufl.edu</u>). All students must have access to PowerPoint 2007 or earlier. All students must have an official University of Florida e-mail address (@ufl.edu) and must use that address for correspondence regarding the class.

University's Honesty Policy (cheating and use of copyrighted materials)

Academic Integrity – Students are expected to act in accordance with the University of Florida policy on academic integrity (see Student Conduct Code, the Graduate Student Handbook or this web site for more details:

www.dso.ufl.edu/judicial/procedures/academicguide.php).

Cheating, lying, misrepresentation, or plagiarism in any form is unacceptable and inexcusable behavior.

"We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity."

On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied:

"On my honor, I have neither given nor received unauthorized aid in doing this assignment."

It is desirable and expected that take home assignments will stimulate conversation among classmates, and that classmates may actually mentor one another in the work. Students are also likely to discuss elements of the assignment with the instructor. It is expected that submitted work will <u>solely</u> reflect the student's own efforts. Students are expected not to collaborate in running analyses, writing answers, or interpreting results. The TA and instructor will regularly check for "unusual congruence" in answers, and will discuss concerning instances with students involved. Where collaboration has been found, a zero grade will be assigned. For further clarification, please see the "Acceptable Collaboration" appendix to this syllabus! Rules will be strictly enforced.

Copyright policy - The University of Florida policy on copyright states: "Copyright permission should <u>not</u> be required of instructors in the following circumstances:

1) A single copy of an article, chapter, or poem is on reserve for only *one semester*.

2) A reasonable number of copies of an article, chapter, or poem are placed on reserve for only *one semester*. "Reasonable" is determined by an assessment of the number of students assigned the reading, the difficulty of the reading, and the time frame allowed for completion of the reading. This should normally not exceed 6 copies, although up to one copy for every 15 students may be accepted if space is available in the reserve area and the above criteria are met."

Single-use copies, for exclusive use in class, which are not to be further duplicated or distributed, will be made available in Sakai. All articles are also available via the University of Florida library system, and may be accessed by the student using that portal as well.

Class Attendance

Students are expected to read all articles, and to submit all Powerpoints. If students have planned absences (e.g., conference attendance), they are expected to submit materials in advance of departure, or no-later-than the expected due date via remote login.

Students who have unexpected/extraordinary circumstances preventing timely submission should explain these circumstances to the course coordinator prior to the scheduled class, or as soon as possible thereafter. The coordinator will then make an effort to accommodate <u>reasonable</u> requests. Late submissions follow the penalty schedule documented below.

Make-up Exams or Other Work

Extra credit - No planned opportunities for extra credit exist in this course.

General policy on missed work - It is expected that no students will miss any assignments or inclass tests/exams. **No make-ups will be possible**.

With regard to missing or incomplete assignments, the following policies apply:

- Coordinator/instructors will not contact you about missing or incomplete assignments. It is your responsibility to check that the *correct* PowerPoint has been submitted to Sakai on time
- It may be possible to avoid a late penalty IF YOU CONTACT THE INSTRUCTOR AT LEAST 24 HOURS IN ADVANCE. You should email the course coordinator and explain what issue (e.g., bereavement, illness) necessitates lateness. In some cases, documentation may be requested. If a lateness allowance is agreed to, this applies to a single assignment only. It does not allow you to delay future assignments. <u>Note,</u> conference attendance or doctoral qualifying examinations or thesis/dissertation defenses do not constitute valid lateness excuses.
- If your assignment is late, you will lose 10% each day. Each assignment is graded up to a total of 70 points (see above). Thus, if an assignment is worth a maximum of 70 points, you will lose 7 points for each late day. "Late" begins one minute after the due time (e.g., an assignment due at 4:05 pm is considered late at 4:06 pm). Penalties are as follows:

1 minute to 24 hours late	10% of maximum deducted from achieved
	grade
1 day + 1 minute late to 48 hours late	20% of maximum deducted from achieved
	grade
2 days + 1 minute late to 72 hours late	30% of maximum deducted from achieved
	grade
3 days + 1 minute late to 96 hours late	40% of maximum deducted from achieved

	grade
4 days + 1 minute late to 120 hours late	50% of maximum deducted from achieved
	grade
5 days + 1 minute late 144 hours late	60% of maximum deducted from achieved
	grade
6 days + 1 minute late 168 hours late	70% of maximum deducted from achieved
	grade
7 days + 1 minute late 192 hours late	80% of maximum deducted from achieved
	grade
8 days + 1 minute late 216 hours	90% of maximum deducted from achieved
	grade
9 days $+ 1$ minute late or later	100% of maximum deducted from achieved
	grade

NOTE: UPLOADING THE WRONG POWERPOINT IS SAME-AS-LATE, even if

you have documentation that you completed the document on time. It is your responsibility to verify that you have uploaded the correct document. (You should open or download your uploaded homeworks and double- or triple-check that you have uploaded the right one).

- There will be <u>**no**</u> exceptions to this policy.
- If you have uploaded the wrong document, and Sakai does not allow you to correct this, you should IMMEDIATELY send the correct document to Dr. Marsiske via email.
- If you cannot upload a document due to technical problems (e.g., if Sakai is down), you may e-mail Dr. Marsiske. The timestamp on your e-mail will serve as the time submitting. In such cases, please upload your assignment to Sakai as well, once the technical issue is resolved. UF "best practice" also suggests that you contact the UF Helpdesk and obtain a "problem ticket number" to further document your good-faith attempts to resolve the technical problem. Official text:
 - Don't wait until the last minute. Know when the [assignment] is due and leave yourself plenty of time.
 - [Finish your assignment] during Help Desk hours (http://helpdesk.ufl.edu) so that if you encounter problems, there will be someone available to help you.
 - *Make sure you have a dependable internet connection.*
 - Use Firefox or Internet Explorer browser with the latest updates. NOTE: If your instructor has created your [assignment] using the "Assessments" tool and you're on a Windows 7 machine, use Firefox only.
 - Make sure you read your instructions carefully before beginning the [assignment].
 - If you encounter any unexpected behavior (error messages, inability to log in, etc.,) take a screen shot of the problem (Print Scrn) and paste (CTRL+V) into a program like Word or Paint. Save this file. This is important so that your instructor knows your problem is legitimate, and to assist the UF Computing Help Desk in helping you fix the problem.
 - If you encounter problems that prevent you from [completing the assignment], immediately call the UF Computing Help Desk at 352-392-4357. Keep the ticket number for future reference.
 - When you are done with your [assignment], be sure you submit it! If you do not see a successful submission message, your test is still in progress. You will not get a grade until you submit.

Accommodations for Students with Disabilities

If you require accommodation because of a disability, you must first register with the Dean of Students Office (<u>http://oss.ufl.edu/</u>). The Dean of Students Office will provide documentation to you, which you then give to the instructor when requesting accommodation. The College is committed to providing reasonable accommodations to assist students in their coursework.

Counseling and Student Health

Students may occasionally have personal issues that arise in the course of pursuing higher education or that may interfere with their academic performance. If you find yourself facing problems affecting your coursework, you are encouraged to talk with an instructor and to seek confidential assistance at the University of Florida Counseling Center, 352-392-1575, or Student Mental Health Services, 352-392-1171. Visit their web sites for more information: http://www.counsel.ufl.edu/ or http://www.health.ufl.edu/shcc/smhs/index.htm#urgent

The Student Health Care Center at Shands is a satellite clinic of the main Student Health Care Center located on Fletcher Drive on campus. Student Health at Shands offers a variety of clinical services, including primary care, women's health care, immunizations, mental health care, and pharmacy services. The clinic is located on the second floor of the Dental Tower in the Health Science Center. For more information, contact the clinic at 392-0627 or check out the web site at: www.health.ufl.edu/shcc

Crisis intervention is always available 24/7 from: Alachua County Crisis Center: (352) 264-6789.

BUT – Do not wait until you reach a crisis to come in and talk with us. We have helped many students through stressful situations impacting their academic performance. You are not alone so do not be afraid to ask for assistance.

Week(s)	Date	Торіс	Assignment	Instructor(s)
			Due Date	
Module ()ne: Cogn	itive aging: Theory, methodology and findi	ings	
1	8/21	Normal cognitive changes	8/28	Marsiske
2	8/28	Neuroimaging/neuroscience methods and	9/4	Perlstein
		aging		
3	9/4	Memory aging	9/11	Bauer
4	9/11	Visuospatial aging	9/18	Bauer
5-6	9/18	The Dementias, 1 & 2	10/2	Bauer
	and			
	9/12			
Module 7	wo: Expl	anatory models and comorbid conditions		
7	10/2	Possible explanations: White matter and	10/9	Price

Topical Outline

		network accounts		
8	10/9	The cognitive neuropsychology of	10/16	Dotson
		depression in the elderly		
9	10/16	Stress-diathesis models of cognitive aging:	10/23	Price
		Sample case of post-operative cognitive		
		dysfunction		
10	10/23	Cardiovascular function and its role in	10/30	Cohen
		cognitive aging: Sample case from the		
		laboratory of Ronald Cohen		
11	10/30	Stroke: Cognitive sequelae	11/6	Conway
12	11/6	Parkinson's disease: Cognitive sequelae	11/13	Bowers
13	11/13	Physical exercise interventions	11/20	Dotson
Module '	Three: To	ward interventional neuropsychology		
14	11/20	Cognitive interventions	11/29**	Marsiske
15	11/27	Mechanisms of Age-Related Cognitive	12/4	Marsiske
		Change and Targets for Intervention		

** note: due date has been delayed for two days in observance of Thanksgiving

Readings

Week	Readings
1	Normal cognitive changes
	 01. On the incomplete architecture of human ontogeny: Selection, optimization, and compensation as foundation of developmental theory. By Baltes, Paul B. American Psychologist, Vol 52(4), Apr 1997, 366-380. doi: 10.1037/0003-066X.52.4.366
	 02. Intellectual Development Across Adulthood. By Schaie, K. Warner; Zanjani, Faika A. K. Hoare, Carol (Ed), (2006). Handbook of adult development and learning, (pp. 99-122). New York, NY, US: Oxford University Press, xviii, 579 pp.
	03. Contemporary review 2009: Cognitive aging. By Drag, Lauren L.; Bieliauskas, Linas A. Journal of Geriatric Psychiatry and Neurology, Vol 23(2), Jun 2010, 75-93. doi: 10.1177/0891988709358590
	04. Human neuroscience and the aging mind: A new look at old problems. By Reuter-Lorenz, Patricia; Park, Denise C. Journals of Gerontology: Psychological Sciences, 65B(4), 405-515. doi: 10.1093/geronb/gbq035
	 05. The fate of cognition in very old age: Six-year longitudinal findings in the Berlin Aging Study (BASE). By Singer, Tania; Verhaeghen, Paul; Ghisletta, Paolo; Lindenberger, Ulman; Baltes, Paul B. Psychology and Aging, Vol 18(2), Jun 2003, 318-331. doi: 10.1037/0882-7974.18.2.318
	 06. Patterns of Cognitive Performance in Middle-Aged and Older Adults: A Cluster Analytic Examination. Gunstad, John; Paul, Robert H.; Brickman, Adam M.; Cohen, Ronald A.; Arns, Martijn; Roe, Donald; Lawrence, Jeffery J.; Gordon, Evian Journal of Geriatric Psychiatry and Neurology, Vol 19(2), Jun 2006, 59-64. doi: 10.1177/0891988705284738

Week	Readings
2	Neuroimaging/neuroscience methods and aging
	07. Neuroimaging of healthy cognitive aging.
	By Dennis, Nancy A.; Cabeza, Roberto
	Craik, Fergus I. M. (Ed); Salthouse, Timothy A. (Ed), (2008). The handbook of aging and cognition (3rd ed.), (pp. 1-54). New York, NY, US: Psychology Press, xi, 657 pp.
	08. Alterations in the BOLD fMRI signal with ageing and disease: a challenge for neuroimaging.
	D'Esposito M, Deouell LY, Gazzaley A.
	Nat Rev Neurosci. 2003 Nov;4(11):863-72.
	09. Cognition and aging: A highly selective overview of event-related potential (ERP) data.
	By Friedman, David
	Journal of Clinical and Experimental Neuropsychology, Vol 25(5), Aug 2003, 702-720. doi: 10.1076/jcen.25.5.702.14578
	10. Imaging aging: Present and future.
	By Hayes, Scott M.; Cabeza, Roberto Hofer, Scott M. (Ed); Alwin, Duane F. (Ed), (2008). Handbook of cognitive aging:
	Interdisciplinary perspectives, (pp. 308-326). Thousand Oaks, CA, US: Sage
	Publications, Inc, xiii, 730 pp.
	11. Scanning patients with tasks they can perform.
	By Price, Cathy J.; Friston, Karl J.
	Human Brain Mapping, Vol 8(2-3), 1999, 102-108.
	doi: 10.1002/(SICI)1097-0193(1999)8:2/3<102::AID-HBM6>3.0.CO;2-J

Week	Readings
3	Memory aging
	12. Age-related changes in neural activity associated with familiarity, recollection and false recognition.Duarte A, Graham KS, Henson RN.Neurobiol Aging. 2010 Oct;31(10):1814-30. Epub 2008 Nov 11.PMID: 19004526
	13. Neural plasticity in the ageing brain.Burke SN, Barnes CA.Nat Rev Neurosci. 2006 Jan;7(1):30-40. Review.PMID: 16371948
	 14. A Meta-Analytic Review of Prospective Memory and Aging. By Henry, Julie D.; MacLeod, Mairi S.; Phillips, Louise H.; Crawford, John R. Psychology and Aging, Vol 19(1), Mar 2004, 27-39. doi: 10.1037/0882-7974.19.1.27
	 15. Aging reduces veridical remembering but increases false remembering: Neuropsychological test correlates of remember-know judgments. By McCabe, David P.; Roediger, Henry L., III; McDaniel, Mark A.; Balota, David A. Neuropsychologia, Vol 47(11), Sep 2009, 2164-2173. doi: 10.1016/j.neuropsychologia.2008.11.025
4	Visuospatial aging
	16. Efficiency of route selection as a function of adult age.By Salthouse, Timothy A.; Siedlecki, Karen L.Brain and Cognition, Vol 63(3), Apr 2007, 279-286.doi: 10.1016/j.bandc.2006.09.006
	17. Aging and spatial navigation: What do we know and where do we go? By Moffat, Scott D. Neuropsychology Review, Vol 19(4), Dec 2009, 478-489.
	doi: 10.1007/s11065-009-9120-3
	 18. Path integration and the neural basis of the 'cognitive map.' By McNaughton, Bruce L.; Battaglia, Francesco P.; Jensen, Ole; Moser, Edvard I.; Moser, May-Britt Nature Reviews Neuroscience, Vol 7(8), Aug 2006, 663-678. doi: 10.1038/nrn1932
	 19. Visual dysfunction, neurodegenerative diseases, and aging. By Jackson, Gregory R.; Owsley, Cynthia Neurologic Clinics, Vol 21(3), Aug 2003, 709-728. doi: 10.1016/S0733-8619(02)00107-X

Week	Readings
5-6	The Dementias, 1 & 2
	20. Frontotemporal dementia: A topical review. By Kertesz, Andrew
	Cognitive and Behavioral Neurology, Vol 21(3), Sep 2008, 127-133. doi: 10.1097/WNN.0b013e31818a8c66
	21. Frontotemporal dementia: a review for primary care physicians.Cardarelli R, Kertesz A, Knebl JA.Am Fam Physician. 2010 Dec 1;82(11):1372-7.PMID: 21121521
	22. The clinical use of structural MRI in Alzheimer disease. Frisoni GB, Fox NC, Jack CR Jr, Scheltens P, Thompson PM. Nat Rev Neurol. 2010 Feb;6(2):67-77. Review.PMID: 20139996
	23. Neuropsychological and neuroimaging changes in preclinical Alzheimer's disease. By Twamley, Elizabeth W.; Ropacki, Susan A. Legendre; Bondi, Mark W. Journal of the International Neuropsychological Society, Vol 12(5), Sep 2006, 707-735. doi: 10.1017/S1355617706060863
	24. Neuropsychological assessment of dementia. By Salmon, David P.; Bondi, Mark W. Annual Review of Psychology, Vol 60, Jan 2009, 257-282. doi: 10.1146/annurev.psych.57.102904.190024
	25. Semantic dementia: a unique clinicopathological syndrome.Hodges JR, Patterson K.Lancet Neurol. 2007 Nov;6(11):1004-14. Review.PMID: 17945154
	 26. Subcortical vascular dementia: Integrating neuropsychological and neuroradiologic data. By Price, C. C.; Jefferson, A. L.; Merino, J. G.; Heilman, K. M.; Libon, D. J. Neurology, Vol 65(3), Aug 2005, 376-382. doi: 10.1212/01.WNL.0000168877.06011.15
	27. Alzheimer's "Other Dementia" By Libon, David J.; Price, Catherine C.; Heilman, Kenneth M.; Grossman, Murray Cognitive and Behavioral Neurology, Vol 19(2), Jun 2006, 112-116. doi: 10.1097/01.wnn.0000209870.69522.a3
	28. Guidelines for the Evaluation of Dementia and Age-Related Cognitive Change By Task Force to Update the Guidelines for the Evaluation of Dementia and Age- Related Cognitive Decline Adopted by the APA Council of Representatives on February 18, 2011, no doi.

Week	Readings	
7	Possible explanations: White matter and network accounts	
	29. Neuropsychology of vascular dementia.	
	By Price, C. C., Nguyen, P., Lamar, M., Libon, D.	
	In Neuropsychology of Cardiovascular Diseases (in press) Psychology Press.	
	30. Selective effects of aging on brain white matter microstructure: a diffusion tensor	
	imaging tractography study.	
	PMID: 20483378	
	21 A sing graasfully, companyatory brain activity in high performing older adults	
	Neuronnage. 2002 Nov,17(5).1574-402.1 MID. 12414279	
	32. Structure-Function Correlates of Cognitive Decline in Aging.	
	doi: 10.1093/cercor/bhj036	
	 Michielse S, Coupland N, Camicioli R, Carter R, Seres P, Sabino J, Malykhin N. Neuroimage. 2010 Oct 1;52(4):1190-201. Epub 2010 May 17. PMID: 20483378 31. Aging gracefully: compensatory brain activity in high-performing older adults. Cabeza R, Anderson ND, Locantore JK, McIntosh AR. Neuroimage. 2002 Nov;17(3):1394-402.PMID: 12414279 32. Structure-Function Correlates of Cognitive Decline in Aging. By Persson, Jonas; Nyberg, Lars; Lind, Johanna; Larsson, Anne; Nilsson, Lars-Göra Ingvar, Martin; Buckner, Randy L. Cerebral Cortex, Vol 16(7), Jul 2006, 907-915. 	an;

Readings
The cognitive neuropsychology of depression in the elderly
33. The cognitive neuropsychology of depression in the elderly
LUCIE L. HERRMANN, GUY M. GOODWIN and KLAUS P. EBMEIER
Psychological Medicine / Volume 37 / Issue 12, pp 1693 -1702
DOI:10.1017/S0033291707001134
34. Geriatric depression and cognitive impairment.
By Steffens, D. C.; Potter, G. G.
Psychological Medicine: A Journal of Research in Psychiatry and the Allied Sciences,
Vol 38(2), Feb 2008, 163-175.
doi: 10.1017/S003329170700102X
35. Pathways linking late-life depression to persistent cognitive impairment and
dementia.
Butters MA, Young JB, Lopez O, Aizenstein HJ, Mulsant BH, Reynolds CF 3rd, DeKosky ST, Becker JT.
Dialogues Clin Neurosci. 2008;10(3):345-57.
36. Depression and risk for Alzheimer disease: systematic review, meta-analysis, and
metaregression analysis.
Ownby RL, Crocco E, Acevedo A, John V, Loewenstein D.
Arch Gen Psychiatry. 2006 May;63(5):530-8.PMID: 16651510
37. How late-life depression affects cognition: neural mechanisms.
Crocco EA, Castro K, Loewenstein DA.
Curr Psychiatry Rep. 2010 Feb;12(1):34-8. Review.PMID: 20425308

Week	Readings
9	Stress-diathesis models of cognitive aging: Sample case of post-operative cognitive
	dysfunction
	38. Post operative cognitive disorders.
	Price, C. C., Tanner, J., Monk, T. G.
	In G. Mashour (Ed), Neuroscientific Foundations of Anesthesiology, Oxford University Press.(in press).
	1 (css.(m press).
	39. Defining postoperative cognitive dysfunction.
	Rasmussen LS.
	Eur J Anaesthesiol. 1998 Nov;15(6):761-4.
	PMID: 9884870
	406 Detection of postoperative accritive dealing after according artery bypass graft
	406. Detection of postoperative cognitive decline after coronary artery bypass graft surgery is affected by the number of neuropsychological tests in the assessment battery.
	Lewis MS, Maruff P, Silbert BS, Evered LA, Scott DA.
	Ann Thorac Surg. 2006 Jun;81(6):2097-104.
	PMID: 16731137
	41. Predictors of cognitive dysfunction after major noncardiac surgery.
	Monk TG, Weldon BC, Garvan CW, Dede DE, van der Aa MT, Heilman KM,
	Gravenstein JS. Anesthesiology. 2008 Jan;108(1):18-30.
	PMID: 18156878
	1,111, 101,0070
	42. Interactive effects of stress and aging on structural plasticity in the prefrontal
	cortex.
	Bloss EB, Janssen WG, McEwen BS, Morrison JH.
	J Neurosci. 2010 May 12;30(19):6726-31.
	PMID: 20463234
	43. Cognitive reserve.
	Stern Y.
	Neuropsychologia. 2009 Aug;47(10):2015-28. Epub 2009 Mar 13.
	PMID: 19467352

Week	Readings
10	Cardiovascular function and its role in cognitive aging: Sample case from the
	laboratory of Ronald Cohen
	44. Cognitive profiles in heart failure: A cluster analytic approach. doi:
	10.1080/13803395.2012.663344 By Miller, Lindsay A.; Spitznagel, Mary Beth;
	Alosco, Michael L.; Cohen, Ronald A.; Raz, Naftali; Sweet, Lawrence H.; Colbert,
	Lisa; Josephson, Richard; Hughes, Joel; Rosneck, Jim; Gunstad, John Journal of
	Clinical and Experimental Neuropsychology, Vol 34(5), Jun 2012, 509-520.
	45. Obesity is associated with reduced white matter integrity in otherwise healthy
	adults. doi: 10.1038/oby.2010.312 By Stanek, Kelly M.; Grieve, Stuart M.; Brickman,
	Adam M.; Korgaonkar, Mayuresh S.; Paul, Robert H.; Cohen, Ronald A.; Gunstad,
	John J. Obesity, Vol 19(3), Mar 2011, 500-504.
	46. Longitudinal cognitive performance in older adults with cardiovascular disease:
	Evidence for improvement in heart failure. By Stanek, Kelly M.; Gunstad, John; Paul,
	Robert H.; Poppas, Athena; Jefferson, Angela L.; Sweet, Lawrence H.; Hoth, Karin F.;
	Haley, Andreana P.; Forman, Daniel E.; Cohen, Ronald A. Journal of Cardiovascular
	Nursing, Vol 24(3), May-Jun 2009, 192-197.
	47. The Relationship Between Frontal Gray Matter Volume and Cognition Varies
	Across the Healthy Adult Lifespan. doi: 10.1097/01.JGP.0000238502.40963.ac By
	Zimmerman, Molly E.; Brickman, Adam M.; Paul, Robert H.; Grieve, Stuart M.; Tate,
	David F.; Gunstad, John; Cohen, Ronald A.; Aloia, Mark S.; Williams, Leanne M.;
	Clark, C. Richard; Whitford, Thomas J.; Gordon, Evian The American Journal of
	Geriatric Psychiatry, Vol 14(10), Oct 2006, 823-833.

Week	Readings
11	Stroke: Cognitive sequelae
	48. American Heart Association. Heart Disease and Stroke Statistics — 2010 Update
	49. Worldwide stroke incidence and early case fatality reported in 56 population-based studies: a systematic review.
	Feigin VL, Lawes CM, Bennett DA, Barker-Collo SL, Parag V.
	Lancet Neurol. 2009 Apr;8(4):355-69. Epub 2009 Feb 21. PMID: 19233729
	502. Review of longer-term problems after disabling stroke
	John Young, Jenni Murray and Anne Forster Reviews in Clinical Gerontology / Volume 13 / Issue 01, pp 55 -65
	DOI:10.1017/S0959259803013157 (About DOI)
	51. Screening patients with stroke for rehabilitation needs: validation of the post-stroke rehabilitation guidelines.
	Edwards DF, Hahn MG, Baum CM, Perlmutter MS, Sheedy C, Dromerick AW. Neurorehabil Neural Repair. 2006 Mar;20(1):42-8. PMID: 16467277
	52. Domain-specific cognitive recovery after first-ever stroke: A follow-up study of 111 cases
	Nys, GMS; Van Zandvoort, MJE; De Kort, PLM; et al. JOURNAL OF THE INTERNATIONAL NEUROPSYCHOLOGICAL SOCIETY, 11 (7): 795-806 NOV 2005
	53. Evolution of Cognitive Impairment After Stroke and Risk Factors for Delayed Progression
	BY del Ser, Teodoro MD, PhD; Barba, Raquel MD, PhD; Morin, Maria M. MD;
	Domingo, Julio MD; Cemillan, Carlos MD; Pondal, Margarita MD; Vivancos, Jose MD
	Stroke, Volume 36(12), December 2005, pp 2670-2675

Week	Readings
12	Parkinson's disease: Cognitive sequelae
	54. Cognitive dysfunction in Parkinson's disease: the role of frontostriatal circuitry. Owen AM. Neuroscientist. 2004 Dec;10(6):525-37. Review.PMID: 15534038
	55. The progression of Parkinson disease: a hypothesis. Lang AE. Neurology. 2007 Mar 20;68(12):948-52.PMID: 17372132
	56. The distinct cognitive syndromes of Parkinson's disease: 5 year follow-up of the CamPaIGN cohort.
	Williams-Gray CH, Evans JR, Goris A, Foltynie T, Ban M, Robbins TW, Brayne C, Kolachana BS, Weinberger DR, Sawcer SJ, Barker RA. Brain. 2009 Nov;132(Pt 11):2958-69. Epub 2009 Oct 7.PMID: 19812213
	57. Neurotransmitter changes in dementia with Lewy bodies and Parkinson disease dementia in vivo. Klein JC, Eggers C, Kalbe E, Weisenbach S, Hohmann C, Vollmar S, Baudrexel S,
	Diederich NJ, Heiss WD, Hilker R. Neurology. 2010 Mar 16;74(11):885-92. Epub 2010 Feb 24.PMID: 20181924
	58. DLB and PDD boundary issues: diagnosis, treatment, molecular pathology, and biomarkers.
	Lippa CF, Duda JE, Grossman M, Hurtig HI, Aarsland D, Boeve BF, Brooks DJ, Dickson DW, Dubois B, Emre M, Fahn S, Farmer JM, Galasko D, Galvin JE, Goetz CG, Growdon JH, Gwinn-Hardy KA, Hardy J, Heutink P, Iwatsubo T, Kosaka K, Lee VM, Leverenz JB, Masliah E, McKeith IG, Nussbaum RL, Olanow CW, Ravina BM, Singleton AB, Tanner CM, Trojanowski JQ, Wszolek ZK; DLB/PDD Working Group. Neurology. 2007 Mar 13;68(11):812-9. PMID: 17353469
	 59. Deep Brain Stimulation and the Role of the Neuropsychologist. By Okun, Michael S.; Rodriguez, Ramon L.; Mikos, Ania; Miller, Kimberly; Kellison, Ida; Kirsch-Darrow, Lindsey; Wint, Dylan P.; Springer, Utaka; Fernandez, Hubert H.; Foote, Kelly D.; Crucian, Gregory; Bowers, Dawn The Clinical Neuropsychologist, Vol 21(1), Jan 2007, 162-189. doi: 10.1080/13825580601025940

Week	Readings
13	Physical exercise interventions
	 60. Neurocognitive aging and cardiovascular fitness: recent findings and future directions. Colcombe SJ, Kramer AF, McAuley E, Erickson KI, Scalf P. J Mol Neurosci. 2004;24(1):9-14. Review.PMID: 15314244
	61. Capitalizing on cortical plasticity: influence of physical activity on cognition and brain function. Kramer AF, Erickson KI.
	Trends Cogn Sci. 2007 Aug;11(8):342-8. Epub 2007 Jul 12. Review.PMID: 17629545
	62. The effects of physical exercise on depressive symptoms among the aged: a systematic review.
	Sjösten N, Kivelä SL. Int J Geriatr Psychiatry. 2006 May;21(5):410-8. Review.PMID: 16676285
	63. Fitness Effects on the Cognitive Function of Older Adults : A Meta-Analytic Study By Stanley Colcombe and Arthur F. Kramer Psychological Science 2003 14: 125, DOI: 10.1111/1467-9280.t01-1-01430
14	Cognitive interventions
	64. Enrichment effects on adult cognitive development: Can the functional capacity of older adults be preserved and enhanced?By Hertzog, Christopher; Kramer, Arthur F.; Wilson, Robert S.; Lindenberger, Ulman Psychological Science in the Public Interest, Vol 9(1), Oct 2008, 1-65.
	65. Intervening with Late-Life Cognition: Lessons from the ACTIVE Study. Marsiske, M.
	Monograph published by the American Society on Aging, San Franciso: CA. (2009).
	66. Can training in a real-time strategy video game attenuate cognitive decline in older adults?
	Basak, Chandramallika; Boot, Walter R.; Voss, Michelle W.; Kramer, Arthur F. Psychology and Aging, Vol 23(4), Dec 2008, 765-777. doi: 10.1037/a0013494
	67. Kueider AM, Parisi JM, Gross AL, Rebok GW (2012) Computerized Cognitive Training with Older Adults: A Systematic Review. PLoS ONE 7(7): e40588. doi:10.1371/journal.pone.0040588
	68. Susanne M. Jaeggi, Martin Buschkuehl, John Jonides, & Walter J. Perri (2008). Improving fluid intelligence with training on working memory. PNAS May 13, 2008 vol. 105 no. 19 6829-6833, doi: 10.1073/pnas.0801268105

Week	Readings
15	Mechanisms of Age-Related Cognitive Change and Targets for Intervention
	69. Kenneth S. Kosik, Peter R. Rapp, Naftali Raz, Scott A. Small, J. David Sweatt, and Li-Huei Tsai (2012) Mechanisms of Age-Related Cognitive Change and Targets for Intervention: Epigenetics J Gerontol A Biol Sci Med Sci 2012 67: 741-746
	70. Charles DeCarli, Claudia Kawas, John H. Morrison, Patricia A. Reuter-Lorenz, Reisa A. Sperling, and Clinton B. Wright (2012) Mechanisms of Age-Related Cognitive Change and Targets for Intervention: Neural Circuits, Networks, and Plasticity. J Gerontol A Biol Sci Med Sci 2012 67: 747-753
	71. Suzanne Craft, Thomas C. Foster, Philip W. Landfield, Steven F. Maier, Susan M. Resnick, and Kristine Yaffe (2012) Mechanisms of Age-Related Cognitive Change and Targets for Intervention: Inflammatory, Oxidative, and Metabolic Processes J Gerontol A Biol Sci Med Sci 2012 67: 754-759.
	72. William S. Kremen, Margie E. Lachman, Jens C. Pruessner, Martin Sliwinski, and Robert S. Wilson (2012) Mechanisms of Age-Related Cognitive Change and Targets for Intervention: Social Interactions and Stress. J Gerontol A Biol Sci Med Sci 2012 67: 760-765
	73. Eric M. Reiman, Roberta Diaz Brinton, Russell Katz, Ronald C. Petersen, Selam Negash, Dan Mungas, and Paul S. Aisen (2012). Considerations in the Design of Clinical Trials for Cognitive Aging. J Gerontol A Biol Sci Med Sci 2012 67: 766-772

Caveat:

The above schedule and procedures in this course are subject to change in the event of extenuating circumstances. Any changes will be announced *in class*, and the student is personally responsible for obtaining updated information regarding those changes.

Appendix A: Objectives

The APA has specific requirements regarding how those objectives should be written, shown below:

Writing Behavioral Learning Objectives and Assessments

- Learning objectives, or learning outcomes, are statements that clearly describe what the learner will know or be able to do as a result of having attended an educational program or activity.
- Learning objectives must be *observable and measurable*.
- Learning objectives should (1) focus on the learner, and (2) contain action verbs that describe measurable behaviors

Verbs to use when writing learning objectives:

- list, describe, recite, write
- compute, discuss, explain, predict
- apply, demonstrate, prepare, use
- analyze, design, select, utilize
- compile, create, plan, revise
- assess, compare, rate, critique

Verbs to avoid when writing learning objectives:

- know, understand
- learn, appreciate
- become aware of, become familiar with

Example of well-written learning objectives:

This workshop is designed to help you:

- 1. *Summarize* basic hypnosis theory and technique;
- 2. Observe demonstrations of hypnotic technique and phenomena;
- 3. Recognize differences between acute and chronic pain;
- 4. *Utilize* hypnosis in controlling acute pain;
- 5. Apply post-hypnotic suggestions to chronic pain; and
- 6. *Practice* hypnotic technique in dyads.

Illustrative Learning Objectives

Title: Succeeding in an Academic Career

At the conclusion of this program, participants will be able to:

Insufficient Learning Objectives

- 1. identify the advantages in advancing one's career of having a systematic research program
- 2. manage the complexities of scheduling research assistants, supervisees and other helpers
- 3. negotiate the ins and outs of getting publications and grants

- 4. discharge advising obligations while still having time to write
- 5. increase chances for retention, tenure, and promotion through understanding academic policies and the administrative structure

Acceptable learning objectives

- 1. identify the practical applications for teaching effectiveness of building a systematic research program
- 2. identify relevant ethical codes associated with research, clinical, or academic supervision with students
- 3. negotiate the regulatory and ethical information regarding publication and grant writing with colleagues or students
- 4. apply appropriate mentoring skills for maximal student growth
- 5. use an understanding of academic policies and the administrative structure to create more efficient classrooms and labs

Note: Insufficient learning objectives identify the advantages that might accrue to the individual faculty member, but fail to link these to improved services and the broader regulatory, ethical or professional issues that might also serve broader constituents within this context. By contrast, the acceptable learning objectives effectively tie the knowledge gains associated with this program to the effective functioning of the students and the administrative units associated with the faculty's functioning, and highlight the professional and scientific gains that would be expected to accrue as a result of the program.

Appendix B: Acceptable Collaboration

On Collaboration

What constitutes acceptable levels of collaboration in this class? Please just treat this as "continuing education". It is here for your reference, but if (after reading this) you feel like you may have gone beyond acceptable and want to discuss it, please get in touch with me or one of the teaching assistants at your convenience.

The short answer about how much collaboration is acceptable is "As specified in the syllabus, and in the UF Honor Code". Let's review those items quickly, and then go a little deeper.

1. UF Honor Code:

A key phrase in this honor code relates to "ambiguity": "It is the responsibility of the student to seek clarification on whether or not use of materials or collaboration or consultation with another person is authorized prior to engaging in any act of such use, collaboration or consultation. If a faculty member has authorized a student to use materials or to collaborate or consult with another person in limited circumstances, the student shall not exceed that authority. If the student wishes to use any materials or collaborate or consult with another person in circumstances to which the authority does not plainly extend, the student shall first ascertain with the faculty member whether the use of materials, collaboration or consultation is authorized. "

http://regulations.ufl.edu/chapter4/4041-2008.pdf

Key phrasing with regard to collaboration:

(a) Plagiarism. A student shall not represent as the student's own work all or any portion of the work of another. Plagiarism includes but is not limited to:

1. Quoting oral or written materials including but not limited to those found on the internet, whether published or unpublished, without proper attribution.

2. Submitting a document or assignment which in whole or in part is identical or substantially identical to a document or assignment not authored by the student.

(b) Unauthorized Use of Materials or Resources ("Cheating"). A student shall not use unauthorized materials or resources in an academic activity. Unauthorized materials or resources shall include:

1. Any paper or project authored by the student and presented by the student for the satisfaction of any academic requirement if the student previously submitted substantially the same paper or project to satisfy an academic requirement and did not receive express authorization to resubmit the paper or project.

2. Any materials or resources prepared by another student and used without the other student's express consent or without proper attribution to the other student.

3. Any materials or resources which the faculty member has notified the student or the class are prohibited.

4. Use of a cheat sheet when not authorized to do so or use of any other resources or materials during an examination, quiz, or other academic activity without the express permission of the faculty member, whether access to such resource or materials is through a cell phone, PDA, other electronic device, or any other means.

(c) Prohibited Collaboration or Consultation. A student shall not collaborate or consult with another person on any academic activity unless the student has the express authorization from the faculty member.

1. Prohibited collaboration or consultation shall include but is not limited to:

a. Collaborating when not authorized to do so on an examination, take-home test, writing project, assignment, or course work.

b. Collaborating or consulting in any other academic or co-curricular activity after receiving notice that such conduct is prohibited.

c. Looking at another student's examination or quiz during the time an examination or quiz is given. Communication by any means during that time, including but not limited to communication through text messaging, telephone, e-mail, other writing or verbally, is prohibited unless expressly authorized.

2. It is the responsibility of the student to seek clarification on whether or not use of materials or collaboration or consultation with another person is authorized prior to engaging in any act of such use, collaboration or consultation. If a faculty member has authorized a student to use materials or to collaborate or consult with another person in limited circumstances, the student shall not exceed that authority. If the student wishes to use any materials or collaborate or consult with another person in circumstances to which the authority does not plainly extend, the student shall first ascertain with the faculty member whether the use of materials, collaboration or consultation is authorized.

2. Syllabus:

The syllabus says:

"On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied:

"On my honor, I have neither given nor received unauthorized aid in doing this assignment".

It is desirable and expected that take home assignments will stimulate conversation among classmates, and that classmates may actually mentor one another in the work. Students are also likely to discuss elements of the assignment with the instructor. It is expected, however, that **submitted** work will **solely** reflect the student's own efforts. Students are expected not to collaborate in thinking through slides, outlining slides, sharing slides, or preparing slides. The instructors will regularly check for "unusual congruence" in answers, and will discuss concerning instances with students involved. Where collaboration has been found, a zero grade will be assigned."

If you feel, based on the foregoing, that you are engaging in excessive levels of collaboration, and you believe this is because what you REALLY need is more instructional support, please let us know.

Please be aware that excessive collaboration can trigger a process that none of us wants to trigger! I'm copying a link below. In the interests of self-protection, we urge each of you to draw a clear firewall between YOUR work, and the work of other students in the class.

http://www.dso.ufl.edu/sccr/faculty/