

## Argosy University

Course Title: **Introduction to Neuropsychological Assessment (PP8720)**

Trimester: **Summer 2009**

Day & Time: **Thursdays 4:30 – 7:30, with Lab to follow, from 7:30pm - 9:00pm**

Instructor: **Shelley Peery, Ph.D. 415-218-6915 (cell) ShelleyPeeryPhD@Gmail.com**

Office Hours: **Thursdays 4:00 – 4:30 & by appointment either at Argosy, at my San Francisco office (1199 Bush St., #350), or by phone.**

**Prerequisites:** A grade of at least “B+” or better is required in the following classes: 1) Introduction to Neuropsychology (PP8645), 2) Cognitive Assessment.

**Course Description:** This is second in a two-semester sequence in clinical neuropsychology.

Goals and Format: The current course will provide students with the “hands-on” ability to **administer** and **interpret** a core set of commonly used neuropsychological tests, under the close supervision of an experienced neuropsychologist.

In each lecture, we will focus on the nature of clinical assessment of various cognitive abilities such as attention/concentration (sustained attention, selective attention, divided attention, alternating attention), working memory, language, visuospatial skills, verbal memory, visual memory, planning, organization, set shifting, hypothesis testing, inhibition of incorrect responses, sequencing, problem solving, abstract and deductive reasoning, etc.

We will also review psychometrics as they are applied in neuropsychological assessment.

Commonly encountered behavioral syndromes such as mild traumatic brain injury, various forms of dementia, reading disability, nonverbal learning disability, and stroke will be used as a vehicle to introduce a core battery of diagnostic instruments (see below) which can be used with a wide variety of patients.

Each class will include lecture followed by hands-on “lab” time to learn the tests.

A “process” assessment method (using a flexible battery) will be the primary focus of training.

Students who are interested may have the opportunity to observe administration of a battery at the San Francisco office of Dr. Peery (1199 Bush St., #350).

### Course Assignments:

- (1) Lab (demonstration of competency in test administration). 10%
- (2) Mystery client report. 20%
- (3) Two reports from a full battery completed with “normal” volunteers. 40%
- (4) Case presentations. 2 x 5%= 10%
- (5) Topic presentation. 10%
- (6) Quizzes. 10%

**Competencies:** After completing this semester’s course, students will be competent in the following areas, performed under the supervision of a qualified neuropsychologist:

- Ability to administer, score, interpret, and summarize a “core” set of neuropsychological measures.
- Ability to identify processes contributing to test performance
- Ability to efficiently and clearly write a neuropsychological report.
- Familiarity with commonly encountered neuropsychological syndromes and associated assessment profiles.

Tests that will be taught include: WAIS-III (testing of the limits), WISC-IV Integrated, WRAT 4, WTAR, WMS-III, DKEFS, JOLO, BDAE, BNT, WIAT-II, CVLT-II, RCFT, RBANS, Cognistat, Finger Tapping Test, Grooved Pegboard, Hand Dynamometer, WCST, GORT, BDI, BAI, Clock Drawing Test, BFR, BVFD, Beery, Vineland, CATS, BCT.

Please note that the current course does not qualify students to work as neuropsychologists. Typical training required for independent practice as a neuropsychologist consists of additional graduate course work, combined with at least two years of post-doctoral work in neuropsychology. However, this course will make your application to these programs more competitive.

### **Required Texts:**

1. Lezak, M.D., Howieson, & Loring, D. (2004). *Neuropsychological Assessment* (4th Ed.). New York: Oxford University Press. Be sure to get the latest (2004) edition!
2. Spreen, O., & Strauss, E. (2006). *A compendium of neuropsychological tests: Administration, norms, and commentary* (2nd ed.). New York: Oxford Univ. Press. Be sure to get the latest (2006) edition!
3. The manuals corresponding to the tests are also **required** reading.

### **Suggested Additional Texts:**

Neuroanatomy through Clinical Cases (Hal Blumenfeld)

INS Dictionary (D. Loring Ed.- INS)

Neurology for Psychiatrist (Kaufman)

Principles of Neurology (Adams and Victor)

Behavioral Neurology and Neuropsychology (Feinberg and Farah)

Medical Neuropsychology (Tartar, Butters, & Beers)

NP Assessment of NP Disorders (Grant & Adams)

Psychological Assessment (Anastasi)  
The Behavioral Neurology of White Matter (Filley)

**Evaluation Criteria:**

- (1) Lab. 10% Students must pass weekly evaluations of their ability to correctly administer tests and subtests.
  
- (2) One report based on a mystery patient data set. 20% To teach report-writing skills and clinical thinking, patient data will be introduced, and each week more test information will be added —e.g., attentional functioning, memory, language, psychiatric history, etc. Students will write up each week’s “mystery client” information in a brief format (roughly 1-2 paragraphs), referring to sample reports and a structured outline. Grade will be based on timeliness of submissions, the degree to which your structure follows guidelines given in class, and the degree to which you have interpreted the data appropriately.
  
- (3) Two reports from a full battery completed with “normal” volunteers. 40%
  - a) Volunteers must be unknown to you. Thus, you may ask incoming 1st year students, and you may swap volunteers who are known to you with another student in the class.
  - b) Volunteers must not have any diagnosable conditions, and you must screen them for a personal history of psychiatric, neuropsychological, or developmental disorders.
  - c) Volunteers must be native speakers of English.
  - d) The first battery will be with an adult and the second may be with an adult or a child. Batteries will be distinct and will measure all cognitive domains (i.e., IQ; verbal, perceptual, and motor skills; attention/concentration; verbal and visual memory; executive functioning; emotional, personality, and effort). Battery selection will take into account availability of appropriate normative data.
  - e) One report must be LONG (8 - 12 pages), and the other must be SHORT (4 - 8 pages). Page limit does not include appendix. An appendix must accompany all submissions. Only your 3rd draft will be graded, and it will represent your final grade for that project. Further guidelines on writing reports are available at [http://docs.google.com/Doc?id=dqmtqxj\\_44crk8jff3](http://docs.google.com/Doc?id=dqmtqxj_44crk8jff3)
  - f) Your first draft must be accompanied by a signed consent form and the raw data, with an indication as to who double scored it. (All students must double score another student’s data; this will be assigned in a round robin fashion to optimize learning.)
  
- (4) Case presentations. 2 x 5% Students will present their cases in class. Case presentations will include background and scores from completed batteries. Further guidelines at [http://docs.google.com/Doc?id=dqmtqxj\\_41whjq2gv](http://docs.google.com/Doc?id=dqmtqxj_41whjq2gv)
  
- (5) Topic presentation. 10% During the second half of the course, students will present cases and select a disorder, research it and its neuropsychological sequelae, briefly present this material in class. Further guidelines at [http://docs.google.com/Doc?id=dqmtqxj\\_41whjq2gv](http://docs.google.com/Doc?id=dqmtqxj_41whjq2gv)

(6) Quizzes. 10% Administered in the first 10-15 minutes of class. You may submit questions you'd like to see on quizzes. Quizzes will be on readings, test administration procedures, scoring, and interpretation. Further descriptions and sample questions at [http://docs.google.com/Doc?id=dqmtqxj\\_43gxzwcmg2](http://docs.google.com/Doc?id=dqmtqxj_43gxzwcmg2)

## **LECTURE SCHEDULE**

### **Week 1: May 14. Orientation and Overview:**

Overview of the course format and requirements; readings and resources; logistics. Required training for neuropsychologists (Houston Standards). Typical neuropsychologist assessment practices, salaries, settings (NAN survey). Ethics of testing "neuro-typical" individuals, Informed Consent.

Reading = Lezak: 1-3; WAIS-IV Manual

Handouts = sample reports, informed consent, writing guidelines

Homework = recruit 2 "normal" subjects (2 adults, or an adult and a child aged 6 – 15 years old)

### **Week 2: May 21. Basic principles of test administration and report writing.**

Reading = Lezak: 1-5; Strauss: 1-5; RBANS, Cognistat manuals

### **Week 3: May 28. General Cognitive Functioning.**

Reading = Strauss 6, WAIS-III testing of limits, WISC-IV Integrated

Handouts = mystery client score sheets/ appendices

Homework = write up intelligence testing (1-2 pages) **DUE June 4th.**

### **Week 4: June 4. Diagnostic Issues.**

Reading = Lezak 8, Premorbid Estimates of Intellectual Functioning: WTAR, WRAT-3, NAART, Ravens SPM, Matrix Reasoning, Object Assembly

Activity = history taking: students will ask questions about the history of their mystery client in order to prepare the history section of their report

Homework = write up history (1 page). **DUE June 11th.**

### **Week 5: June 11. Orientation, Attention.**

Reading = Lezak 9; Strauss 9

1. MMSE, WMS-III Orientation, Cognistat Orientation,
2. Digit Span, Visual Digit Span, Spatial Span, Arithmetic Testing of the Limits (WISC-IV & WAIS-III), Letter-Number Sequencing, LNS Testing the Limits (WISC-IV),

- WRAML-2 Finger Windows
3. Cancellations, Picture Completion Testing of the Limits, JoLO, Go-No-Go, Digit Symbol (RBANS)
  4. DKEFS Stroop, DKEFS Verbal Fluency, DKEFS Design Fluency, WCST

Homework = Write up Orientation and Attention Sections of Mystery Client Report (1 – 2 paragraphs) **DUE June 25<sup>th</sup>**;

Testing = Meeting with subjects, History, Orientation, Attention, Intelligence Testing (prorated WAIS – III; 2nd subject: full WAIS – III with testing of the limits, or full WICS-IV Integrated), test, score, and write up **DUE June 25<sup>th</sup>**.

**Week 6: June 18. No Class. American Academy of Clinical Neuropsychology conference in San Diego.**

**Week 7: June 25. Perception, Construction.**

Lezak 10, 14; Strauss 12; Contributions to Neuropsychological Assessment sections on Face Recognition (p. 35), JoLO (p. 53), and Visual Form Discrimination (p. 65).

1. Clock Drawing Test, JoLO, Cancellations, Line Bisection, RBANS Figure Copy
2. Block Design Testing of the Limits (WISC-IV), Benton Facial Recognition, BFDT
3. Rey Complex Figure Test, WMS-III Visual Reproduction, Beery
4. DKEFS – Trails Visual Scanning, Design Fluency, WMS-III Faces, WMS-III Family Pictures, WRAML-2 Picture Memory, WRAML-2 Design Memory

Homework = 1. Write up Perception and Construction Sections of Mystery Client Report (1-2 paragraphs) **DUE July 2<sup>nd</sup>**.

2. Battery proposals x 2 **DUE July 2<sup>nd</sup>**.

Testing Subjects = Adult 1: Clock, JoLO, Cancellations, Line Bisection, RCFT; Adult 2: different Clock, different JoLO, different Cancellations, BFR, BFDT, WMS-III VR; Child: Beery

**Week 8: July 2. Memory Functioning.**

Lezak 11-12; Strauss 10

1. WMS-III, RBANS List Learning, Story Memory
2. WRAML-2, CMS
3. RCFT, CVLT-II
4. **Battery ideas should be reviewed and proposals discussed in class for each of your clients (long and short)**

- Homework = 1. Write up Memory section of Mystery Client report (2 paragraphs) **DUE July 9<sup>th</sup>**.  
2. Create the rest of your competencies worksheet, **DUE July 9<sup>th</sup>** - bring 2 copies  
3. Double scoring (by your assigned student)

Testing = Adult 1 WMS-III, Adult 2 RCFT & CVLT-II, Child = either WRAML-2 or CMS

**Week 9: July 9. Language Functioning.**

Lezak: 13; Strauss 11

1. WIAT-II, GORT,
2. BNT, BDAE, RBANS Picture Naming
3. DKEFS Verbal Fluency, Proverb Test, RBANS Semantic Fluency

- Homework = 1. Write up language testing for mystery client, **DUE July 16<sup>th</sup>**  
2. Draft of history and IQ parts of your report of client 1, **DUE July 16<sup>th</sup>** turn in WITH copies of raw data & note re: WHO double scored it  
3. sign up on web for Case Presentation & Topic Presentation

Testing = Adult 1: BDAE, RBANS, WIAT-II abbreviated; Adult 2 and Child: Full WIAT-II, GORT, BNT, DKEFS

**Week 10: July 16. Executive Functioning, Motor Function**

Lezak 15, 16; Strauss 8, 13-14

1. DKEFS (no sorting test)
2. Finger Tap, Grooved Pegboard, Hand Dynamometer,
3. WCST, BCT

- Homework = 1. Write up executive and motor sections of mystery client (1-2 paragraphs each), **DUE July 23<sup>rd</sup>**.  
2. Bring in raw data from np for client 1 to go over in class

Testing = Adult 1: DKEFS, BCT, Finger Tap, one other motor test; Adult 2 or child: DKEFS, WCST, 3 motor tests

**Week 11: July 23. Batteries. Achievement testing WIAT-II. Emotion and Personality in Neuropsychological Assessment. CATS, BDI, BAI, BYI, MMPI-II. Summaries, Conclusions, Formulations, and Treatment Recommendations.**

Lezak 18-20; Strauss 6-7, 15

Scoring questions

Writing workshop: presentations of initial data

Integrated mystery client report due

Drafts of test subjects reports **due next week July 30th**

Case presentations (3-4 students)

**Week 12: July 30. Special Issues. Summary, formulation, conclusion, diagnoses, treatment recommendations**

Strauss 16

Writing workshop: presentations of data

Scoring questions

Case presentations (3-4 students)

**Drafts of case 1 due today**

**Week 13: August 6. Additional clinical syndromes. Student presentations**

Rewrites of Mystery client due today

**Case 2 draft due today**

Scoring questions

**Week 14: August 13. Additional clinical syndromes. Student presentations**

Scoring questions

**Week 15: August 20. Additional clinical syndromes. Student presentations**

**Final versions of your assessment report due, incorporating class and instructor suggestions.**