University of Florida College of Public Health & Health Professions Syllabus

CLP 7428C: NEUROPSYCHOLOGICAL ASSESSMENT OF ADULTS (3 hrs) Spring Semester 2019

Meeting Time/Place: Wednesday, 8:30 AM - 11:30 AM, Room G201 HPNP

Instructors: Glenn Smith, Ph.D., ABBP-CN Erika M. Cascio, Psy.D.

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Preferred Course Communication: email

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By Appointment

Prerequisites Must be a graduate student in good standing in Clinical and Health Psychology. All others must petition. Note that this is one of the core course requirements for a concentration in Neuropsychology, Clinical Neuroscience, and Neurorehabilitation.

Course Overview and Objectives

This course will provide an overview of basic concepts and methods in the neuropsychological assessment of adults. You will learn the most important conceptual models of neuropsychological assessment and will learn to recognize quantitative and qualitative aspects of test performance and behaviors that are most relevant to differential diagnosis. Basic principles of neuroanatomy and brain organization will be briefly reviewed, as they pertain to specific neurologic disorders and neurocognitive domains. Major diagnostic problems will be illustrated through the introduction of case materials. You will also learn different report styles for communicating neuropsychological findings to other professionals, attorneys, and lay individuals. Due to diversity of the experience of students enrolled in this class, this course will not focus on test administration, per se. Rather, the emphasis is on broader conceptual and pragmatic issues, with a major focus on case conceptualization based on neurocognitive profiles, along with ways of creatively tailoring the methods of assessment to the special needs and problems presented by individual cases.

Course Materials

Readings are from the two required texts (see below), along with other articles/chapters that will be distributed electronically and placed in a designated class folder on our class p-drive (np assessment). Make sure you have access to this p- drive. If not, it is your responsibility to let Dr. Cascio know so that the folks in IT can give you access. We will try to make handouts/slides available in this class folder after class.

Required (2 books)

Parson, M., & Hammecke, M. (eds). (2014). <u>Clinical Neuropsychology: A Pocket Handbook for Assessment</u>, American Psychological Association, Washington DC.

Strauss, E., Sherman, E. M. S. & Spreen, O. (2013). <u>A Compendium of Neuropsychological Tests: Administration,</u> Norms and Commentary, Oxford University Press, New York.

Highly Recommended

Blumenfeld, H. (2010). <u>Neuroanatomy through Clinical Cases</u>. Sinauer. 2nd edition.

Lezak, M., Howieson, D., Blgler, E., Tranel, D. (2012). <u>Neuropsychological Assessment</u> (5rd Edition). New York: Oxford University Press.

Morgan, J., & Ricker, J. (2012). Textbook of Clinical Neuropsychology. New York: Taylor & Francis.

Kolb, B. & Wishaw, I. (2015) Fundamentals of Human Neuropsychology. 7th Edition. MacMillan, NY.

Recommended

Stringer A., Cooley, E., Christensen, A. (2002). <u>Pathways to Prominence in Neuropsychology: Reflections of 20th century pioneers.</u> New York: Psychology Press.

Available to review in the clinic

Heaton, R., Miller, W., Taylor, M., Grant, I. (2004). <u>Revised Comprehensive Norms for an Expanded Halstead-Reitan Battery</u>. Lutz, FL: Psychological Assessment Corporation.

Course Format

This course will be conducted in the form of a graduate seminar. Class will meet Wednesdays from 8:30 am - 11:30 in Room G201 on the first floor of the HPNP building. This is a participatory course. Classes will typically consist of a lecture, discussion of clinical cases, "hot topics," and other testing related activities. Please be on time.

Course Requirements, Evaluation, and Grading

Grades will be weighted according to the number of points available for each component, as described below. Final grades will be calculated as a percentage of the highest score. Evaluation in the course will be based on the following components

Midterm Exam	30%	
Final Exam	40%	(cumulative)
Clinical Case Presentation	10%	
Test Summary/Weird Disorders	5%	
Hot Topic Discussion	5%	
Quizzes	10%	

- 1. Midterm and Final Exams: will comprise 70% of your grade. These exams will be drawn from class lectures and assigned readings and will consist of multiple choice, short answer, odd man out and other formats. The final exam may also involve some ethical scenarios and writing sections of a report. FYI, you will be provided a set of study questions that will be helpful in guiding your thinking and preparation for these exams.
- 2. Clinical Case Presentation: Each student will take the lead in presenting a clinical case to the class and facilitating discussion about the case. You will work closely with us in doing so. If you have already been on clinic, you can present one of the cases you previously saw. If not, then we will help you locate a case from our files. You can decide whether you want to present your case within the context of "fact finding" or a more traditional format. Part of this assignment will involve learning something more about the "disorder" at hand in addition to examining/discussing the clinical neuropsychological profile, the various factors that might contribute to a pattern, cultural and demographic issues, etc.
- 3. Hot Topics & Discussion Points: Students will be assigned in pairs or groups of 3 to lead relevant, hot topic discussions during certain classes. The format of the discussion will be left up to the group leading it that day. Example: A recent hot topic relates to computerized testing. What do you think of all the companies that are now marketing computerized test batteries to primary care and other physicians, who then upload the information to some centralized unit and then get a canned report back? What are the implications for patient care? What are the implications for our profession? (For this assignment, do not show videos from internet).

4. You will be randomly assigned a test to review or a weird disorder. See below

4a. Test Reviews

In past years, students have compiled data on test administration and scoring, including reliability and validity information about major tests that are frequently used during neuropsychological assessments. We will continue this tradition. Information about tests will be put together in a notebook, so that brief 1-2 page summaries of various neuropsychological measures will be available to all class participants by the end of the course. You will be assigned the particular test to review.

For each test, you are to prepare a brief 1-2 page typed summary about its <u>historical background</u>, <u>administration</u>, <u>available norms</u>, <u>reliability</u>, <u>validity</u>, <u>strengths and weaknesses</u>. An important focus is the availability of norms for the elderly, for individuals with low SES and education, and for individuals from diverse cultural/ethnic backgrounds. You will place a digital copy of your summary in the class folder and prepare a 5-7 minute presentation of the test for your colleagues. Below are the headings that should be covered in your write-up. If you have any questions about this assignment, let us know.

Name of Test Normative Information (sample size, age, sex, ethnic)

Author Psychometric Properties: Reliability & Validity

Publisher & Address Strengths & Weaknesses
Year Published Test Format and Procedures
Purpose of Test Instructions (if relevant)

4b. Weird Disorders

This assignment involves discussion/exposure to a potpourri of disorders that you are bound to run across in your career as a neuropsychologist (i.e., reduplicative paramnesia, Dandy Walker, etc.). You will be assigned a specific disorder and will give a brief presentation (i.e., 5-7 minutes) about the nature of this disorder and how it presents neuropsychologically. Include chief complaints and symptoms, the course of the disorder, and the role of the neuropsychologist. Describe prototypical neurocognitive profiles and any special assessment/treatment issues. You will provide a brief 1-page handout to your classmates, along with several key references (NO Wikipedia), and also place a digital copy on the class projects folder.

5. Quizzes on Test Administration

This will entail brief in class quizzes on *administration* of specific test measures. There will be 4 quizzes, one prior to each of the following lectures: Language, Visuoperceptual-Spatial, Memory, Frontal-Executive. We will tell which particular measures you need to know for each of these quizzes.

Additional Tools:

All of you should have access to the share drive demonstrating use of video (s:\NP Training Material) demonstrating administration of commonly used neuropsychological measures. The faculty created these videos in order to help with 'test drift' in administration. You are encouraged to review these, particularly those of you who have not started your neuropsychology core. There are a lot of tests, and best way to tackle is by domain. You will not be graded on this.

Grading

Scores will be rounded to the nearest percent (rounded up or down, whichever is closest) for grade determination

in accordance with the grading table below:

% of points earned	93%-	90%-	87%-	83%-	80%-	77%-	73%-	70%-	67%-	63%-	60%-	Below
	100%	92%	89%	86%	82%	79%	76%	72%	69%	66%	62%	60%
Letter Grade	Α	A-	B+	В	B-	C+	С	C-	D+	D	D-	F

Below is table linking letter grades to grade points.

Letter Grade	Α	A-	B+	В	B-	C+	С	C-	D+	D	D-	Ε	WF		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

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

Policy Related to Class Attendance

Attendance and class participation is required. Students are expected to complete assigned readings prior to coming to class. Students needing to miss class for personal or professional reasons should consult with the instructor prior to the date on which they will be unable to attend. It is the student's responsibility to acquire any handouts or notes from a colleague in the class for any sessions missed.

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

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 website 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.

Policy Related to Make-up Exams or Other Work

Students are expected to complete assigned readings prior to coming to class. Personal issues with respect to class attendance or fulfillment of course requirements will be handled on an individual basis. Students must make *prior* arrangements with Drs. Cascio or Smith if they must miss any in-class examination, and an alternative test time must be arranged.

Accommodations for Students with Disabilities

If you require classroom accommodation because of a disability, you must first register with the Dean of Students Office (http://oss.ufl.edu/). 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

Class Syllabus

Adult Neuropsychological Assessment

This course is divided into 2 major parts: (1) the fundamentals of neuropsychological assessment & neurocognitive domains, and (2) assessment of neuropsychological functions and neurologic disorders (including malingering). Assigned readings will come from your texts and other readings provided to you.

Jan 9 Introduction to Course and Requirements

Sign-up for Case Presentations & Hot Topic Discussions

<u>Lecture:</u> Historical Background of Neuropsychological Assessment: Important figures and

landmark cases

Case Presentation: Cascio

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Jan 16 <u>Lecture:</u> Stages of the Neuropsychological Exam: Medical record review, test selection, clinical interview & behavioral observations

In class videos: behavioral observations

Case Presentation

Readings: P&H: Chapters 1-3

Supplemental: Blumenfeld: Chapter 1

Hot Topic readings: Loring & Bauer (2010); Bush (2009)



Should there be an FDA for NP tests?

 Loring, D., & Bauer, R.M. (2010) Testing the limits: causes and concerns for the new Weschler IQ and memory scales. Neurology.

 Bush, S. (2009) Determining whether or when to adopt new versions of psychological and neuropsychological tests: Ethical and professional consideration. The Clinical Neuropsychologist

Homework Assignment: Write behavioral observations on in-class video cases

Jan 23 Lecture: Neuologic vs Neuropsychologic Exam

Case Presentation

Readings: P&H: Chapter 4

Blumenfeld CH 3: pgs 50-58 (up to cranial nerves); pgs 73-75 (end top of pg 76) Hot Topic readings: Brandt (2006) Neuropsychological Crimes and MisDemeanors;

John A. Lucas Ph.D., et al., (2005) Mayo's Older African Americans Normative Studies: Normative Data for Commonly Used Clinical Neuropsychological Measures, The Clinical Neuropsychologist, 19:2, 162-183, DOI: 10.1080/13854040590945265

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Hot Topic: Should we norm for age, education, and ethnic differences?

(read Brandt, J. 2006; Lucas et al 2005)

Jan 30 Lecture: Battle of the Batteries: Fixed, Flex & The Spectrum In Between

In-class discussion: Advocacy for any of the battery approaches Case Presentation

Readings: Milberg, W., Hebben, N. & Kaplan, E. The Boston Process Approach to

Neuropsychological Assessment

Kaplan E. Serendity in science: A personal account. In Stringer et al (eds.),

Pathways to Prominence in Neuropsychology:

Luria, A. Pursuing neuropsychology in a swiftly changing society. (In Stringer et

al. (eds). Pathways to Prominence in Neuropsychology.

Reitan, R. The best laid plans and vagaries of circumstantial events. In Stringer

et al (eds), Pathways to Prominence in Neuropsychology

Bauer, R. The flexible battery approach

Feb 6 Lecture: Domains of Neurocognitive Ability & Estimating IQ; Effort & Malingering

Readings: P&H: Chapter 5

Strauss, Sherman & Spreen: Chapter 6 (pgs 98-111) & Chapter 16 (pgs 1145-1156)

Additional readings provided by Dr. Cascio

Feb 13 EXAM 1 (1.5 hr)

<u>Lecture:</u> Assessment of Attention/Concentration, Processing Speed & Associated Disorders

Readings: P&H: Chapters 12, 13 & 20

Strauss, Sherman & Spreen: Chapter 9 (pgs 546-574; 610-616)

Feb 20 NO CLASS- INS



Feb 27 Lecture: Assessment of Language and Language Related Skills & Associated Disorders

Case Presentation

Readings: P&H: Chapter 18

Strauss, Sherman & Spreen: Chapter 11 (pgs 891-912; 933-960)

March 6 NO CLASS SPRING BREAK

March 13 <u>Lecture:</u> Assessment of Visuoperceptual, Spatial, & Constructional Skills & Associated

Disorders

Case Presentation

Readings: P&H: Chapter 19

SS&S Chapter 12 all except 966-971

Hot Topic: Computerized Testing batteries: are we being outsourced?

March 20 Lecture: Assessment of Memory & Associated Disorders

Case Presentation

Hot Topic: Is there such a thing as modality specific memory?

Readings: P&H: Chapter 17

S,S,&S Chapter 10

Hot topic readings: Smith, Malec & Ivnik (1992) Validity of the construct of nonverbal memory: A factor-analytic study in a normal elderly sample, Journal

of Clinical and Experimental Neuropsychology, 14:2, 211-

221, DOI: 10.1080/01688639208402824;

Kelley, et al., (1998). Hemispheric specialization in human dorsal frontal cortex

and medial temporal lobe for verbal and nonverbal memory

encoding. Neuron, 20(5), 927-936.

Mar 27 Lecture: Assessment of Executive & Frontal Lobe Skills & Associated Disorders

Case Presentation

Readings: P&H: Chapter 20 & 21

S,S,&S; Chapter 8 (except 456-470)

Apr 3 Lecture: Assessment Issues in the Elderly

Case Presentation

Readings: P&H: Chapter 11



Should neuropsychologists know how to read basic neuroimaging scans?

Bigler (2001). Neuropsychological testing defines the neurobehavioral significance of neuroimaging-identified abnormalities. Archives of Clinical Neuropsychology, 16, 227-236.

Tanner, Mellott, Dunne, Price (2015). Integrating neuropsychology and brain imaging for a referral of possible pseudodementia: A case report. The Clinical Neuropsychologist, 272-292.

Roalf, D., Ruparel, K., Gur, R., Gur, R. (2013). Neuroimaging predictors of cognitive performance across a standardized neurocognitive battery. Neuropsychology, 28 (2).161-176.

Apr 10 Lecture: Issues in the Assessment of Epilepsy & Emotion

The Wada Exam & More Role of neuropsychologist

Case Presentation

Readings: P&H: Chapters 9, 26 & 27 + Chapter on Emotion

Apr 17 Lecture: Inferential Logic and Methods in Neuropsychology; Psychometric Issues
The Business of Psychology: nuts and bolts from CPT codes onward
Future directions of the field

Case Presentation

Readings: Smith, G.E., Ivnik, R.J., Lucas, J.A. (2008). Assessment Techniques: Tests, Test Batteries, Norms and Methodological Approaches in J. Morgan and J. Ricker, (Eds). *Textbook of Clinical Neuropsychology*. New York; Taylor & Francis.



HOT TOPIC: How much is enough? Sweet, et al., (2015) *TCN* Professional Practice and 'Salary Survey': Professional Practices, Beliefs, and Incomes of U.S. Neuropsychologists, The Clinical

Neuropsychologist, 29:8, 1069-1162, DOI: 10.1080/13854046.2016.1140228

Apr 24 FINAL EXAM