THE GRADUATE CENTER OF THE CITY UNIVERSITY OF NEW YORK
Clinical @ City Doctoral Program in Clinical Psychology

PSY 76101 32824: Clinical Neuropsychology II (3 credits)

Day, Time: Wednesdays, 2:00-3:50 p.m.
Room: NAC 8/132
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Office Hours: By appointment via email

Course Description:

This doctoral level course provides a broad overview of the assessment of the psychological and educational problems encountered by individuals with learning disabilities during their inevitably altered developmental trajectory. The course format will consist of a two-hour lecture per week, as well as a practical component where you will complete a testing case through the Psychological Center under supervision. 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 V 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. There will also be a focus 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 disorders studied are:

1) Developmental language disorders, particularly Specific Reading Disability
2) Attention-deficit/hyperactivity disorder
3) Right hemisphere learning disorders
4) Intellectual Disability
5) Autism Spectrum 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.

Goals/ Objectives:

By the end of the course, the successful student will have accomplished the following goals:

- The successful student will have a working knowledge of how to take a thoughtful approach to neuropsychological assessment, which takes into account both the cognitive and socio-emotional contributions to an individual's symptom picture and their educational difficulties.
- The successful student will develop an understanding of how disorders manifest across the lifespan.
- The successful student will have knowledge of neuropsychological tests commonly used in the evaluation of individuals with suspected learning disorder, ADHD, autism spectrum disorder, intellectual disability, and non-verbal learning difficulties.
- The successful student will be able to *apply* this knowledge to examples of patients so he or she knows what test to give and will be able 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 parts of a test, to best answer a clinical question.
- The successful student will have knowledge of proper test administration and will have gained experience in administering common neuropsychological tests. The student will be able to *apply* this knowledge to administration of novel neuropsychological tests.
- The successful student will 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 individuals who have learning problems.
- The successful student will have completed all readings on time; will actively participate in class discussions; and will complete a testing case (including assessment of IQ, achievement, and additional neuropsychological constructs such as memory, language, attention, etc.).

Books:

The following texts are <u>required:</u>

- Fletcher, J. Lyon, G. R., Fusch, L., Barnes, M. (2007). *Learning Disabilities: From Identification to Intervention.* The Guilford Press: New York, London
- Pennington, B. F. (2008). *Diagnosing Learning Disorders: A Neuropsychological Framework*. New York: Guilford

The following texts are recommended:

- Flanagan, D., & Alfonso, B. (2010). *Essentials of Specific Learning Disability Identification.* New York: Wiley (Really a very decent basic text on evaluation – kind of a crib sheet – a new version of this book comes out in Mar 2017, so if interested in this text, perhaps rent it)
- Shaywitz, S. (2005) *Overcoming Dyslexia*. New York: Knopf
- Swanson, J. L., Harris, K. R., & Graham, S. (2014). *Handbook of Learning Disabilities* (2nd Ed.). The Guilford Press: New York, London

Assignments:

Readings:

Students will be required to read a series of articles and chapters on current theories, controversies, and issues related to neuropsychological assessment. It is the expectation that all students will come to class fully prepared by having closely read all chapters and articles.

Most of the reading material will be posted to Dropbox. Additional material can be accessed easily through the City College library.

Training session:

Students will be assigned a commonly administered standardized test. They will develop and a present a training session (45 mins) to other members of class on how to *administer, score, and interpret the protocol.* Students will prepare a handout to give to the class that summarizes key information around scoring, interpretation, and also psychometric properties (*normative data, reliability, validity*) of the test. The handout should also include a list of peer-reviewed articles that are particularly relevant for this test (e.g., use of the test with a different sample; updated validity data etc.).

The purpose of these sessions is to provide essential information about these tests to peers. The handouts should serve as a "go to" for quick, relevant, and critical information about the measures, which students can keep with them throughout their time in residence.

*WJ-COG IV
*WJ ACH IV
*GORT 5 & TOWRE-2
*TONI-IV
*SB-5
*CPT & Conners Rating Scales
*WPPSI IV
*TOWL-4

Grading Rubric (100 points)

Presentation (60 points):
The presentation to the class should last for 45 minutes and include the following information:
-Purpose of the test
-Standardization sample
-To whom the test can be reliably administered
-Psychometric properties of the test (reliability and validity)
-Subtests (if relevant) – what they measure, how to administer
-Demonstrate how to administer subtests
-Show a fake protocol for scoring.
-Profile interpretation

Written summary (20 points)
-Summary of key information (purpose; to whom the test can be administered; psychometrics etc).
-list of peer reviewed articles that provide additional key information about the test

Style (20 points)
-Clarity, thoroughness and organization of oral presentation
-Clarity and organization of written summary

Completion of a neuropsychological assessment case (testing and report)

Students will pick up a testing case through the CCNY Psychological Center. Students will complete a testing case, including administration of IQ, achievement, and more extensive neuropsychological tests (e.g., attention, memory, language and so on). Students will then score their test subject's performance and write-up the results, drawing appropriate conclusions from the scores and giving appropriate recommendations. Students will complete the report and provide feedback to families.

Students will attend group supervision once per week during the course of the semester. Supervision is held Tues 4-6 pm or Wed 4-6 pm. Students must come prepared for supervision. This includes write up of any interviews (with patients or parents or teachers), write up of school observation (if relevant), scoring any tests administered **within one week of administration.** Students will present their case during supervision and provide de-identified copies of scoring protocols to members of supervision group **before supervision begins**.

In light of the importance of patients receiving feedback in a timely manner, reports should be completed within 8 weeks of the beginning of testing.

WISC-V Scoring Protocol

You will be provided with a brief background history of a child who has been referred for assessment, as well as the child's raw data from the WISC-V. You will score the profile and write up an interpretation of the data. The interpretation should be no more than 1-2 pages.

Grading Rubric (50 points)

Scoring (30 points):
-Accurate scoring of raw data for individual subtests, and transformation to scaled scores
-Accurate calculation of index scores, as well as 95% CIs and percentiles

Interpretation (20 points):
-1-2 page interpretation of the data, including any acknowledgement (if necessary) of significant discrepancies in index scores, and what this may mean
-make reference to background information provided in vignette, including consistencies or inconsistencies with data from the testing.

Class Participation:

Participation is evaluated on quality (not quantity) of contribution to the class discourse. This does not mean talking a lot; quality of participation includes facilitation of group discussion, questioning, and integrating others' ideas and comments. You must have done the readings to be able to fully participate in class discussion.

Evaluation:

Student grades will be based on the following activities:

- 30% Training session
- 40% Test administration and report
- 20% WISC Protocol Scoring
- 10% Class participation

Grades will be calculated based on CCNY classification:

A+	97-100	B+	87-89	C+	77-79	F	≤69
A	93-96	B	83-86	C	73-76		
A	90-92	B-	80-82	C-	70-72		

Attendance:

Attendance in class is required. Attending all classes is essential for being successful in this course, and therefore absences will not be excused for just any illness or scheduling conflict – there needs to a major crisis for an absence to be excusable. Discuss with the professor any anticipated events or religious holidays that conflict with the course schedule, and alternative arrangements must be worked out in advance. Please note that more than two unexcused absences will be grounds for a failing grade.

Plagiarism and Cheating:

Plagiarism is the use or presentation of ideas, words, or work that is not your own and that is not common knowledge, without granting credit to source of origin. Cheating includes, but is not limited to the following: falsification of statements or data; listing sources that have not been used; having another individual write your paper or do your assignments; writing a paper or creating work for another student to use without proper attribution; purchase of paper or research work for one's examination (except when expressly permitted by the instructor, depending on the nature of the examination) or knowingly providing such assistance to aid other students.

Plagiarism and cheating will not be tolerated. Any instances of plagiarism and/or cheating will be dealt with as per CUNY policy. Penalties for academic dishonesty include academic sanctions, such as failing or otherwise reduced grades, and/or disciplinary sanctions, including suspension or expulsion. Make sure that you are familiar with the University's published policy on academic dishonesty, cheating and plagiarism. You can find this policy at:

http://www.ccny.cuny.edu/about/integrity.cfm

Students with Disabilities:

The AccessAbility Center
Office: NAC 1/218
T: (212) 650-5913

In compliance with CCNY policy and equal access laws, appropriate academic accommodations are offered for students with disabilities. Students must register with the AccessAbility Center for reasonable academic accommodations.

Under the Americans with Disability Act, an individual with a disability is a person who has a physical or mental impairment that substantially limits one or more major life activities. If you have any such issues, we encourage you to visit the AccessAbility Center to determine which services may be appropriate for you.

Calendar:

Date	Lecture Topic	Readings	Assessment
8/31/16 Week 1	Ethical issues surrounding neuropsyc testing	*Brickman et al. (2006). Ethical issues in cross-cultural neuropsychology. *Applied Neuropsychology, 13,* 91-100. *Dittrich, L. (Aug 9, 2016). *The Brain that Couldn't' Remember.* New York Times. *Wong, T. M. (2006). Ethical controversies in neuropsychological test selection, administration, and interpretation. *Applied Neuropsychology, 13,* 68-76.	
9/7/16 Week 2	Problems of Classification, Models and	Fletcher et al. (2007), Chapter 3 Pennington (2008), Chapter 1-3, 5 *Recommended:* Flanagan & Alfonso (2011), Ch. 1	

	Definitions		
9/14/16 Week 3	Assessment	Achenbach, T. M., McConaughy, S. H., & Howell, C. T. (1987). Child/adolescent behavioral and emotional problems: implications of cross-informant correlations for situational specificity. *Psychological Bulletin, 101,* 213–232. doi:10.1037/0033-2909.101.2.213. Dirks, M. A., De Los Reyes, A., Briggs-Gowan, M., Cella, D., & Wakschlag, L. S. (2012). Annual research review: embracing not erasing contextual variability in children's behavior—theory and utility in the selection and use of methods and informants in developmental psychopathology. *Journal of Child Psychology and Psychiatry, 53,* 558–574. doi:10.111/j.1469-7610.2012.02537x. O'Neill, S., Schneiderman, R. L., Rajendran, K., Marks, D. J., & Halperin, J. M. (2014). Reliable ratings or reading tea leaves? Can parent, teacher, and clinician behavioral ratings of preschoolers predict ADHD at age six? *Journal of Abnormal Child Psychology, 42*(4), 623-634.	
9/21/16 Week 4	Intelligence testing	WISC 5 Manual Alfonso, V. C., Flanagan, D. P., & Radwan, S. (2005). The impact of the Cattell-Horn-Carroll theory on test development and interpretation of cognitive and academic abilities (pp. 185-202). In D. P. Flanagan & P. L. Harrison (Eds), Contemporary intellectual assessment: Theories, tests, and issues. New York, NY: Guilford Press.	Training Session: WJ Cog IV
9/28/16 Week 5	Intellectual Disability	Pennington, chapter 10 Flynn, J. R. (1987). Massive IQ gains in 14 nations: what IQ tests really measure. *Psychological Bulletin, 101,* 171-191.	Training Session: SB-5
10/5/16 Week 6	Reading	*Aaron, P.G. (l995). Differential diagnosis of reading disabilities. *School Psychology Review,* 24, 345 - 360. Fletcher et al. (2007), Chapters 5-7 *Lyon, G. R. et al. (2003). Toward a definition of dyslexia. *Annals of dyslexia*, 53, 1 - 14. Pennington (2008), Chapter 6	Training Session: WJ ACH IV
10/12/16 Week 7 **NO CLASS**			
10/19/16			WISC-V Protocol

Week 8 **NO CLASS**			Scoring and Interpretation
10/26/16 Week 9	Neurobiological Aspects of Dyslexia	*McCandliss, B., &Noble, K. (2003) The development of reading impairment: A cognitive neuroscience model. *Mental Retardation and Developmental Disabilities Research Review*, 9, 106 – 204. *Molfese, D. (2000). Predicting dyslexia at 8 years of age using neonatal brain responses. *Brain and Language*, *72,* 238-245. *Paulescu, D. et al. (2001) Dyslexia: Cultural diversity and biological unity. *Science*, 291. *Shaywitz, S. & Shaywitz, B. (2001). The neurobiology of reading and dyslexia. *Focus on Basics,* 5, 1 – 14. *Eden et al. (2004). Neural changes following remediation in adults developmental dyslexia. *Neuron, 44,* 411-422. *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.	Training Session: GORT-5 & TOWRE-2
11/2/16 Week 10	Spelling and Writing	Fletcher et al. (2007), Chapter 9. *Treiman, R. & Bourassa, D. (2000) The development of spelling skill. *Topics in Language disorders*, 20, 1 - 18.	Training Session: TOWL-IV
11/9/16 Week 11	Trajectories of ADHD and Impairment	*Faraone, S.V., Biederman, J. & Mick, E. (2006). The age-dependent decline of attention deficit hyperactivity disorder: a meta analysis of follow-up studies. *Psychological Medicine, 36,* 159-165. *Healey DM, Miller CJ, Castelli KL, Marks DJ, Halperin JM. (2008). The impact of impairment criteria on rates of ADHD diagnoses in preschoolers. *Journal of Abnormal Child Psychology, 36*(5), 771-8. doi: 10.1007/s10802-007-9209-1. Epub 2008 Jan 26. *Humphreys KL, Eng T, Lee SS. (2013). Stimulant medication and substance use outcomes: a meta-analysis. *JAMA Psychiatry, 70*(7), 740-9. doi: 10.1001/jamapsychiatry.2013.1273. *Mrug S, Molina BS, Hoza B, Gerdes AC, Hinshaw	Training Session: CPT & Conners Rating Scales

		SP, Hechtman L, Arnold LE. (2012). Peer rejection and friendships in children with Attention-Deficit/Hyperactivity Disorder: contributions to long-term outcomes. *Journal of Abnormal Child Psychology, 40*(6), 1013-26. doi: 10.1007/s10802-012-9610-2. Molina BS, Hinshaw SP, Swanson JM, Arnold LE, Vitiello B, Jensen PS, Epstein JN, Hoza B, Hechtman L, Abikoff HB, Elliott GR, Greenhill LL, Newcorn JH,Wells KC, Wigal T, Gibbons RD, Hur K, Houck PR; MTA Cooperative Group. (2009). The MTA at 8 years: prospective follow-up of children treated for combined-type ADHD in a multisite study. *Journal of the American Academy of Child and Adolescent Psychiatry, 48*(5), 484-500. doi: 10.1097/CHI.0b013e31819c23d0.	
11/16/16 Week 12	Neuropsychological Functioning in ADHD	Coghill DR, Hayward D, Rhodes SM, Grimmer C, Matthews K. (2014). A longitudinal examination of neuropsychological and clinical functioning in boys with attention deficit hyperactivity disorder (ADHD): improvements in executive functioning do not explain clinical improvement. *Psychological Medicine, 44*(5), 1087-99. doi: 10.1017/S0033291713001761. Epub 2013 Jul 19. 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. Miller, M., Loya, F., & Hinshaw, S. P. (2013). Executive functions in girls with and without childhood ADHD: developmental trajectories and associations with symptom change. *Journal of Child Psychology and Psychiatry, 54,* 1005-1015. doi: 10.1111/jcpp.12074. Willcutt EG, Doyle AE, Nigg JT, Faraone SV, Pennington BF. (2005). Validity of the executive function theory of attention-deficit/hyperactivity disorder: a meta-analytic review. *Biological Psychiatry, 57*(11), 1336-46.	Training session: WPPSI-IV
11/23/16 Week 13	Math Disorder	Fletcher Chapter 8 Geary, D. C. (1993). Mathematical disabilities: Cognitive, neuropsychological and genetic components. *Psychological Bulletin, 114*(2), 345-362. Pennington Chapter 12 Shalev, R. S. (2004). Developmental dyscalculia. *Journal of Child Neurology, 19*(10), 765-771.	Training session: TONI-IV

11/30/16 Week 14	Nonverbal Learning Disorders	*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. Pennington, Chapter 13 *Rourke, B. & Tsatsanis, K. (1996) Syndrome of nonverbal learning disabilities; Psycholinguistic assets and deficits. *Topics in Language Disorder*, 1996, 16, 30 – 44. *Wasserstein, J., Vadhal, N., Varboza, k., & Sttefantos, G. Outcomes in Probable Nonverbal Learning Disabled (NLD) Adults: A Naturalistic Study.	
12/7/16 Week 15	Autism Spectrum Disorder	Pennington, chapter 8 Kanner, L. (1943). Autistic disturbances of affective contact. *Nervous Child, 2,* 217-250. Frith, U. (1991). Asperger and his syndrome. In U. Frith (Ed.), *Autism and Asperger Syndrome* (pp. 1-36). Cambridge, UK: Cambridge University Press Szatmari et al. (2015). Developmental trajectories of symptom severity and adaptive functioning in an inception cohort of preschool children with autism spectrum disorder. *JAMA Psychiatry, 72,* 276-283.	
12/14/16	**NO CLASS – FINAL EXAM PERIOD**		