

University of Toronto at Scarborough Department of Life Sciences



CLINICAL NEUROPSYCHOLOGY



Course Instructor Zachariah Campbell

> Course Code PSYC31H3

Course e-Mail psyc31@utoronto.ca

Teaching Assistant Diana Jovanovski

Lecture Details
Thursdays, 4 to 6 pm, SW309

Office Hour Details Thursdays, 3 to 4 pm, SW418C

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 this course we will comprehensively explore the science and practice of clinical neuropsychology.

Important Notes

- A. All course related inquiries are to be directed to the course e-Mail address as provided on the first page.
- B. Every enrolled student must ensure that they have access the course website via the UTSC intranet. All course related content will be posted here (e.g., lecture slides, important announcements, and midterm grades). The only format that will be used for all posted documents is Adobe PDF. Free reading software is available at www.adobe.com.
- C. Every effort will be made to post the lecture slides on the Wednesday evening prior to each class (by 10 pm).
- D. All students need to ensure that they have the necessary prerequisites for this course. If this course is taken without having completed the prerequisites, the registrar will not allow you credit for this course at the time of graduation. This can jeopardize the completion of your degree.
- E. The prerequisites are Psychological Research Methods (PSYB01H), Abnormal Psychology (PSYB32H), Human Brain & Behaviour (PSYB65H), and any of the following statistics courses: PSYB07H, SOCB06H, STAB22H. The only exclusion for this course is PSYC32H which is reserved for co-op students in the Behavioural Disorders Stream.

- F. If a lecture is cancelled because of an unforeseen circumstance (e.g., snow-storm cancellation, unexpected illness), students are still responsible for the material that was to be presented in the lecture that day.
- G. If a student is absent from a midterm examination due to illness or other extenuating circumstance, they must contact the instructor via the course email address as soon as possible. For medical reasons, students must use the University of Toronto Student Medical certificate. It can be downloaded on the UTSC website. Matters concerning the final examination are dealt with solely by the Registrar's office.
- H. Make-up midterm examinations are held exactly one week after the original exam date from 8 to 9 pm. Exact details will be listed on the intranet.
- I. For all examinations, you must bring your UofT student ID cards. You are also encouraged to bring a pencil and eraser to allow for making answer changes.
- J. Students with a disability/health consideration are encouraged to approach me and the AccessAbility Services Office (416-287-7560). You can also drop by their office, S302B, inside the Resource Centre. A coordinator is available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations.

Textbook

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 – so you may be able to find a used copy.

Grading Scheme

Your grade will be determined by three examinations. Two in-class midterms and one final examination. All exams are multiple-choice in format.

1st Midterm

Administered in-class (February 1) during the first hour

Will consist of 50 multiple choice questions

Worth 30% of your final grade

*A lecture will follow the exam at 5:15 pm.

2nd Midterm

Administered in-class (March 1) during the first hour

Non-Cumulative

Will consist of 50 multiple choice questions

Worth 30% of your final grade

*A lecture will follow the exam at 5:15 pm.

Final Exam

UTSC final examination period (April 17 - May 2)

Cumulative (but representative)

Will consist of 75 multiple choice questions

Worth 40% of your final grade

Important Spring Session Dates

January 21 Last day to add Spring courses.

February 19-23 Reading Week - no classes are held.

March 25 Last day to drop Spring courses without academic penalty.

*You will know 60 percent of your grade at this point.

April 5 Last day of classes and last day for submission of term

assignments.

April 10-13 UTSC Study Break.

April 14 - May 1 Final examination period.

Lecture Dates & Readings

January 11

Lecture 1

Welcome & Introduction
Theory and Practice of Neuropsychological Assessment
Chapter 1

January 18

Lecture 2

Basic Concepts The Behavioural Geography of the Brain Chapters 2 and 3

January 25

Lecture 3

The Rationale of Deficit Management The Neuropsychological Examination: Procedures Chapters 4 and 5

February 1

First Midterm (1" hour)

Covers chapters 1 to 5

Lecture 4 (2nd hour)

The Neuropsychological Examination: Interpretation
Chapter 6

February 8

Lecture 5

Neuropathology for Neuropsychologists Chapter 7

February 15

Lecture 6

Neuropathology for Neuropsychologists (continued) Neurobehavioural Variables and Diagnostic Issues Chapters 7 and 8

February 22

No class (Reading week).

March 1

Second Midterm (1st hour).

Non-cumulative (covers only chapters 6 to 8)

Lecture 7 (2nd hour)

Orientation and Attention

Perception

Chapters 9 and 10

March 8

Lecture 8

Memory I: Tests Memory II: Batteries, Paired Memory Tests, and Questionnaires Chapters 11 and 12

March 15

Lecture 9

Verbal Functions and Language Skills Construction Chapters 13 and 14

March 22

Lecture 10

Concept Formation and Reasoning Executive Functions and Motor Performance Chapters 15 and 16

March 29

Lecture 11

Neuropsychological Assessment Batteries Observational Methods, Rating Scales and Inventories Tests of Personal Adjustment and Emotional Functioning Chapters 17, 18 and 19

April 5

Lecture 12

Tests of Personal Adjustment and Emotional Functioning (continued)
Testing for Response Bias and Incomplete Effort
Review & Tips for the final
Chapters 19 and 20

End of the Term

The final examination will be scheduled by the registrar's office approximately midway through the term. Details will be provided in class and on the intranet once known.