University of Florida
College of Public Health & Health Professions Syllabus

CLP 7934, Special Topics: Directed Reading-Neuropsychology of Aging
Section Number: 154G(11115), Spring 2019 (3 credit hours)

Meeting time/place: n/a (online class)
Delivery Format: Online
Course Website or E-Learning

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Office Hours: By appointment
Preferred Course Communications: Email

Prerequisites Admitted, in good standing, to the Graduate School at the University of Florida. No other pre-requisites apply. 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.

PURPOSE AND OUTCOME

Course Overview. This directed reading course introduces students to contemporary theory, method, and findings regarding normal cognitive aging, neuropsychology (based mainly on research with brain-damaged 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.

Relation to Program Outcomes. This course counts as a “Neuropsychology elective” for doctoral students in Clinical and Health Psychology. It also satisfies one of the elective requirements of the Graduate Certificate in Gerontology.

Instructional Methods

This online course is a directed reading course. Students will access personal-use electronic copies of all assigned readings in this course (online, in the UF Canvas 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 executive summary produced by the student (see “Assignments” below for details).

Course Objectives and/or Goals

As noted above, this is a **very different** class from other in-person or online courses you may have taken. It is a directed reading class. That means there are **no lectures or prepared materials**. The overarching goal of the class is to see what you can extract and explain from primary source readings.

The philosophical underpinning of the learning approach is the Feynman method, which emphasizes active learning over passive learning. And the hallmark of active learning is that you can EXPLAIN the topic simply to someone else.

In this class, doctoral students from diverse backgrounds will read primary source literature on cognitive and neuropsychological changes associated with aging and age-related disease. Students are expected to demonstrate their higher level skills, as doctoral trainees, to integrate, analyze, summarize, explain and critique primary source empirical research. Students in this class **will produce weekly infographic-rich executive summaries** of their readings, in order to:

1. Explain and summarize the content of each week's readings, using minimal jargon, specialized vocabulary, or acronyms, **so that a typical naïve undergraduate student could learn from it**
2. Integrate and organize the readings, drawing linkages across articles within and between weeks, in order to describe higher order themes about cognitive aging
3. Appraise and critique the weekly articles in order to draw conclusions about the quality of the evidence for the week's topic, so that they may identify critical next steps to be addressed by the research field

Weekly assignments serve two functions:

(a) a reading check (so they should incorporate content from all assigned readings), but also
(b) an application of the Feynman method, showing the ability to synthesize, summarize and extract "big picture" themes from the readings via infographic, image-rich executive summary presentations.

Please see videos demonstrating some design principles and guidance in the course "Resources" area, which is part of the Course Hub in Canvas.

DESCRIPTION OF COURSE CONTENT

Topical Outline/Course Schedule

Specific weekly readings are listed in the appendix to this syllabus

Week	Date	Topic(s)	Assignment due date (11:59 pm)
1	Jan 9	Normal cognitive changes	Jan 16
2	Jan 16	Neuroimaging/neuroscience methods and aging	Jan 23
3	Jan 23	Memory aging	Jan 30
4	Jan 30	Visuospatial aging	Feb 6
5-6	Feb 6,13	The Dementias, 1 & 2	Feb 20
7	Feb 20	Possible explanations: White matter accounts	Feb 27
8	Feb 27	The cognitive neuropsychology of depression in the elderly	Mar 12
9	Mar 12	Stress-diathesis models of cognitive aging: Sample case of post-operative cognitive dysfunction	Mar 19
10	Mar 19	Cardiovascular function and its role in cognitive aging: Sample case from the laboratory of Ronald Cohen	Mar 26
11	Mar 26	Stroke: Cognitive sequelae	Apr 2
12	Apr 2	Parkinson's disease: Cognitive sequelae	Apr 9
13	Apr 9	Interventions 1	Apr 16
14	Apr 16	Interventions 2	Apr 23

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.

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 elearning site. The specific weekly reading list is given in the bibliography in the appendix of this syllabus.

Software Policy

All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

Technology

Students are required to access all materials in Canvas, and to submit all materials in Microsoft format (Office, Powerpoint) in Canvas. Software can be obtained at the UF download link. Readings are provided in Adobe pdf format, and can be accessed via the free AdobeAcrobat reader.

For issues with technical difficulties for E-learning please contact the UF Help Desk at:

- Learning-support@ufl.edu
- (352) 392-HELP - select option 2
- https://lss.at.ufl.edu/help.shtml

Managing e-learning technical issues

- If you cannot upload a document due to technical problems (e.g., if Canvas 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 Canvas as well, once the technical issue is resolved. We also require you to 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 a current, updated browser and operating system*
  - *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.*

ACADEMIC REQUIREMENTS AND GRADING

Assignments

The grade for the class will be based on the weekly Executive Summaries. ***Each Executive Summary 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.***

1. *Submitted Executive Summaries*. ***Submit via Canvas.***

The Executive Summary should:

a. Be 6-8 pages (this will vary on how dense your presentation is) **(For the Dementias combined weeks 5 and 6, this should be doubled!).** Most students submit this as a powerpoint.
b. The goal is for it to be an INTEGRATIVE SUMMARY of themes and ideas in the readings of the week, and should also include critiques ('unanswered questions', 'methodological issues') that emerge from your critical reading of the material.
c. Your approach to reviewing the articles to to provide a summary/synthesis/integration/analysis of what you have read
    - the executive summary should not be a point-by-point review of each article, but should provide the "big picture"
    - the summary should be at the level of "what you would tell an educated layperson about this week's materials"
d. Use as few words as possible. Images (graphs, tables, figures from the readings, as well as your own summary charts, bulleted lists, or images from the internet—properly credited) should be the centerpiece of these summaries. Your general goal should be to summarize the material in the style of an *infographic* (see below).
e. You are encouraged to draw on materials outside of the required readings (e.g., Wikipedia definitions, illustrative images, background info not contained in the readings). However, *this must not come at the expense of materials in the readings*. The key point of these assignments is to show that you have read, understood, and synthesized the week's materials. So that should always be your main goal.

Executive summary resources

The resources that follow are not specific to the in-class exercises, because we haven't found good models for these. ***Please be assured that in the early weeks, as we figure out the optimal format, grading will be lenient and comments will help shape the product***. A major intent of this assignment is also to allow you to be creative and flexible in how you approach your summaries.

- http://sharpbrains.com/executive-summary/
- http://visual.ly/executive-summary-introduction
- http://www.sustainability.com/news/model-behavior-infographic-and-executive-summary-now-available#.U2FI7ygZFOk
- http://massdmg.com/2012/02/5-steps-to-an-awesome-executive-summary/ (I think this one might be pretty good)
- Something more texty: http://www.care.org/sites/default/files/documents/AG-2013-Pathways-Annual-Report-Executive-Summary.pdf
- Completely not research, but nicely segmented thematically in a way I could imagine for articles: https://www.herndon-va.gov/Content/FY2013ARExecSummaryFINAL.pdf?cnlid=5682

- Later pages of this (too long) one are research … https://credo.stanford.edu/documents/NCSS%202013%20Executive%20Summary.pdf

Grading

Requirement	Due date (11:59 pm)	% of final grade (must sum to 100%)
Week 1 Assignment	Jan 16	7.14%
Week 2 Assignment	Jan 23	7.14%
Week 3 Assignment	Jan 30	7.14%
Week 4 Assignment	Feb 6	14.32%
Week 5-6 Assignment	Feb 20	7.14%
Week 7 Assignment	Feb 27	7.14%
Week 8 Assignment	Mar 12	7.14%
Week 9 Assignment	Mar 19	7.14%
Week 10 Assignment	Mar 26	7.14%
Week 11 Assignment	Apr 2	7.14%
Week 12 Assignment	Apr 9	7.14%
Week 13 Assignment	Apr 16	7.14%
Week 14 Assignment	Apr 23	7.14%

The grading rubric for each executive summary is as follows, and comments upon grading will help explain the points assigned.

Criterion	2 points	1 point	0 points
Thoroughness	Accurately summarizes at least one major point from each assigned article	Accurately summarizes at least one major point from most assigned articles	Inaccurate summaries or excludes more than one assigned article
Organization and narrative structure	Initial slide signals the "story", "narrative", or major organizing questions that the summary is structured to address. This structure is reflected in the organization of subsequent slides.	Initial organizing slide is difficult to follow, or does not reflect the week's readings.	No advance organizational structure is communicated, or slides do not follow the organization.
Informative to a lay reader	Content is organized for a lay reader. Key concepts are defined, explained and illusrated. Guiding questions for the week's module are presented and addressed.	Content includes undefined acronyms or jargon, or serves as a summary of readings, but would be confusing to a lay reader.	Content is mostly comprised of direct summaries of readings, with little explanation or organization
Critical research evaluation	Research is summarized with respect to methodological strengths and weaknesses, as well as student perspective on the next needed steps for the research field.	Methodology is clearly presented, but not evaluated with regards to strengths and weaknesses.	Methodology is not addressed
Engaging content	Effort is demonstrated in making content appealing and engaging to lay readers. This can include good use of imagery, tables, columns, and smart art.	Content is clearly presented, but mostly in bullets and/or narrative paragraphs	Content serves as a summary outline of readings; comes across as personal notes, not a document for outside readers.

See below for additional policy on late submissions.

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

Point system used (i.e., how do course points translate into letter grades).

Points earned	93-100	90-92	87-89	83-86	80-82	77-79	73-76	70-72	67-69	63-66	60-62	Below 60
Letter Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E

Please be aware that a C- is not an acceptable grade for graduate students. A grade of C counts toward a graduate degree only if an equal number of credits in courses numbered 5000 or higher have been earned with an A.

Letter Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E	WF	I	NG	S-U
Grade Points	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

More information on UF grading policy may be found at this link and this link.

Exam Policy.

No exams for this class

Policy Related to Extra Credit

For student evaluations of teaching, all members of the class will be awarded one (1) bonus point if at least 80% of the enrolled class completes evaluations, and two (2) bonus points if 100% of the enrolled class completes evaluations. Note that if class enrollment is low, you may not be asked to provide evaluations, which then means there will be no bonus points.

Policy Related to Make up Exams or Other Work

For homework, late submissions are not encouraged. Late submissions will be accepted for up to 7 days, but with the following penalty schedule:

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* Summary has been submitted to Canvas 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. Note, 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 up to the seventh day, after which a zero grade will be assigned. Each assignment is initially graded up to a total of 10 points according to the rubric (before it is converted to 6.67% or 13.33% of your grade, depending on assignment). Thus, if an assignment is worth a maximum of 10 points, you will lose 1 point for each late day. "Late" begins one minute after the due time (e.g., an assignment due at 11:59 pm is considered late at midnight). 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 to 144 hours late	60% of maximum deducted from achieved grade
6 days + 1 minute late to 168 hours late	70% of maximum deducted from achieved grade
7 days + 1 minute late or longer	100% of maximum deducted from achieved grade

NOTE: UPLOADING THE WRONG DOCUMENT 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 **no** exceptions to this policy.
- If you have uploaded the wrong document, and Canvas does not allow you to correct this, you should IMMEDIATELY send the correct document to Dr. Marsiske via email.

Any requests for waiving of late penalties due to technical issues MUST be accompanied by the ticket number received from LSS when the problem was reported to them. The ticket number will document the time and date of the problem. You MUST e-mail your instructor within 24 hours of the technical difficulty if you wish to request a make-up. The Appendix to this syllabus includes additional details for managing technical issues.

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.

Policy Related to Required Class Attendance

There is no specific physical attendance requirement for this online class, but all weekly assignments must be submitted, without exception, by the stated deadline. If you have a qualifying "excused absence", you must contact the instructor to negotiate a new deadline for missed work. Excused absences must be consistent with university policies in the Graduate Catalog and require appropriate documentation. Additional information can be found here.

STUDENT EXPECTATIONS, ROLES, AND OPPORTUNITIES FOR INPUT

Inclusive Learning Environment.
Public health and health professions are based on the belief in human dignity and on respect for the individual. As we share our personal beliefs inside or outside of the classroom, it is always with the understanding that we value and respect diversity of background, experience, and opinion, where every individual feels valued. We believe in, and promote, openness and tolerance of differences in ethnicity and culture, and we

respect differing personal, spiritual, religious and political values. We further believe that celebrating such diversity enriches the quality of the educational experiences we provide our students and enhances our own personal and professional relationships. We embrace The University of Florida's Non-Discrimination Policy, which reads, "The University shall actively promote equal opportunity policies and practices conforming to laws against discrimination. The University is committed to non-discrimination with respect to race, creed, color, religion, age, disability, sex, sexual orientation, gender identity and expression, marital status, national origin, political opinions or affiliations, genetic information and veteran status as protected under the Vietnam Era Veterans' Readjustment Assistance Act." If you have questions or concerns about your rights and responsibilities for inclusive learning environment, please see your instructor or refer to the Office of Multicultural & Diversity Affairs website.

Expectations Regarding Course Behavior

Students are expected to complete all work by the deadline stated, and to contact the instructor *in advance* with any problems related to completing course assignments.

Communication Guidelines

A discussion board exists in Elearning for any open questions about course materials and assignments. You are welcome to post any questions. Please be respectful, and follow UF Netiquette guidelines. Please do not use the open forums for complaints or criticisms. Please do not post your suspected "answers" for any questions, so as not to interfere with the independent problem solving of other students.

University Honesty Policy

UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. 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."

The Honor Code specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

Online Faculty Course Evaluation Process

For student evaluations of teaching, all members of the class will be awarded one (1) bonus point if at least 80% of the enrolled class completes evaluations, and two (2) bonus points if 100% of the enrolled class completes evaluations. Note that if class enrollment is low, you may not be asked to provide evaluations, which then means there will be no bonus points.

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at GatorEvals. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at GatorEvals.

SUPPORT SERVICES

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.

Accommodations for Students with Disabilities
Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center by visiting their website. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

Student Privacy
There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see this link.

Campus Resources:

Health and Wellness

- **U Matter, We Care**: If you or a friend is in distress, please contact umatter@ufl.eduor 352 392-1575 so that a team member can reach out to the student.
- **Counseling and Wellness Center**: CWC Website, and 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.
- **Sexual Assault Recovery Services** (SARS): Student Health Care Center, 392-1161.
- **University Police Department** at 392-1111 (or 9-1-1 for emergencies), or website.

Academic Resources

- **E-learning technical support**, 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu, or visit the website.
- **Career Resource Center, Reitz Union**, 392-1601. Career assistance and counseling website.
- **Library Support**, Website. Various ways to receive assistance with respect to using the libraries or finding resources.
- **Teaching Center**, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring. Website.

- **Writing Studio**, 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers. Website.
- **Student Complaints Campus**: Website.
- **On-Line Students Complaints**: Website.

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.

APPENDICES

Readings

Week	Readings
1	**<u>Normal cognitive changes</u>** 01. IOM (Institute of Medicine). (2015). CHARACTERIZING AND ASSESSING COGNITIVE AGING. In Dan G. Blazer, Kristine Yaffe, and Catharyn T. Liverman, (Editors). Cognitive Aging: Progress in Understanding and Opportunities for Action (pp. 31-74). Washington, DC: The National Academies Press 02. IOM (Institute of Medicine). (2015). POPULATION-BASED INFORMATION ABOUT COGNITIVE AGING. In Dan G. Blazer, Kristine Yaffe, and Catharyn T. Liverman, (Editors). Cognitive Aging: Progress in Understanding and Opportunities for Action (pp. 75-108). Washington, DC: The National Academies Press 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. Wilson, R. S., Capuano, A. W., Sytsma, J., Bennett, D. A., & Barnes, L. L. (2015). Cognitive aging in older Black and White persons. Psychology and aging, 30(2), 279.

Week	Readings
2	**Neuroimaging/neuroscience methods and aging** 06. 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. 07. 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. 08. 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. 09. Rentz, D. M., Rodriguez, M. A. P., Amariglio, R., Stern, Y., Sperling, R., & Ferris, S. (2013). Promising developments in neuropsychological approaches for the detection of preclinical Alzheimer's disease: a selective review. Alzheimer's research & therapy, 5(6), 1. 10. Schmidt, E. L., Burge, W., Visscher, K. M., & Ross, L. A. (2016). Cortical thickness in frontoparietal and cingulo-opercular networks predicts executive function performance in older adults. Neuropsychology, 30(3), 322. 11. Friedman, D. (2013). The cognitive aging of episodic memory: a view based on the event-related brain potential. Frontiers in behavioral neuroscience, 7, 111.
3	**Memory aging** 12. Tromp, D., Dufour, A., Lithfous, S., Pebayle, T., & Després, O. (2015). Episodic memory in normal aging and Alzheimer disease: Insights from imaging and behavioral studies. Ageing research reviews, 24, 232-262. 13. Danckert, S. L., & Craik, F. I. (2013). Does aging affect recall more than recognition memory?. Psychology and aging, 28(4), 902. 14. 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

Week	Readings
4	**Visuospatial aging** 15. Lithfous, S., Dufour, A., & Després, O. (2013). Spatial navigation in normal aging and the prodromal stage of Alzheimer's disease: insights from imaging and behavioral studies. Ageing research reviews, 12(1), 201-213. 16. 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 17. 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 18. Drag, L. L., Light, S. N., Langenecker, S. A., Hazlett, K. E., Wilde, E. A., Welsh, R., ... & Bieliauskas, L. A. (2015). Patterns of frontoparietal activation as a marker for unsuccessful visuospatial processing in healthy aging. Brain imaging and behavior, 1-11.

Week	Readings
5-6	**The Dementias, 1 & 2** 19. Bhogal, P., Mahoney, C., Graeme-Baker, S., Roy, A., Shah, S., Fraioli, F., ... & Jäger, H. R. (2013). The common dementias: a pictorial review. European radiology, 23(12), 3405-3417. 20. 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 21. 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 22. 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 23. Semantic dementia: a unique clinicopathological syndrome. Hodges JR, Patterson K. Lancet Neurol. 2007 Nov;6(11):1004-14. Review.PMID: 17945154 24. 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 25. 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 26. 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 accounts** 27. Bennett, I. J., & Madden, D. J. (2014). Disconnected aging: cerebral white matter integrity and age-related differences in cognition. Neuroscience, 276, 187-205. 28. Sasson, E., Doniger, G. M., Pasternak, O., Tarrasch, R., & Assaf, Y. (2013). White matter correlates of cognitive domains in normal aging with diffusion tensor imaging. Frontiers in neuroscience, 7, 32. 29. Borghesani, P. R., Madhyastha, T. M., Aylward, E. H., Reiter, M. A., Swarny, B. R., Schaie, K. W., & Willis, S. L. (2013). The association between higher order abilities, processing speed, and age are variably mediated by white matter integrity during typical aging. Neuropsychologia, 51(8), 1435-1444. 30. Bender, A. R., Völkle, M. C., & Raz, N. (2016). Differential aging of cerebral white matter in middle-aged and older adults: a seven-year follow-up. Neuroimage, 125, 74-83. 31. Neuropsychology of vascular dementia. By Price, C. C., Nguyen, P., Lamar, M., Libon, D. In Neuropsychology of Cardiovascular Diseases (in press) Psychology Press.

Week	Readings
8	**<u>The cognitive neuropsychology of depression in the elderly</u>** 32. 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 33. 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 34. Dotson, V. M., Zonderman, A. B., Kraut, M. A., & Resnick, S. M. (2013). Temporal relationships between depressive symptoms and white matter hyperintensities in older men and women. International journal of geriatric psychiatry, 28(1), 66-74. 35. 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 36. 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

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10	**Cardiovascular function and its role in cognitive aging: Sample case from the laboratory of Ronald Cohen** 43. 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. 44. 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. 45. 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. 46. 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.

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Week	Readings
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13	**Interventions 1** 59. 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 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. Hayes, S. M., Hayes, J. P., Cadden, M., & Verfaellie, M. (2013). A review of cardiorespiratory fitness-related neuroplasticity in the aging brain. Frontiers in aging neuroscience, 5, 31. 62. Chapman, S. B., Aslan, S., Spence, J. S., Keebler, M. W., DeFina, L. F., Didehbani, N., ... & D'Esposito, M. (2016). Distinct Brain and Behavioral Benefits from Cognitive vs. Physical Training: A Randomized Trial in Aging Adults. Frontiers in Human Neuroscience, 10. 63. Voss, M. W., Weng, T. B., Burzynska, A. Z., Wong, C. N., Cooke, G. E., Clark, R., ... & McAuley, E. (2016). Fitness, but not physical activity, is related to functional integrity of brain networks associated with aging. NeuroImage, 131, 113-125.

Week	Readings
14	**<u>Interventions 2</u>** 64. 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 65. IOM (Institute of Medicine). (2015). RISK AND PROTECTIVE FACTORS AND INTERVENTIONS: GENERAL COGNITIVE AGING INTERVENTIONS AND NEXT STEPS. In Dan G. Blazer, Kristine Yaffe, and Catharyn T. Liverman, (Editors). Cognitive Aging: Progress in Understanding and Opportunities for Action (pp. 187-208). Washington, DC: The National Academies Press 66. IOM (Institute of Medicine). (2015). RISK AND PROTECTIVE FACTORS AND INTERVENTIONS: LIFESTYLE AND PHYSICAL ENVIRONMENT. In Dan G. Blazer, Kristine Yaffe, and Catharyn T. Liverman, (Editors). Cognitive Aging: Progress in Understanding and Opportunities for Action (pp. 109-148). Washington, DC: The National Academies Press 67. IOM (Institute of Medicine). (2015). PUBLIC EDUCATION AND KEY MESSAGES. In Dan G. Blazer, Kristine Yaffe, and Catharyn T. Liverman, (Editors). Cognitive Aging: Progress in Understanding and Opportunities for Action (pp. 257-294). Washington, DC: The National Academies Press

Appendix: 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.

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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.

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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."

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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/