

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

**CLP 7427: NEUROPSYCHOLOGICAL ASSESSMENT OF ADULTS (3 hrs)**  
**Spring Semester 2017**

Meeting Time/Place: Wednesday, 7:30 AM – 10:30 AM, Room G301A HPNP

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

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<b>Instructors:</b>	Dawn Bowers, Ph.D., ABBP-CN Professor, CHP & Neurology	Catherine Price, Ph.D., ABPP-CN Associate Professor, CHP & Anesthesiology
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<b>Office Hours:</b>	By Appointment	By Appointment
<b>Preferred Course Communication:</b>	email	

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**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.

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**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.

**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. We guarantee that by the end of this course, you will be pleased, with your accomplishments. One of Dr. Bowers' dear professors and mentors, Molly Harrower, impressed upon her that "when work is fun, it's fun rather than work. And why would one ever want to have career that wasn't fun?" We 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. We will try to make handouts/slides available in this class folder after class.

**Required (2 books)**

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

Blumenfeld, H. (2010) Neuroanatomy through Clinical Cases. 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) Neuropsychological Assessment (5<sup>rd</sup> Edition). New York: Oxford University Press. *The standard compendium of neuropsychological measures according to “domains”. All neuropsychologists should have this book in their library!*

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

Kolb, B. & Wishaw, I. (2015) Fundamentals of Human Neuropsychology. 7<sup>th</sup> Edition. MacMillan, NY. *The word on the street is that a large proportion of the neuropsychology ABPP written exam questions are directly based on information from this book. Hint Hint*

### Recommended

Stringer A., Cooley, E., Christensen, A. (2002). Pathways to Prominence in Neuropsychology: Reflections of 20<sup>th</sup> century pioneers. 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). Revised Comprehensive Norms for an Expanded Halstead-Reitan Battery. Lutz, FL: Psychological Assessment Corporation.

### Course Format

This course will be conducted in the form of a graduate seminar. Class will meet Wednesdays from 7:30 am - 10:30 in Room G301A 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	35%	
Final Exam	45%	(cumulative)
Clinical Case Presentation	10%	
Test Summary/Weird Disorders	3%	
Hot Topic Discussion	3%	
Quizzes	4%	

1. **MidTerm and Final Exams** will comprise 75% 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 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 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 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? (For this assignment, do not show videos from internet).

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 *historical background, administration, available norms, reliability, validity, strengths and weaknesses*. 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 writeup. If you have any questions about this assignment, let us know.

<b>Name of Test</b>	<b>Instructions (if relevant)</b>
<b>Author</b>	<b>Normative Information (sample size, age, sex, ethnic)</b>
<b>Publisher &amp; Address*</b>	<b>Psychometric Properties: Reliability &amp; Validity</b>
<b>Year Published</b>	<b>Strengths &amp; Weaknesses</b>
<b>Purpose of Test</b>	<b>Relevant Research Findings</b>
<b>Cost to purchase</b>	<b>Test Format and Procedures</b>

*\*Amazon.com is not a publisher, nor is it where 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., 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, Visuo-perceptual-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%- 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-	F

Below is table linking letter grades to grade points.

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

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 web site for more details: [www.dso.ufl.edu/judicial/procedures/academicguide.php](http://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](http://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 .

**Jan 4** Introduction to Course and Requirements: Bowers and Price Discuss  
Pre-Quiz

Historical Background & UF Perspective

Case Presentation: Bowers

Homework Assignment for 01/11:

Answer the following questions on paper and turn in to class on 1/11/2017

- 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). Revised Comprehensive Norms for an Expanded Halstead-Reitan Battery: Demographically adjusted Neuropsychological Norms for African Americans and Caucasian Adults, 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 evaluate if you knew your patient had a stroke involving the inferior division of the left middle cerebral artery?

Hint: For b & c, read Blumenfeld.

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**Jan 11** Neurologic vs Neuropsychologic Exam: Bowers  
Inferential Logic & Methods in NP - Psychometric Issues & David Schretlein

Case Presentation: Bowers

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



**Hot Topic:** *Should there be an FDA for NP tests?*

- Leaders: Houck, Gaynor, O'Shea
- 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

Jan 18      **Stages of the Neuropsychological Exam: Price**  
**Behavioral Observations, Interview, and Clinical Pearls**

Video cases for behavioral observations

Case Presentation: *Price*

**Readings:**      P&H: Chapter 7  
                      *Edit Kaplan on behavioral observations*  
                      Handouts  
                      Brandt (2006) Neuropsychological Crimes and MisDemeanors



**Hot Topic:**      *Should we norm for age, education, and ethnic differences?*  
**Leaders:** Polejaeva, Rottblatt, Svingos  
                      (read Brandt, J. 2006):

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

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Jan 25      **Battle of the Batteries: Part 1-**  
**Flexible Batteries & Boston Process Approach: Price**

Case Presentation: *Svingos*  
Case Presentation: *Bryant*

**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.*

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Feb 1      **No class.**

**Readings:** Blumenfeld: Chapters 2, 10, 11,19

**Assignment (in addition to reading)**

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



Feb 8      **Battle of the Batteries Part II:**  
**Fixed Batteries & Estimating IQ Bowers**

Case Presentation: *Crowley*  
Case Presentation: *(if Time, Bowers)*  
A personal perspective & cases

**Readings:**      Reitan, R. The best laid plans and vargaries of circumstantial events. In  
                      Stringer et al (eds), Pathways to Prominence in Neuropsychology  
                      Bauer, R. The Flexible battery Approach

**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 Presentations

**Feb 15 Assessment of Memory: Bowers**

Amnesia Videos  
Memory Measures: NP travesties  
Memory Writeups

Case Presentation Houck

Test Reviews/Updates: MOCA vs MMSE Crowley

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

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

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 orally, 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.

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**Feb 22 Exam 1 (1.5 hr)**

**Assessment of Language and Language Related Skills: Price**

Test Reviews/updates: WAB Rhomas/Altomare  
Verbal Fluency: COWA vs DKEFs Abanisque

**Readings:** P&H: Chapter 18

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**March 1 Assessment of Visuo-perceptual, Spatial, & Constructional Skills: Price**

Case Presentation: Polejaeva

Test Review/Updates: Hooper VOT Moreno  
Florida Affect Battery Svingos

**Readings:** P&K: Chapters 19  
Bauer et al (2012) Computerized Neuropsychological Assessment Devices  
Others: TBD by discussion leaders



**Hot Topic:** *Computerized Testing batteries: are we being outsourced?*  
**Discussion Leaders:** Abanisque, Rhomas, Crowley

March 8 NO CLASS Spring Break



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March 15 **Assessment of Executive & Frontal Lobe Skills: Bowers**

Frontal Videos

Case Presentation: O'Shea

Test Reviews/Updates: *NIH Executive Battery* Trifilio  
*FrSBe* Rotblatt  
*Wisconsin Card Sort: short vs long form* Grief

Handscoring the WCST: Demonstration

**Readings:** P&K: Chapter 20 & 21  
Teuber (1960): The riddle of the frontal lobes  
Brandt et al. (2009)  
Stuss' frontal lobe battery  
  
Heaton - Admin & scoring the WCST  
Strauss- WCST from Compendium of NP Tests  
Axelrol et al (1994) Comparison of scoring guides  
Nyhus & Barcelo (2009) WCST - Critical Update

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

Homework: Handscoring a WCST protocol

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**Part III: Neuropsychological Disorders.** Over the next 5 classes, we'll focus on assessment issues germane to commonly encountered neuropsychological disorders

Mar 22 **Processing Speed & the Efficiency Disorders: Bowers**

MS, Binswangers, radiation necrosis, NPH, parkinsonisms, HD

Case Presentation: Rhomas/Altomare

Case Presentation: Grief

Weird Disorder Update: *Anton's Syndrome* Bryant  
*Susac Syndrome* Gaynor

**Readings:** P &H: Chapters 12 & 13

Thought Question: Why is executive functioning so correlated with processing speed?

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Mar 29 **Assessment Issues in the Elderly: Price**

MCI, the "cortical dementias", and vascular dementia

Special measures and special considerations: hearing, vision

*Has the WMS-IV gone TOO far? Composites and defining MCI*

Case Presentation: Rottblatt

Weird Disorder Update: *Reduplicative Paramnesia* Polejaeva  
*Antiphospholipid Syndrome* O'Shea

**Readings:** P&H: Chapter 11  
DSM-V: Criteria for major and Minor Cognitive Disorders  
Jak et al., 2009; Delano Wood et al., 2009, Schinka et al., 2010  
Also Hot topic readings



**Hot Topic:** Should neuropsychologists know how to read basic neuroimaging scans?  
**Discussion leaders:** Trifilio & Grief

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.

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**Apr 5 Issues in the Assessment of Epilepsy & Emotion: Bowers/Pandya**

The Wada Exam & More  
Role of neuropsychologist

Case Presentation: Moreno  
Case Presentation: Trifilio

Weird Disorder Update: *Dandy Walker Syndrome*

*Houck*

**Readings:** P&K: Chapters 9, 26&27, Chapt on Emotion  
Chelune (1995)  
Lassonde et al., (2006)  
Epilepsy Guide (Shands)  
Pseudoseizures aka PNES

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**Apr 12 Assessment of Effort and Malingering: Price**  
**The Business of Psychology: nuts and bolts from CPT codes onward**  
Future directions of the field -

Case Presentation: Gaynor  
Abanisque

**Readings:** P&H: Chapter 5  
Chafetz et al. (2015). Official position of AACN Social Security Administration Policy on Validity Testing: Guidance and Recommendations for Change. *TCN*, 29 (6), 723-40.  
Slick, Sherman, & Iverson (1999). Diagnostic criteria for malingered neurocognitive dysfunction. Proposed standards for clinical practice & research. *TCN*, 13, 545-61.  
Others TBD



**HOT TOPIC:** Should effort tests be given as part of every neuropsychological exam?  
**Discussion Leaders:** *Bryant, Moreno*

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**Apr 19 Clinical Case Potpourri OR in class Final exam**