

Psychology 605: Readings in Developmental Neuropsychology

Tuesdays & Thursdays, 1 – 2:20 pm, PAS 2083

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Office Hours: Tuesdays and Thursdays from 12 – 1pm or by appointment

Course Description: Developmental neuropsychology is a field in which brain-behaviour relationships are examined in the context of typical and atypical development. This course will focus on the structural development of the brain, the emergence of functional brain systems, and the neuropsychological underpinnings of childhood brain disorders. Emphasis will be placed on the integration of theoretical perspectives and empirical research in neuropsychology with clinical practice.

Course Web Site: Announcements, articles, lecture slides, and grades will be posted on the course web site in Learn.

Required Readings: Required readings have been compiled in a custom course pack that is available for purchase at the UW Book Store. Optional readings (e.g., case studies) can be accessed on the course web site in Learn. A supplementary brain atlas is available on reserve at the UW Porter library (3 hour loan).

Learning Objectives:

1. Become familiar with structural brain development and the emergence of functional brain systems
2. Develop a thorough understanding of how neuropsychological functions develop and how this development may be affected in brain-based disorders of childhood
3. Identify the strengths and limitations of different approaches to pediatric neuropsychological assessment and intervention
4. Develop proficiency in case conceptualization and fact finding

Outcome Measures: Your final grade will be based on the points you accrue on two assignments, an in-class presentation of a case study, and a final fact finding exam that will be evaluated by two clinical neuropsychologists.

Assessment Planning Assignment

In this assignment you will be asked to develop an assessment plan based on a referral question and selected background information of a child client. This assignment will require that you integrate your extant clinical knowledge and expertise with information provided in the context of the course (i.e., readings and lectures) and relevant empirical literature. In this assignment you will a) describe the nature of the brain damage that the child has incurred, b) develop hypotheses about possible cognitive, behavioural, and social-emotional sequelae of the insult, c) identify neuropsychological and (if relevant) other functions that should be covered in your assessment, and d) provide a rationale for the selection of

specific tests or measures that you would include in your hypothetical battery, including an indication of the strengths and limitations of each.

30 points (20 pt report, 10 pt small-group presentation).

Case Formulation and Treatment Planning Assignment

In this assignment you will be asked to develop a case formulation and treatment plan based on a referral question, relevant background data, and assessment results of a child client. This assignment will require that you integrate your extant clinical knowledge and expertise with information provided in the context of the course (i.e., readings and lectures) and relevant empirical literature. In this assignment you will a) interpret test results in the context of what is known about brain-behaviour relationships during development, b) provide an overall summary of the strengths and weakness of your child client, and c) propose a set of recommendations that are theoretically sound and that are supported by the empirical literature.

30 points (20 pt report, 10 pt small-group presentation).

Case Critique

In consultation with the Instructor you will select a case study to critique. Your critique may highlight issues pertaining to any aspect of neuropsychological assessment, including the selection of neuropsychological tests, use of norms, interpretation of test results, case conceptualization, provision of recommendations, and the extent to which the referral question was addressed by the assessment.

15 points (10-15 minute presentation with Q&A from the class)

Fact Finding Exam

The fact finding exam will build on your first 2 assignments, the major difference being that you are thinking through a case 'on your feet' with no advance preparation regarding the particulars of your client. You will be given a child client and will be required to collect, organize, evaluate, and integrate information, conceptualize the case, construct differential diagnoses, and prepare recommendations for managing the problem.

25 points

Course Schedule:

Date	Topic	Readings	Notes
May 1	Course overview and history of the field	Lajiness-O’Neill, R., Pawluk, L., & Jacobson, D. (2011). Past, present, and future of pediatric neuropsychology. In A. Davis (Ed.), <i>Handbook of pediatric neuropsychology</i> (pp.979-994).	
3	Brain development I: Structural brain development	Anderson, A., Northam, E., Hendy, J., & Wrennall, J. (Eds.). (2001). <i>Developmental neuropsychology: A clinical approach</i> (pp.39 – 68).	
8	Brain development II: The specializing brain		
10	Early brain insult and recovery	Anderson, A., Northam, E., Hendy, J., & Wrennall, J. (Eds.). (2001). <i>Developmental neuropsychology: A clinical approach</i> (pp.103-124).	
15	Methods of neuropsychological assessment	Baron, I. S. (Ed.). <i>Neuropsychological evaluation of the child</i> (pp. 37-60).	
17	Spatial and Motor Control	Atkinson, J., & Nardini, M. (2008). The neuropsychology of visuospatial and visuomotor development. In J. Reed & J. Warner-Rodgers (Eds.), <i>Child neuropsychology: Concepts, theory, and practice</i> (pp.183-217).	
22	Non-executive Attention	Sinclair, M., & Taylor, E. (2008). The neuropsychology of attention development. In J. Reed & J. Warner-Rodgers (Eds.), <i>Child neuropsychology: Concepts, theory, and practice</i> (pp.235-263).	Disregard case study in this chapter (pp.250-253)
24	NO CLASS		
29	Memory	Horton, A.M., & Soper, H. (2008). The neuropsychology of children’s memory. In J. Reed & J. Warner-Rodgers (Eds.), <i>Child neuropsychology: Concepts, theory, and practice</i> (pp.218-234).	
31	Language	Ninio, A. & Snow, C.E. (1999). The development of pragmatics: Learning to use language appropriately. In W.C. Ritchie & T.K. Bhatia (Eds.). <i>Handbook of child language acquisition</i> (pp.347-383).	Disregard Functionalist Models & Developmental Theories (pp.349-353)
June 5	Social Cognition	Baron-Cohen, S. & Chakrabarti, B. (2008). Social	

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		neuroscience. In J. Reed & J. Warner-Rodgers (Eds.), <i>Child neuropsychology: Concepts, theory, and practice</i> (pp.316-339).	
7	Executive Functions	Zelazo, P.D., & Muller, R. (2011). Executive function in typical and atypical development. In U. Goswami (Ed.), <i>The Wiley-Blackwell handbook of childhood cognitive development, Second edition</i> (pp.574-603) Reading for assignment 2 (see course web site): McAuley, T., Chen, S., Goos, L., Schachar, R, & Crosbie, J. (2010). Is the Behavior Rating Inventory of Executive Function more strongly associated with measures of impairment or executive function? <i>Journal of the International Neuropsychological Society, 16</i> , 495-505.	
12	Assessment Planning Assignment		
14	Endocrine + Metabolic Disorders I	Anderson, A., Northam, E., Hendy, J., & Wrennall, J. (Eds.). (2001). <i>Developmental neuropsychology: A clinical approach</i> (pp.249-278).	Case study at the end of chapter is optional (pp. 275-278)
19	Endocrine + Metabolic Disorders II	OPTIONAL CASE STUDY: As Above (pp.275-278)	
21	Hydrocephalus and Spina Bifida	Anderson, A., Northam, E., Hendy, J., & Wrennall, J. (Eds.). (2001). <i>Developmental neuropsychology: A clinical approach</i> (pp.185-219).	
26	Feotal Alcohol Exposure	Mattson, S.N, & Vaurio, L. (2010). Fetal alcohol spectrum disorders. In K.O. Yeates, M.D. Ris, H.G. Taylor, & B.F. Pennington. (Eds.). <i>Pediatric neuropsychology: Research, theory, and practice</i> (pp.265-293).	
28	Epilepsy	Westerveld, M. (2010). Childhood epilepsy. In K.O. Yeates, M.D. Ris, H.G. Taylor, & B.F. Pennington. (Eds.). <i>Pediatric neuropsychology: Research, theory, and practice</i> (pp.71-91). OPTIONAL CASE STUDY: See course web site	
July 3	Traumatic Brain Injury	Yeates, K.O. (2010). Traumatic brain injury. In K.O. Yeates, M.D. Ris, H.G. Taylor, & B.F. Pennington. (Eds.). <i>Pediatric neuropsychology: Research, theory, and practice</i> (pp.112-146).	Assignment 3 Due: Sports-related concussions and the teenage brain.

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		<p>OPTIONAL CASE STUDY: See course web site</p> <p>Reading for assignment 3 (see course web site):</p> <p>Fine, S. (2011, February 11). My Daughter's concussion shook my world. <i>Globe and Mail</i>. Retrieved March 23, 2012 from http://www.globeandmail.ca</p>	
5	Reading Disability	<p>Riccio, C.A., Sullivan, J.R., & Cohen, M.J. (2010). <i>Neuropsychological assessment and intervention for childhood and adolescent disorders</i> (pp.15-39).</p> <p>OPTIONAL CASE STUDY: As Above (pp.28-39)</p>	Case study at the end of chapter is optional (pp. 28-39)
10	ADHD	<p>Willcutt, E.G. (2010). Attention-deficit/hyperactivity disorder. In K.O. Yeates, M.D. Ris, H.G. Taylor, & B.F. Pennington. (Eds.). <i>Pediatric neuropsychology: Research, theory, and practice</i> (pp.393-417).</p> <p>OPTIONAL CASE STUDY: See course web site</p>	
12	Autism Spectrum	<p>Bade-White, P.A., Obrzut, J.E., & Randall, P.P. (2009). Neuropsychological aspects of pervasive developmental and autism spectrum disorders. In C.R. Reynolds & E. Fletcher-Janzen (Eds.). <i>Handbook of clinical child neuropsychology</i> (pp. 765-781).</p> <p>OPTIONAL CASE STUDY: See course web site</p>	
17	Neuropsychological Intervention	<p>Teeter, P.A. (2009). Neurocognitive interventions for childhood and adolescent disorders: A transactional model. In C.R. Reynolds & E. Fletcher-Janzen (Eds.). <i>Handbook of clinical child neuropsychology</i> (pp. 427-458).</p>	
19	Neuropsychological Intervention	<p>Reading for assignment 4 (see course web site):</p> <p>Hurley, D.. (2012, April 18). Can you make yourself smarter? <i>The New York Times</i>. Retrieved April 30, 2012 from http://www.nytimes.com</p>	
24	Case Formulation and Treatment Planning		
??	Fact Finding Final TBD		