

**Doctoral Program in Clinical Psychology  
The Graduate Center of the City University of New York**

**Assessment III: Child Neuropsychological Assessment  
Course # 76103.16179  
Fall, 2010**

**Professor:** Lissa Weinstein, Ph.D.

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**Day & Time:** Tuesday 9:45 – 11:45a.m.

**Office Hours:** By appointment via e-mail

**Course Description:**

This doctoral level course provides a broad overview of the assessment of the psychological and educational problems encountered by children with learning disabilities during their inevitably altered developmental trajectory. The course format will consist of a two hour lecture per week, and an additional two hours for a lab which will offer students the chance to observe more experienced testers demonstrate test batteries and later to conduct assessments themselves while being observed. Because the course is an attempt to integrate different perspectives on learning disabilities, essential background material on the neuropsychology of learning disabilities will be covered in lectures and readings so that assessment can proceed from an informed theoretical perspective. It goes without saying that students are expected to become familiar with the manuals and standardization processes of all the tests listed. By the end of the semester, students will be expected to be able to evaluate a WISC IV protocol and decide on the basis of the patterning of the scores which additional instruments would best assess the given problem and to administer and interpret a full psychoeducational battery. Although the course will not focus on the Rorschach and other projective tests, it is expected that the student integrate these materials into their final test report. There will also be a focus during the lab on the close observation of behaviors that are not necessarily manifest in test scores, but which can provide further information about the patient's processing issues and their adjustment to those issues.

The three syndromes studied are:

- 1) Developmental language disorders, particularly Specific Reading Disability
- 2) Right hemisphere learning disorders.
- 3) Attention deficit hyperactivity disorder

While for diagnostic purposes, these are treated as discrete categorical entities, the focus of the course will be on seeing disorders of attention, language, memory and perception as existing on a continuum. Hence, the skills learned in evaluation these disorders will be applicable to a wide range of patients.

**Course Objectives:**

To promote a thoughtful approach to neuropsychological assessment which takes into account both the cognitive and dynamic contributions to a child's symptom picture and their educational difficulties. The course is designed to teach not only what test to give and how to properly administer that test, but also to provide a rationale for why a given test is necessary and what part functions it addresses. Students are expected to know how each of the tests within a subcategory (i.e. attention) measure different aspects of the construct. The focus of the course will not be on "giving lots of tests" or omnibus batteries. Instead, students will be helped both through lecture and supervision to choose the appropriate instrument or part of a test to best answer a clinical question. In addition, students will learn to critically evaluate the tests they are giving, building on the foundations of their tests and measurements course, as well as understand the statistical and clinical problems in categorizing learning disabled children.

Most of the reading material is available on the course web site. Access it through the City College Library. Go to quick links, Library, Quick links to selected resources, course reserves and look under my name, choose the current course from the menu. The password will be psylweinstein

**Students with Disabilities:**

Any student with a disability may be accommodated. Please contact me by e mail to arrange a meeting to discuss accommodations or if extended time is necessary during tests and quizzes.

**Required Text:**

Fletcher, J. Lyon, G. R., Fusch, L., Barnes, M. (2007). *Learning Disabilities: From Identification to Intervention*. The Guilford Press: New York, London

**Recommended Reading:**

Swanson, J. L., Harris, K. R., & Graham, S. (2006). *Handbook of Learning Disabilities*. The Guilford Press: New York, London

Shaywitz, S. (2003) *Overcoming Dyslexia*. New York: Knopf

Weinstein, L. (2003) *Reading David: A Mother and Son's Journey Through the Labyrinth of Dyslexia*. New York: Penguin

Rothstein, A. Benjamin, L. Crosby, M. Eisenstadt, K (1988) Chapters One and Four: *Learning Disorders: An Integration of Neuropsychological and Psychoanalytic Considerations*. Madison, Ct. International Universities Press.

## Requirements and Grading:

- 30% Three brief in- class quizzes which cover the reading material
- 10% Proper Test Administration
- 10% In class assessment of WISC IV protocol and suggestions for further testing
- 50% One comprehensive integrated psychoeducational assessment

It is your option to substitute a short research paper (3 – 5) pages for one of the exams, on a topic that can be discussed with me. One could also choose to write a review of the relative strengths and weaknesses of a specific test, comparing it to other assessment instruments that purport to measure the same function. Finally, one could choose to develop their own small test instrument to elucidate a particular process, and to critique that instrument. However, these papers must be due on the day of the exam. If they are not, you receive a 0 for the exam. If an exam grade on the first two tests is below expectation, you are allowed to resubmit the exam for a potential increase of one grade. There are no incompletes given in the course. Not finishing is an F.

## Weekly Reading Assignments and Class Topics:

Week One: Introduction: What is a Learning Disability? Epidemiology: Racial and Gender Factors that Impact Neuropsychological Functioning and Diagnosis. The Use of the Diagnostic Interview. Review of WISC IV scores that might point to the indication of a Learning Disability

**Objective:** to think critically about the various criteria used to determine the presence or absence of a learning disability, and to be able to identify score patterns on intelligence tests as well as individual item responses that might point to the necessity for further testing.

### Readings:

*Learning Disabilities: From Identification to Intervention:* Chapter 3: Classification, Definition and identification of Learning Disabilities

Norman, Marc A.; Moore, David J.; Taylor, Michael; Franklin, Donald, Jr.; Cysique, Lucette; Ake, Chris; Lazarretto, Deborah; Vaida, Florin; Heaton, Robert K. (2011). Demographically corrected norms for African Americans and Caucasians on the Hopkins Verbal Learning Test–Revised, Brief Visuospatial Memory Test–Revised, Stroop Color and Word Test, and Wisconsin Card Sorting Test 64-card version. *Journal of Clinical and Experimental Neuropsychology*, Vol 33(7), 011, 793-804.

Morgan, P.L., Farkas, G. & Hibel, J. (2008). The Matthew effect, for whom? *Learning Disability Quarterly*, 31 (4), 189-198.

Nabors, N. A., Evans, J. D & Strickland, T. L. Neuropsychological assessment and intervention with African Americans. In E. gletcher-Janzen, T. L Strickland & C. Reynolds (Eds.) *Handbook of cross-cultural neuropsychology (pp 31-42)*. Dordrecht, Netherlands: Kluwer Academic Publishers.

WISC IV manual

## **UNIT ONE: DYSLEXIA AND LANGUAGE BASED LEARNING DISABILITIES**

### Week Two: Understanding the Reading Process

**Objective:** To understand the various components of the reading process and how these are differentially impaired in different reading disorders; to understand the limitations of different models of identification and the implications of these models for intervention; to become familiar with the DSM IV TR definitions of Reading Disability and other Developmental Language Disorders

#### **Readings**

Lyon, G. R. (1995) Toward a definition of dyslexia. *Annals of dyslexia*, 45, 3 - 25.

Aaron, P.G. (1995) Differential diagnosis of reading disabilities. *School Psychology Review*, 24, 345 - 360.

*Learning Disabilities: From Identification to Intervention* Chapters 5-7

### Week Three and Four: Neurobiological Aspects of Dyslexia

**Objectives:** To be familiar with current research on the neurobiology of dyslexia, how it manifests differently depending on the orthography of the language, as well as its neurodevelopment.

#### **Readings**

Shaywitz, S. & Shaywitz, B. (2001). The neurobiology of reading and dyslexia. *Focus on Basics*, 5, 1 – 14.

McCandliss, B., & Noble, K. (2003) The development of reading impairment: A cognitive neuroscience model. *Mental Retardation and Developmental Disabilities Research Review*, 9, 106 – 204.

Paulescu, D., DeMonet, J., Fazio, F. et al. (2001) Dyslexia: Cultural diversity and biological unity. *Science*, 291,

Molfese, D. (2000). Predicting dyslexia at 8 years of age using neonatal brain responses. *Brain and Language*, 72, 238-245.

Temple, E. Deutsch, Poldrack, Miller, Tallal, P. Marzenich & Gabrieli (2003). Neural deficits in children with dyslexia ameliorated by behavioral remediation. Evidence from functional MRI. *Proceedings of the National Academy of Sciences of the United States*, 100, 2860-2865.

Dimos, P.G., Fletcher, J. M., Bergman, E., Breier, et al. (2002). Dyslexia specific brain activation profile becomes normal following successful remedial training. *Neurology*, 58, 1203-1213. Can be found on the web at:  
<http://neurology.org/cgi/content/abstract/58/8/1203>.

Collins, D., & Rourke, B.P. (2003). Learning-disabled Brains: A review of the literature. *Journal of Clinical and Experimental Neuropsychology*, 25, 1011-1034. (City College Full Text)

#### Week Five: Assessment of Reading Disability

**Objective:** To master the assessment of reading comprehension and phonological disability; to understand the strengths and limitations of various instruments as well as their differential applicability; to critically evaluate test instruments

(This list is by no means comprehensive, but is a representative sample of the types of instruments used to assess the central components of the reading process. Students are expected to read the manuals for all of the tests and to practice giving them to each other

#### **Tests of Phonological Processing**

Lindamood Auditory Conceptualization Test

WIAT Pseudoword Decoding, Analysis of Spelling errors

Comprehensive Test of Phonological Processing

Woodcock Johnson Spelling of Sounds, Incomplete Words, Sound Blending,

Letter Word Identification

Woodcock Reading Mastery Word Attack

#### **Fluency**

Woodcock Johnson Reading Fluency, Math Fluency

Rapid Automatized Naming

#### **Comprehension**

WIAT II Reading Comprehension

Gray Oral Reading IV

Woodcock Reading Mastery Cloze Passages

#### Week Six Spelling and Writing

**Objective:** To understand the developmental acquisition of spelling skills, their relation to reading disorders, and the continuum between spelling and other writing disorders. To learn the basics of assessing disorders of written language.

#### **Readings**

Treiman, R. & Bourassa, D. (2000) The development of spelling skill. *Topics in Language disorders*, 20, 1 - 18.

Stacher, D. Dysgraphia Handout

*Learning Disabilities: From Identification to Intervention* Written Expression Disabilities: Chapter 9

### **Assessment of Writing Problems**

WIAT II Writing, Spelling

Woodcock Johnson Writing Fluency, Extended Writing Samples, Spelling of Sounds

Test of Written Language (TOWL)

Week Seven: Language Based Learning Disabilities (Not Specific Reading Disability)

**Objective: To be able to differentiate the contributions of other language disabilities to reading and writing and some mathematical skills from developmental dyslexia. To understand the trajectory of child language development and its assessment**

Shoshana Goldman (handout) Highlights of Early Language development.

### **Assessment of Oral Language**

WIAT II Oral Language Section

Boston Naming Test (Expressive Function)

Peabody Picture Vocabulary

Woodcock Johnson: Understanding Directions, Listening Comprehension, Oral Comprehension

Clinical Evaluation of Language Fundamentals IV

Week Eight: Psychological Aspects of Language Based Learning Disabilities

**Objective:** To understand the relationship between the specific deficits in language and reading disorders and how they impact psychological functioning across the life span;

### **Readings**

Arkowitz (2000) The over stimulated state of dyslexia. *JAPA*

Migden, S. (1998) Dyslexia and self control: An ego psychoanalytic perspective. *Psychoanalytic Study of the Child*, 53, 283 - 299.

McNulty, M. (2003) Dyslexia and the life course. *Journal of Learning Disabilities*, 36, 363-381.

## **FIRST UNIT TEST**

### **UNIT TWO: SPATIAL, VISUAL SPATIAL, PERCEPTUAL AND MOTOR DISORDERS**

Week Nine: Introduction to Nonverbal Learning Disabilities

**Objective: To differentiate the psychological and neurobiological differences between the two populations of SLD and NVLD children**

Rourke, B. & Tsatsanis, K. (1996) Syndrome of nonverbal learning disabilities; Psycholinguistic assets and deficits. *Topics in Language Disorder*, 1996, 16, 30 – 44.

Collins, D. & Rourke, B. (2003). Learning-disabled brains: A review of the literature. *Journal of Clinical and Experimental Neuropsychology*, 25, 7: 1011-1034

Dimitrovsky, L. Spector, H., Levy Shiff, R. and Vakil, E. (1998) Interpretation of facial expressions of affect in children with learning disabilities with verbal or nonverbal deficits. (To be distributed in class)

Little, S. (1998) Nonverbal learning disabilities and socioemotional functioning: a review of recent literature. *Journal of Learning Disabilities*, 26, 652 – 665.

Week Ten: Assessment of Spatial and Perceptual Abilities

**Objective: To understand the differences among tests of visual perceptual and motor abilities**

WISC IV Scores tapping into spatial and perceptual skills

The Woodcock Johnson III Spatial Tests – Spatial Relations, Visual Spatial Thinking

The Rey Osterreith Complex Figure

Wide Range Assessment of Memory and Learning -- Tests of Visual Memory C Toni

**SECOND UNIT QUIZ**

**UNIT THREE DISORDERS OF ATTENTION**

Week Eleven: Neuropsychological Aspects

**Objective: To understand the relationship between executive, frontal lobe functioning and attentional problems, to learn to assess the relative efficacy of medication, and understand current controversies in diagnosis.**

Seidman, L. (2006). Neuropsychological functioning in people with ADHD across the lifespan. *Clinical Psychology Review*, 26 (4) 466-485.

Halperin, J. & Schulz, K. (2006). Revisiting the role of the prefrontal cortex in the pathophysiology of attention – deficit hyperactivity disorder. *Psychological bulletin*, 132 (4) 560 – 581.

Panskeep, J. (1998) Attention deficit hyperactivity disorders, psychostimulants and intolerance of childhood playfulness: A tragedy in the making.

Semrud-Clikeman, M., Pliska, S., Liotti, M. (2008). Executive functioning in children with attention deficit/hyperactivity disorder: combined type with and without a stimulant medication history. *Neuropsychology*, 22 (3) 329-340.

Week Twelve: Assessment of Attentional Disorders/Executive Functioning.

**Objective: To understand the different tests for the myriad aspects of attentional problems and executive functioning.**

The Continuous Performance Test,  
Tower  
Decision Making  
DKEFS  
Test of Everyday Attention Child  
Stroop  
Wisconsin Card Sort  
Woodcock Johnson Auditory Attention  
NEPSY Attentional Subtests

Week Thirteen: Psychological Aspects of ADHD

**Objective: To put the problems of attention and executive function in the larger context of self and object representations and the family and cultural context.**

Morrel, A. (1998) Attention deficit disorder and its relationship to narcissistic pathology. In *Narcissistic disorders in children and adolescents: Diagnosis and treatment*. New Jersey: Jason Aronson.

Gilmore, K. (1998) Diagnosis dynamics and development: considerations in the psychoanalytic assessment of children with AD/HD. *Journal of the American Psychoanalytic Association*, 22, 372-390.

Gilmore, K. (2000) A psychoanalytic perspective on attention deficit hyperactivity disorder *Journal of the American Psychoanalytic Association*, 48 (4), 1260 – 1275.

### **THIRD UNIT TEST**

Week Fourteen: The Developmental Context

**Objective: To encourage theoretical thinking about developmental models which incorporate physiological and psychological factors, and the relative weighting of the two factors at different points in development.**

Freud, A. (1965) The concept of developmental lines. In *Normality and Pathology in Childhood*. New York: International Universities Press.

Weil, A. (1970) The basic core. *Psychoanalytic Study of the Child*, 25:442-460.

Weil, A. (1978) Maturational variations and genetic-dynamic issues. *Journal of the American Psychoanalytic Association* 26:461-492.

Cohen, J. (1985) Learning disabilities and adolescence: developmental considerations  
To be distributed in class

Pine, F. (1985) Disturbances of learning and behavior in childhood. In *Developmental Theory and Clinical Process*. New Haven: Yale University Press.

Rothstein, A. & Glenn, J. (1998) Learning Disabilities and Psychoanalysis (Chapters to be distributed in class)

Week Fifteen : Conceptualizing the Problem: Towards an integration, treating the psychological aspects of learning disabilities . Review of selected student batteries and recommendations for treatment.

### **ASSESSMENT OF WISC PROTOCOL**