

University of Toronto at Scarborough Department of Psychology

CLINICAL NEUROPSYCHOLOGY PSYC32



Course Instructor: Lab Instructor: Course Code: Lecture: Laboratory: Course E-mail: Konstantine Zakzanis Eliyas Jeffay PSYC32H3 Tuesdays, 5 to 7 pm, SW319 Tuesdays, 7 to 8 pm, BV355 eliyas.jeffay@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 (eliyas.jeffay@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.

*The Strauss et al. text can be purchased at Amazon.ca but pertinent pages will be photocopied/provided.

Lecture Component – Worth 70% of your final grade

1st Midterm

Administered in-class (February 8) Will consist of 60 multiple-choice questions Worth 20% of your final grade

2nd Midterm

Administered in-class (March 15) Non-Cumulative Will consist of 60 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 30% of your final grade

Laboratory Component – Worth 30% of your final grade

Laboratory Take-home Test Due on February 1 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 Dates to be determined in class and will be added to presentation schedule (please see last section of syllabus for schedule) Worth 5% of your final grade

Final In-vivo Examination (1 hour) Date to be determined in class (usually prior to UTSC final examination period) Will involve in-vivo testing (~30 min) and scoring/behavioural observation summaries (~30 min) Worth 20% of your final grade

January 11

Laboratory 1

Topic: Neuropsychological Evaluation & History Taking Assigned Lab Readings: Chapters 1-5 from Strauss et al., 2006

January 18

Laboratory 2

Topic: Scoring Procedures Practice Questions Assigned Lab Readings: Chapters 1-3 from Mitrushina – readings will be provided in lab

January 25

Laboratory 3

Topic: Attention & Working Memory; Perception Tests: Digit Span, Judgment of Line Orientation, Visual Form Discrimination, Face Discrimination Test Take-home test handed out – covers assigned readings, lecture notes, and scoring procedures

February 1

Laboratory 4

Topic: Verbal Memory Tests: California Verbal Learning Test-II; Wechsler Memory Scale-III (WMS-III) Story Recall Take-home test due today

February 8

Midterm #1 – No Lab Today

February 15

Laboratory 5 Topic: Visual Memory Tests: Rey-Osterreith Complex Figure Test, WMS-III Faces

February 22

No Lab Today (Reading week).

March 1

Laboratory 6 Topic: Language Tests: Boston Naming Test, Controlled Oral Word Association Test

March 8

Laboratory 7

Topic: Construction

Tests: Rey-Osterreith Complex Figure Test (again!); WASI Block Design

March 15

Midterm #2 – No Lab Today

March 22

Laboratory 8 Topic: Executive Function Tests: Wisconsin Card Sorting Test, Trail Making Test

March 29

Laboratory 9 Topic: Motor Performance Tests: Grooved Pegboard, Finger Tapping Test, Grip Strength Test

April 5

Laboratory 10 Topic: Intelligence Tests: Wechsler Abbreviated Scale of Intelligence (WASI)*

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

Final In-Vivo Exam: Date(s) to be announced in lab

PRESENTATION SCHEDULE

Date	Tests	Presenter(s)
January 25	ATTENTION & WM; PERCEPTION Digit Span Judgment of Line Orientation Test Visual Form Discrimination Face Discrimination	Eliyas
February 1	 VERBAL MEMORY California Verbal Learning Test-II WMS-III Story Recall (Logical Memory) 	
February 15	 VISUAL MEMORY Rey-O Complex Figure Test WMS-III Faces 	
March 1	 LANGUAGE Boston Naming Test Controlled Oral Word Association Test 	
March 8	 CONSTRUCTION Rey-O Complex Figure Test Block Design (WASI) 	
March 22	 EXECUTIVE FUNCTIONS Wisconsin Card Sorting Test Trail Making Test 	Eliyas
March 29	MOTOR PERFORMANCE Grooved Pegboard Finger Tapping Test + Grip Strength 	
April 5	INTELLIGENCE Wechsler Abbreviated Scale of Intelligence • Vocabulary • Similarities • Matrix Reasoning • (Block Design – already covered)	