

University of Toronto at Scarborough Department of Life Sciences



CLINICAL NEUROPSYCHOLOGY PSYC32



Course Instructor
Lab Instructor
Course Code
Lecture Details
Laboratory Details
Course E-mail

Konstantine Zakzanis Diana Jovanovski PSYC32H3 Tuesdays, 5 to 7 pm, S143 Tuesdays, 7 to 8 pm, S143 diana@psych.utoronto.ca

Brief Description of Clinical Neuropsychology

Neuropsychology is the research discipline that seeks to understand brain and behavior relationships through the study of both healthy and damaged central nervous systems. It seeks to identify the biological substrates of behaviors, from creative genius to mental illness, which account for intellectual processes as well as personality.

Clinical Neuropsychology is an applied science that is concerned with the behavioural expression of brain dysfunction (Lezak et al., 2004). The clinical neuropsychologist uses standardized tests to tie the biological and behavioral aspects together. Inferences are made on the basis of accumulated research.

Overall, the clinical neuropsychologist interprets every aspect of the examination (both quantitative and qualitative components) to ascertain the relative cognitive strengths and weaknesses that a patient with suspected or known neuropathology. Findings from a neuropsychological examination can be used to make diagnoses, inform rehabilitation strategies, and direct various aspects of patient care.

In the laboratory component of this course you will learn to administer, score and interpret a wide variety of neuropsychological measures. By the end of the term, each student should be capable of performing the psychometry for a complete neuropsychological evaluation with competency and ease.

Important Notes

- A. All lab related inquiries are to be directed to the course e-mail address as provided on the first page (diana@psych.utoronto.ca).
- B. Every enrolled student must ensure that they have access to the course website via the UTSC intranet. All course related content will be posted here (e.g., lecture slides, important announcements, and midterm grades).
- C. Students enrolled in PSYC32 also need to be enrolled in the Behavioural Disorders Stream of the Co-op Program in Psychology and its Applications. The only exclusion for this course is PSYC31.

Textbooks

Lezak, M.D., Howieson, D.B., & Loring, D.W. (2004). Neuropsychological assessment (4th Edition). New York: Oxford University Press.

*This is the same book that was used last year.

Strauss, E., Sherman, E., & Spreen, O. (2006). A compendium of neuropsychological tests: Administration, norms, and commentary (3rd Edition). Oxford University Press.

Grading Scheme

Lecture Component – Worth 70% of your final grade

1st Midterm

Administered in-class (February 5)
Will consist of 50 multiple-choice questions
Worth 30% of your final grade

2nd Midterm

Administered in-class (March 11) Non-Cumulative Will consist of 50 multiple-choice questions Worth 20% of your final grade

Final Exam

UTSC final examination period Non-Cumulative (but representative of entire course learning) Will consist of 50 multiple-choice questions Worth 20% of your final grade

Laboratory Component – Worth 30% of your final grade

Laboratory Take-home Test
Will consist of short-answer and practical (scoring) questions from Strauss
et al. and Mitrushina et al.
Worth 5% of your final grade

Presentation – Administration/scoring of neuropsychological tests Worth 5% of your final grade

Final In-vivo Examination (1 hour)
Will involve in-vivo testing (~30 min) and scoring/behavioural observation summaries (~30 min)
Worth 20% of your final grade

LABORATORY SCHEDULE

January 8 Laboratory 1 Topic: Introduction to Psychometry and Neuropsychological Assessment (Chapter 1 - Strauss et al., 2006); Scoring Procedures -Chapters 2 & 3 (Strauss et al., 2006) Assigned Lab Readings: Chapters 1-3 (Strauss et al., 2006) January 15 Laboratory 2 Topic: Scoring Procedures – Practice Questions January 22 Laboratory 3 Topic: Attention & Working Memory; Perception Tests: Digit Span, Judgment of Line Orientation, Visual Form Discrimination, Face Discrimination Test January 29 Laboratory 4 Topic: Verbal Memory Tests: California Verbal Learning Test-II; Wechsler Memory Scale-III (WMS-III) Story Recall February 5 Midterm #1 - No Lab Today February 12 Laboratory 5 (2 hours) Topic: Visual Memory Tests: Rey-Osterreith Complex Figure Test, WMS-III Faces February 19 No Lab Today (Reading week). February 26 Laboratory 6 Topic: Language Tests: Boston Naming Test, Controlled Oral Word Association Test March 4 Laboratory 7

-Topic: Construction

<u>Test</u>s: Rey-Osterreith Complex Figure Test (again!); WASI Block Design

March 11

Midterm #2 – No Lab Today

March 18

Laboratory 8

Topic: Executive Function-Continued

<u> -Tests: Wisconsin Card Sorting Test</u>, T<u>rail Making Test</u>

March 25

Laboratory 9

Topic: Motor Performance

Tests: Grooved Pegboard, Finger Tapping Test, Grip Strength Test

April 1

Laboratory 12 (6 to 9 pm)

Topic: Intelligence Various sources*

Tests: Wechsler Abbreviated Scale of Intelligence (WASI)*

^{*}Note: The Block Design subtest of the WASI will have already been covered during Lab #7 (Construction)

PRESENTATION SCHEDULE

Date	Tests	Presenter(s)
January 22	ATTENTION & WM; PERCEPTION Digit Span Judgment of Line Orientation Test Visual Form Discrimination Face Discrimination	Diana
January 29	VERBAL MEMORY California Verbal Learning Test-II WMS-III Story Recall (Logical Memory)	
February 12	VISUAL MEMORY Rey-O Complex Figure Test WMS-III Faces	
February 26	LANGUAGE • Boston Naming Test + Controlled Oral Word Association Test	
March 4	CONSTRUCTION Rey-O Complex Figure Test Block Design (WASI)	Diana
March 18	EXECUTIVE FUNCTIONS Wisconsin Card Sorting Test Trail Making Test	Diana
March 25	MOTOR PERFORMANCE Grooved Pegboard Finger Tapping Test + Grip Strength	
March 29	INTELLIGENCE • Wechsler Abbreviated Scale of Intelligence • Vocabulary • Similarities • Matrix Reasoning • (Block Design – already covered)	