## University of Florida College of Public Health & Health Professions Syllabus

## CLP 7427: NEUROPSYCHOLOGICAL ASSESSMENT OF ADULTS (3 hrs) Fall Semester 2014

Meeting Time/Place: Thursdays, 9:30 AM - 12:30 PM, Room G108 HPNP

Delivery Format: On campus, Regular Course Projects Drive: p:\NP assessment

## Instructor Name: Dawn Bowers, Ph.D., ABBP-CN

Professor, Clinical & Health Psychology and Neurology Office: HPNP 3172 Email Address: <u>dawnbowers@phhp.ufl.edu</u> Office Hours: By Appointment Preferred Course Communication: email

**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 conceptulation based on neurocognitive profiles, along with ways of creatively tailoring the methods of assessment to the special needs and problems presented by individual cases.

## The Peptalk

For some of you, this may be your first formal clinical neuropsychology course in graduate school. Some of you may not have seen a neuropsych case yet or had neuroanatomy. That's ok. Regardless of your past experience, this is going to be a lot of work/fun. You are going to read a good bit and there are all sorts of different assignments peppered throughout. This is not a typical lecture type class. I guarantee that by the end of this course, you will be pleased, with your accomplishments. One of my dear professors and mentors, Molly Harrower, impressed upon me that "when work is fun, it's fun rather than work. And why would one ever want to have career that wasn't fun?" I agree ©

## **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 me know so that you can be given access by the folks in IT. I 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.

Blumenfeld, H. (2010) <u>Neuroanatomy through Clinical Cases</u>. Sinauer. 2<sup>nd</sup> edition. This is superb and is used by many as a study guide for the ABPP exam. Excellent integration of neuroanatomy with clinical cases.

#### Highly Recommended.

Lezak, M., Howieson, D., BIgler, E., Tranel, D. (2012) <u>Neuropsychological Assessment</u> (5<sup>rd</sup> Edition). New York: Oxford University Press. *The standard compendium of neuropsychological measures according to "domains"*.

Morgan, J., & Ricker, J. (2008). <u>Textbook of Clinical Neuropsychology</u>. New York: Taylor & Francis. *Excellent book that covers disorders from neuropsychological perspective*.

#### **Recommended**

Stringer A., Cooley, E., Christensen, A. (2002). <u>Pathways to Prominence in Neuropsychology: Reflections of</u> <u>20<sup>th</sup> century pioneers.</u> New York: Psychology Press. Particularly good for those interested in knowing about their roots. If this doesn't interest you, then perhaps bypass. I've selected a few chapters from here that are included in your readings.

#### Available to review in the clinic

Heaton, R., Miller, W., Taylor, M., Grant, I. (2004). <u>Revised Comprehensive Norms for an Expanded Halstead-</u> <u>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 Thursdays from 9:30 am - 12:30 in Room G108 on the first floor of the HPNP building This is a participatory course. Classes will typically consist of a lecture (45 minutes or so), 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	50%	(cumulative)
Clinical Case Presentation	15%	
Test Summary/Weird Disorders	2%	
Hot Topic Discussion	3%	

 MidTerm and Final Exams will comprise 80% 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. This will be done in class. FYI, you will be provided a set of study questions that will be helpful in guiding your thinking and preparation for the exam.

#### 2. Clinical Case Presentation

Each student will take the lead in presenting a clinical case to the class and engaging discussion about the case. You will work closely with me in doing so. If you have already been on clinic, you can present one of the cases you previously saw. If not, then I'll help you locate a case from my 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 triplets 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 the new billing code for computerized testing (96120). 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?

#### 4. You will be randomly assigned to a test 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 provide a copy of your summary for each member of the class, place a digital copy in the class folder, and prepare a 5 minute presentation of the test for your colleagues. Below are the headings that should be covered in your writeup. If you have any questions about this assignment, let us know.

Name of Test	Instructions (if relevant)
Author	Normative Information (sample size, age, sex, ethnic)
Puhlisher & Address*	Psychometric Properties: Reliability & Validity
Year Published	Strengths & Weaknesses
Purpose of Test	Relevant Research Findings
Cost to purchase	Test Format and Procedures
*Amazon.com is not a publisher, nor is it w	here the test should be published

#### 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., Capgras, Moya Moya, etc.). You will be assigned a specific disorder and will give a brief presentation (i.e., 5-10 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.

#### 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:

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% of 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	Α	A-	B+	В	B-	C+	С	C-	D+	D	D-	F

Below is table linking letter grades to grade points.

Letter Grade	А	A-	B+	В	B-	C+	С	C-	D+	D	D-	Е	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

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>

#### 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 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.

#### 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 Dr. Bowers 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

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.

## Class Syllabus

## Adult Neuropsychological Assessment

This course is divided into 3 major parts: the fundamentals of neuropsychological assessment, neurocognitive domains, and assessment issues in commonly seen neurologic disorders (including malingering). Assigned readings will come from your texts and other readings. Although there are many superb neuropsychology journals, perhaps 3 or 4 tend to focus moreso on assessment issues. These are: The Clinical Neuropsychologist, Archives of Clinical Neuropsychology, the Journal of Experimental & Clinical Neuropsychology, and the Journal of the International Neuropsychological Society (JINS). You are encouraged to review these journals and keep abreast of the field vis a vis assessment.

# Part I: Getting Started\_ During the initial month, we'll cover some of the basics in neuropsychological assessment .

Aug 28 Introduction to Course and Requirements

Historical Background & UF Perspective

Homework Assignment for 9/4: Answer the following questions on paper and turn in to class on 9/4/2012

a) What percentage of people perform within the "normal range" on all of the measures described in the Heaton norms book? A copy of this book is in our clinic. Hint: You will find this in one of the tables ©.

Heaton, R., Miller, W., Taylor, M., & Grant, I. (2004). <u>Revised Comprehensive Norms for an Expanded Halstead-Reitan Battery: Demographically adjusted Neuropsychologyal Norms for African Americans and Caucasion Adults</u>, Psychological Assessment Resources, Odessa.

- b) What cognitive functions would you plan to evaluate if your patient had bilateral upper visual field loss?
- c) What cognitive functions would you plan to evaluation if you knew your patient had a stroke involving the inferior division of the left middle cerebral artery?
- Sept 4Neurologic vs Neuropsychologic ExamInferential Logic & Methods in NP Psychometric Issues & David Schretlein

Case Presentations: Bowers (tales of 2 physicians)

Readings:P&H: Chapters 1-4Blumenfeld:Chapters 1 & 3Loring & Bauer (2010)Bush (2009)

Hot Topic:

- ic: Should there be an FDA for NP tests? Leaders: Asken, Lafo, Letzen
  - Loring, D., & Bauer, R.M. (2010) Testing the limits: causes and concerns for the new Weschler IQ and memory scales. <u>Neurology.</u>
  - Bush, S. (2009) Determining whether or when to adopt new versions of psychological and neuropsychological tests: Ethical and professional consideration. <u>The Clinical Neuropsychologist</u>

Sept 11	No class.								
	<i>Readings:</i> Blumenfeld: Chapters 2, 10, 11,19								
	<b>Today's Assignment (in addition to reading)</b> Spend time learning information pertaining to questions 1-6 on the Study guide. Hemispheric specialization and cognitive functions associated with different brain regions, right and left; cerebral blood supply-vasculature; visual fields								
Sept 18	Stages of the Neuropsychological Exam Behavioral Observations, Interview, and Clinical Pearls Edith Kaplan on behavioral observations								
	Video cases fo	or behavioral observations							
	Case Presentation: Symzkowicz								
	Readings:	P&H: Chapter 7 Bowers handout Brandt (2006) see below							
*	<ul> <li>Hot Topic: Should we norm for age, education, and ethnic differences? Leaders: Mangal, Henderson, Sullan</li> <li>Brandt, J. (2006): Neuropsychological Crimes and MisDemeanors</li> </ul>								
	Homework Assignment: Write behavioral observations on in class video cases								
Sept 25	The Battle of the Batteries: Fixed vs Flexible								
		Case Presentation: Letzen							
		A personal perspective & cases							
	Readings:	Reitan, R. The best laid plans and vargaries of circumstantial events. In Stringer et al (eds), <u>Pathways to Prominence in Neuropsychology</u> Bauer, R. The Flexible battery Approach							
Oct 2	Boston Process Approach								
	Estimating Your IQ: Barona, NART, WTAR, and More								
		Case Presentation: Mangal Case Presentation: TBD							
	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)							

Part II: Neurocognitive Domains: Over the next 4 weeks, each class will adhere to the following format

- a) Overview of the domain and its neuroanatomic and cognitive substrates
- b) Typical tests and how they can be used
- c) Typical disorders associated with deficits in this domain.
- d) Case Presentations/Videos and Student Presentation s

#### Oct 9 Exam 1 (1.5 hr)

Assessment of Language and Language Related Skills

Test Revie	ews/updates:	COWA vs DKEF's VERBAL Fluency FrSbe	TBD TBD
Readings:	P&K: Chapter 1 Bowers overvie		

Oct. 16 Assessment of Memory

Amnesia Videos Memory Measures: NP travesties

Case Presentation Garcia

MOCA vs MMSE

**Readings:** P&K: Chapter 17

Test Reviews/Updates:

Squire, L.D. (1980). Specifying the defect in human amnesia: storage, retrieval and semantics. Neuropsychologia, 18 (3) 369-372.

TBD

Nelson Butters: One step ahead. In Stringer et al. (2002), Pathways to Prominence in Neuropsychology. (I knew him when I was in Boston ; he was enmeshed in his "memory" research at that time. As you'll read he was on the job market, and ended up at UCSD and set in place a highly successful UCSD neuropsych program. This autobiography is very poignant as he produced this verbally, during the final throes of ALS. His daughter's comments (Meryl Butters) are on target about him liking to be known as the "godfather" of NP.

## Oct. 23 Assessment of Executive & Frontal Lobe Skills Frontal Videos

	esentation: esentation:	Lafo Henderson		
Test Reviews/Updates:		Wisconsin Card Sort (short vs long form Iowa Gambling Test	TBD TBD	
Readings:	P&K: Chapter 20 & 21 Teuber (1960): The riddle of the frontal lobes Brandt et al. (2009) Stuss' frontal lobe battery			

Thought question: Is executive function the same as fluid intelligence? Is Salthouse right?

Oct.30	Assessment of Visuoperceptual, Spatial, & Constructional Skills						
	Case Pre	esentation:	Seider				
	Test Review/Updates:		Hooper VOT Brief Visuospatial Memory Test-Revised	TBD TBD			
	Readings:		s 19 012) Computerized Neuropsychological Assess y discussion leaders	ment Devices			
*	Hot Topic:		<b>I Testing batteries: are we being outsourc</b> aders: Garcia, Hizel, McClaren	ed?			
Part III: Neur			ver the next 5 classes, we'll focus on asse europsychological disorders	essment issues germane			
Nov. 6	MS, B	inswangers, radi	<b>iency Disorders</b> ation necrosis, NPH, s, Huntingtons disease				
		Presentation: Presentation:	Scott Maye				
	My Dis	order Update:	Lubag Cortico-basal degeneration (CBD)	TBD TBD			
	Readings:		s 12 & 13 012) Computerized Neuropsychological Assess y discussion leaders	ment Devices			
Though	nt Question: Why	is executive funct	ioning so correlated with processing speed?				
Nov.13	MCI, tl	l measures and Has the WMS-	erly nentias", and vascular dementia special considerations: hearing, vision IV gone TOO far? nd defining MCI				
	Case P	resentation:	Sullan				
	My Dis	order Update:	Capgras Antons	TBD TBD			
	Readings:		ia for major and Minor Cognitive Disorders 19; Delano Wood et al., 2009, Schinka et al., 2	2010			
×	Hot Topic:		doing DBS on individuals with amnestic MCI? Iders: Symzkowicz, Scott, Seider				
		Laxton et al. (	2010). A Phase I Trial of Deep Brain stimulatio	on of memory			

circuits in Alzheimer's disease. <u>Annals Neurology</u> Stone et al., 2011; Encinas et al., 2011

Nov. 20 Issues in the Assessment of Epilepsy & Emotion The Wada Exam & More Role of neuropsychologist Case Presentation: Schwab Case Presentation: Asken My Disorder Update: TBD Anton's Syndrome Antiphospholid Syndrome TBD Jacob-Creutzfeld TBD Readings: P&K: Chapters 9, 26&27 Chelune (1995) Lassonde et al., (2006)



Nov. 28 THANKSGIVING HOLIDAY

Dec. 5 Assessment of Effort and Malingering The Business of Psychology: nuts and bolts from CPT codes onward Future directions of the field - Implications of Affordable Care Act

Case Present	ation: Hizel McLai	
Readings:		Chapter 5 rs TBD
нот торіс:		tests be given as part of every neuropsychological exam? aders: Schwab & Maye

Dec 12 Clinical Case Potpourri

Previous Students, Post-Docs, & Faculty

December 19: In Class FINAL EXAM

