



Psychology  
UNIVERSITY OF TORONTO  
SCARBOROUGH

# Neuropsychological Assessment

PSYC31H3

Web Option Asynchronous Lectures

&

Synchronous Remote Supplement Lectures

(12:00pm to 1:00pm on Thursdays during lecture weeks)

Course E-mail: [PSYC31UTSC@gmail.com](mailto:PSYC31UTSC@gmail.com)

**Professor Konstantine K. Zakzanis**

[konstantine.zakzanis@utoronto.ca](mailto:konstantine.zakzanis@utoronto.ca)

Office Hours: by remote platform and appointment only

**Teaching Assistants:**

**Melanie Mascarenhas**

**Sanghy Ramani**

## Brief Description of Neuropsychological Assessment

**Neuropsychological assessment** 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.

### Learning objectives:

In this course we will comprehensively explore the science and practice of neuropsychological assessment.

1. To understand the history, theory and practice of neuropsychological assessment as it pertains to adults throughout the age spectrum (ie. Young adulthood to seniors)
2. To become familiar with various assessment procedural matters.
3. To become familiar with the behavioural geography of the brain and its functional relationship to various cognitive constructs including orientation, attention, perception, memory, verbal functions and language skills, construction, concept formation and reasoning, executive formation and reasoning, executive functions and motor performance.
4. To develop familiarity with the clinical presentation of various neurological and psychiatric disorders
5. To be mindful of individual differences, various behavioural variables, and diagnostic issues as it pertains to the assessment process (e.g., age, cultural, racial, gender, sexuality, class, religion, other aspects of identity and the intersections among these, medication side effects, personality etc).
6. To understand the rationale of deficit management (e.g., normative comparison, standardization, test score interpretation)
7. To interpret assessment findings and to be mindful of misinterpretive errors.
8. To develop familiarity with test administration, and case conceptualization by way of experiential learning with a faux patient.

## 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 to the course website via the UTSC Quercus. All course related content will be posted here (e.g., lecture slides, important announcements, and midterm grades).
- C. 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.
- D. The prerequisites are as follows:
  - a. Abnormal Psychology (now titled Introduction to Clinical Psychology; PSYB32H)
  - b. AND any one of the following: Psychological Research Methods (PSYB01H) OR Foundations in Psychological Research (PSYB04H) OR Methods in Psychological Science (PSYB70)
  - c. AND any one of the following: Human Brain & Behaviour (PSYB65H) OR Introduction to Cognitive Neuroscience (PSYB55)
  - d. AND any one of the following statistics courses: PSYB07H, STAB22H OR STAB23H.

The only exclusion for this course is PSYC32H, which is reserved for co-op students in the Co-op Behavioural Disorders Stream.

- E. This course is being delivered via WEB OPTION only! If you were expecting an in-class room lecture with the professor, this course is not for you. It is amazing to us that students will enroll in a WEB OPTION only course and at course end, complain that there were no in-class lectures. Please don't be one of these students!
  - Every enrolled student must ensure that they have access to the course website via the UTSC Quercus Portal. All course related content will be posted here (e.g., lecture slides, supplementary readings, important announcements, and so on). The only format that will be used for all posted documents is Adobe PDF. Free reading software is available at [www.adobe.com](http://www.adobe.com).
  - For reasons of privacy as well as protection of copyright, unauthorized video or audio recording in classrooms or via remote delivery is strictly prohibited. This is outlined in the Provost's guidelines on Appropriate Use of Information and Communication Technology. Note, however, that these guidelines include the provision that students

may obtain consent to record lectures and, “in the case of private use by students with disabilities, the instructor’s consent must not be unreasonably withheld.”

## Department of Psychology Missed Term Work Policy

For missed term work (assignments and term tests) due to illness, emergency, or other mitigating circumstances, please follow the procedure outlined below.

**Procedure:**

1. Complete the [Request for Missed Term Work Accommodations Form](#) (“MTW Form”).
2. Email **BOTH** your MTW Form and Supporting Documentation to [PSYC31UTSC@gmail.com](mailto:PSYC31UTSC@gmail.com) according to the instructions specified below.

**Supporting Documentation Requirements and Deadlines:**

Reason for Missed Work	Documentation required for a <b>first absence</b> in the term	Documentation required for <b>subsequent absences</b> in the term	Deadline for submitting MTW form and supporting documentation
Illness or Injury	<a href="#">ACORN</a> Absence Declaration	<a href="#">UofT Verification of Illness Form</a>	<b><u>WITHIN 2 BUSINESS DAYS</u></b> of the missed work
Bereavement	<a href="#">ACORN</a> Absence Declaration	A death certificate or funeral announcement	<b><u>WITHIN 2 BUSINESS DAYS</u></b> of the missed work
University-sponsored athletic or artistic obligation at the varsity/provincial/national level	<a href="#">ACORN</a> Absence Declaration	A note from a university staff member (advisor, coach, residence staff, etc.) who can substantiate the obligation, sent directly to the course email	<b><u>10 BUSINESS DAYS IN ADVANCE</u></b> of the missed deadline
Disability-related reasons for students registered with AccessAbility Services	For missed <b>TERM TESTS</b> , <ul style="list-style-type: none"> <li>- <b>Contact your AccessAbility consultant</b> and have them write to the course email detailing the accommodations needed.</li> </ul> For missed <b>ASSIGNMENTS</b> , <ul style="list-style-type: none"> <li>- If your desired accommodation is <b>within the scope</b> of your Accommodation Letter (e.g. your letter includes “extensions of</li> </ul>		<b><u>PREFERABLY IN ADVANCE OF THE MISSED WORK, OR AS SOON AS POSSIBLE</u></b>

	<p>up to 7 days” and you need 3 days), send your <b>Accommodation Letter</b> to the course email and specify how many days extension you are requesting.</p> <ul style="list-style-type: none"> <li>- If your desired accommodation is <b>outside the scope</b> of your Accommodation Letter (e.g. your letter includes “extensions of up to 7 days” but you need more time than that), <b>contact your AccessAbility consultant</b> and have them write to the course email detailing the accommodations needed.</li> </ul>	
Academic Conflict (e.g. two midterms at the same time)	Screenshot from Quercus demonstrating the conflict.	<b><u>10 BUSINESS DAYS IN ADVANCE</u></b> of the missed work
Religious Conflict	None required	

**Notes:**

- The following reasons are not considered sufficient for missed term work: social activities, recreational travel, technological issues, avoidance of assessments or deadlines, work commitments
- [Missed Final Exams](#) are handled by the Registrar’s Office and should be declared on eService.
- For ACORN absence declarations, the date you declare the absence is required to fall within the seven-day declaration period (i.e.) the absence cannot be submitted proactively or retroactively.
- Instructors cannot accept term work any later than five business days after the last day of class. Beyond this date, accommodations are only possible via the Registrar’s Office [petition process](#).
- If you are unable to submit your request within the specified number of business days, you must still email your instructor within that window to explain the nature of the delay. Exceptions to the deadlines are made only under exceptional circumstances.
- Multiple assignments due on the same day are not considered academic conflicts. Students are expected to manage their time effectively to meet assignment deadlines.
- Back-to-back tests/quizzes are not considered academic conflicts. Only overlapping activities are conflicts.
- Students are responsible for keeping their course timetables conflict-free. Students who register in two courses with overlapping lecture/tutorial/lab schedules will not be accommodated.

**Next Steps:**

After submitting your documentation, you will receive a response from your instructor or TA. The course instructor reserves the right to decide what accommodations will be made. Failure to adhere to any aspect of this policy may result in a denial of your request. **You are responsible for checking your official U of T email and Quercus course announcements daily**, as accommodations may be time-critical.



For missed assignments, **do not wait for the instructor's response to resume work on your assignment.** Extensions may be as short as one business day, depending on the nature of the illness/emergency. Complete your assignment as soon as you're able, and email it to your instructor.

If an accommodation is granted but a continued illness/emergency prevents you from meeting its requirements, you must repeat the missed term work procedure to request additional accommodations. **Please make it clear in your subject line that you are requesting a second accommodation.** Examples: If you were granted an extension for a paper but are still unable to meet the new deadline, or if you miss a make-up term test, you must submit another MTW form and supply documentation according to the "subsequent absences" column in the chart above. \*Note: In the case of a missed make-up test, an opportunity to write a second make-up test may not necessarily be provided.

The email address to submit missed term work accommodation requests in  
[PSYC31UTSC@gmail.com](mailto:PSYC31UTSC@gmail.com)

## Academic Integrity

The University treats cases of cheating and plagiarism very seriously. The University of Toronto's Code of Behaviour on Academic Matters (<http://www.governingcouncil.utoronto.ca/policies/behaveac.htm>) outlines the behaviours that constitute academic dishonesty and the processes for addressing academic offences.

Potential offences in papers and assignments include using someone else's ideas or words without appropriate acknowledgement, submitting your own work in more than one course without the permission of the instructor, making up sources or facts, obtaining or providing unauthorized assistance on any assignment.

On tests and exams, cheating includes using or possessing unauthorized aids, looking at someone else's answers during an exam or test, misrepresenting your identity, or falsifying or altering any documentation required by the University.

## Equity, Diversity and Inclusion

The University of Toronto is committed to equity, human rights and respect for diversity. All members of the learning environment in this course should strive to create an atmosphere of mutual respect where all members of our community can express themselves, engage with each other, and respect one another's differences. U of T does not condone discrimination or harassment against any persons or communities.

The University of Toronto is a richly diverse community and as such is committed to providing an environment free of any form of harassment, misconduct, or discrimination. In this course, I seek to foster a civil, respectful, and open-minded climate in which we can all work together to

develop a better understanding of key questions and debates through meaningful dialogue. As such, I expect all involved with this course to refrain from actions or behaviours that intimidate, humiliate, or demean persons or groups or that undermine their security or self-esteem based on traits related to race, religion, ancestry, place of origin, colour, ethnic origin, citizenship, creed, sex, sexual orientation, gender identity, gender expression, age, marital status, family status, disability, receipt of public assistance or record of offences.

## **University Land Acknowledgement**

We wish to acknowledge this land on which the University of Toronto operates. For thousands of years, it has been the traditional land of the Huron-Wendat, the Seneca, and the Mississaugas of the Credit. Today, this meeting place is still the home to many Indigenous people from across Turtle Island and we are grateful to have the opportunity to work on this land.

## **Accommodations**

Students with diverse learning styles and needs are welcome in this course. In particular, if you have a disability/health consideration that may require accommodations, please feel free to approach me and/or the AccessAbility Services Office as soon as possible.

AccessAbility Services staff (located in Rm AA142, Arts and Administration Building) are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations 416-287-7560 or email [ability.utsc@utoronto.ca](mailto:ability.utsc@utoronto.ca). The sooner you let us know your needs the quicker we can assist you in achieving your learning goals in this course.

## **Use of Generative Artificial Intelligence Tools**

Students may use artificial intelligence tools, including generative AI, in this course as learning aids or to help produce assignments. However, students are ultimately accountable for the work they submit.

Students may not use artificial intelligence tools for taking tests, writing research papers, creating computer code, or completing major course assignments. However, these tools may be useful when gathering information from across sources and assimilating it for understanding.

The knowing use of generative artificial intelligence tools, including ChatGPT and other AI writing and coding assistants, for the completion of, or to support the completion of, an examination, term test, assignment, or any other form of academic assessment, may be considered an academic offense in this course.

## **Recording of Classroom Material by Students**

Recording or photographing any aspect of a university course - lecture, tutorial, seminar, lab, studio, practice session, field trip etc. – without prior approval of all involved and with written approval from the instructor is not permitted.

## University's Plagiarism Detection Tool

Normally, students will be required to submit their course essays to the University's plagiarism detection tool for a review of textual similarity and detection of possible plagiarism. In doing so, students will allow their essays to be included as source documents in the tool's reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of this tool are described on the Centre for Teaching Support & Innovation web site (<https://uoft.me/pdt-faq>).





## Readings

Lezak, M.D., Howieson, D.B., & Bigler, E. D., & Tranel, D. (2012). *Neuropsychological Assessment* (5<sup>th</sup> Edition). New York: Oxford University Press.

## Grading Scheme

Your grade will be determined by three examinations and one paper assignment.

All exams are multiple-choice in format and will be held online through Quercus. All exams will be open book and will require you to apply the knowledge learned. All students must complete the exams independently.

### 1<sup>st</sup> Midterm

Administered online (date TBD by registrar)

Will consist of 60 multiple-choice questions

Worth 30% of your final grade

### 2<sup>nd</sup> Midterm

Administered online (date TBD by registrar)

Non-Cumulative

Will consist of 60 multiple-choice questions

Worth 30% of your final grade

### Final Exam

UTSC final examination period

Administered online (date TBD by registrar)

Non-Cumulative (but representative of entire course learning)

Will consist of 60 multiple-choice questions

Worth 30% of your final grade

### Paper Assignment

Worth 10% of your final grade

For this assignment, students will be presented with a Clinical Case demonstration that will unfold throughout the academic term. You will be provided with brief background information, referral documentation from the family physician, and neuropsychological test score data. In addition, you will be provided with weekly in-class demonstrations that will reflect the patient's disease/disorder. Your assignment will require you to write up your diagnostic impression and treatment recommendations for the fictitious patient. You will be expected to outline a clinical diagnosis and why you have made it. For example, you should speak to what symptoms were evident and how they fit into the clinical diagnosis you come up with (e.g., behavioral

observations, test findings; behavioral relationship to brain and disorder) and moreover, what other clinical diagnoses you ruled out and why (i.e., state your differential diagnosis if there is one to make, and select your clinical diagnosis and state why). The maximum length of this assignment is ONE page, 1.5 spacing using 12-point font - anything longer and you will be given a grade of 0% on this assignment. All submissions will go through Quercus. Please note that all papers will be processed through OurOriginal.

**This assignment will be worth 10% of your final grade in the course and is due August 7, 2024 @ 11:55 pm on Quercus. Late submissions will result in a deduction of 10% per day to a maximum of 3 days.**

### **Important Dates: 2024 Summer Session**

Please visit:

**<https://www.utsc.utoronto.ca/registrar/summer-2024-academic-dates>**



## Lecture Dates and Readings

- Lectures will be posted AFTER the INITIAL supplementary lecture take place and on MONDAYS of each week hereafter, which will act as the impetus for discussion for each Thursday's supplementary lecture.
- The "live" remote supplementary lectures will be held on Thursdays (only on weeks we have a lecture). The information to join the supplement lectures is provided below and will be posted in a course announcement.
  - Please be sure to join each week for our remote (i.e., via Zoom) synchronous supplement lectures where Dr. Zakzanis will reflect on the material from lecture and engage the class in further discussion and answer questions. Guest scientists and clinicians will also be invited to participate.
  - Supplementary lectures are recommended but are not testable material.
  - These occur every week there is a lecture on Thursday, 12:00PM to 1:00pm. They will also be recorded and made available if you are unable to attend remotely.

### Topic: PSYC31 Live Supplementary Synchronous Lecture with Professor Zakzanis

**May 9, 2024 12:00 PM**  
**May 16, 2024 12:00 PM**  
**May 23, 2024 12:00 PM**  
**May 30, 2024 12:00 PM**  
**Jun 13, 2024 12:00 PM**  
**Jun 27, 2024 12:00 PM**  
**Jul 4, 2024 12:00 PM**  
**Jul 18, 2024 12:00 PM**  
**Jul 25, 2024 12:00 PM**  
**Aug 1, 2024 12:00 PM**

**Please download and import the following iCalendar (.ics) files to your calendar system.**

**Weekly:**

[https://utoronto.zoom.us/meeting/tZUpdOGhrzwpGdWJLLpQTvtEQ6wST2U2N3lk/ics?icsToken=98tyKuGpqjgiE9WSsxqGRpwcBojCWfPzmGZejadtjPJExFndBfTB7RVAYYtJYr-](https://utoronto.zoom.us/join/81438917331)

**Join Zoom Meeting**

<https://utoronto.zoom.us/j/81438917331>

**Meeting ID: 814 3891 7331**

**Passcode: 970340**

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**One tap mobile**

**+17209289299,,81438917331#,,,,\*970340# US (Denver)**

**+17866351003,,81438917331#,,,,\*970340# US (Miami)**

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**Dial by your location**

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- **+1 267 831 0333 US (Philadelphia)**
- **+1 301 715 8592 US (Washington DC)**
- **+1 312 626 6799 US (Chicago)**
- **+1 346 248 7799 US (Houston)**
- **+1 470 250 9358 US (Atlanta)**
- **+1 470 381 2552 US (Atlanta)**
- **+1 602 753 0140 US (Phoenix)**
- **+1 646 518 9805 US (New York)**
- **+1 646 558 8656 US (New York)**
- **+1 651 372 8299 US (Minnesota)**
- **+1 669 219 2599 US (San Jose)**

- +1 669 900 6833 US (San Jose)

**Meeting ID: 814 3891 7331**

**Passcode: 970340**

**Find your local number: <https://utoronto.zoom.us/j/81438917331>**

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**Join by SIP**

- [81438917331@zoomcrc.com](mailto:81438917331@zoomcrc.com)

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**Join by H.323**

- 162.255.37.11 (US West)
- 162.255.36.11 (US East)
- 69.174.57.160 (Canada Toronto)
- 65.39.152.160 (Canada Vancouver)

**Meeting ID: 814 3891 7331**

**Passcode: 970340**

**RECORDED LECTURES:**

**Week of May 9**

Lecture:

Welcome & Introduction

History, Theory and Practice of Neuropsychological Assessment

Chapter 1

**Week of May 16**

Lecture:

Basic Concepts

Chapter 2



Demonstration:

The Neuropsychological Examination: Procedures  
Chapter 5

### **Week of May 23**

Lecture:

The Behavioural Geography of the Brain  
Chapter 3

Demonstration:

Orientation and Attention  
Chapter 9

### **Week of May 30**

Lecture:

The Rationale of Deficit Measurement  
Chapter 4

Demonstration:

Perception  
Chapter 10

### **Week of June 6 (NOT TESTABLE CONTENT FOR MIDTERM 1)**

Lecture:

The Neuropsychological Examination: Interpretation  
Chapter 6

Demonstration:

Memory I: Tests  
Chapter 11

**Monday, June 10, 5:00 – 6:30 PM EST**

**First Mid-Term Examination**

The examination will cover chapters 1, 2, 3, 4, 5, 9 & 10 (Lectures 1-4 ONLY)

### **Week of June 20**

No class (Reading week)

### **Week of June 27**

Lecture:

Neuropathology for Neuropsychologists  
Chapter 7

Demonstration:

Verbal Functions and Language Skills  
Chapter 13

### **Week of July 4**

Lecture:

Neuropathology for Neuropsychologists, Continued  
Chapter 7

Demonstration:

Construction  
Chapter 14

### **Week of July 11 (NOT TESTABLE CONTENT FOR MIDTERM 2)**

Lecture:

Neurobehavioral Variables and Diagnostic Issues  
Chapter 8

Demonstration:

Concept Formation and Reasoning  
Chapter 15

### **Monday, July 15, 5:00 – 6:30 PM EST**

Second Mid-Term Examination

The examination will cover chapters 6, 7, 11, 13 & 14 (Lecture 5-7 ONLY)

The examination is non-cumulative

## Week of July 25

Lecture:

Neurobehavioral Variables and Diagnostic Issues Continued  
Chapter 8

Demonstration:

Executive Functions and Motor Performance  
Chapter 16  
Testing for Response Bias and Incomplete Effort  
Chapter 20

## August 1

Lecture: Overall Review of the Neuropsychological Examination and Answers to Questions Regarding the Case Study.

**August 7<sup>th</sup>, 2024, 11:55 pm: Term Paper due**

## August 10 to August 23:

Final Examination Period

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. **The final examination will cover Chapters 8, 15, 16, and 20** (lectures 8-9) and is noncumulative although do note that the exam questions will be representative of entire course learning.

## Frequently Asked Questions:

**Q: I missed the midterm. Can I write the makeup?**

**A:** Carefully read the information located under “**Missed Term Work due to Medical Illness or Emergency**” above.

**Q: I will be outside of the country during the test. Can I write the makeup?**

**A:** No. As a responsible student, you are expected to plan excursions accordingly. As soon as the registrar sends us a copy of the midterm/final examination schedule, we will post an announcement.

**Q: I don't have all the pre-requisites for this course. Can I still be enrolled?**

**A:** No. Pre-requisites are in place for a reason; many of the concepts build upon the content learned from prior courses. Allowing an exception would be unfair to the other students who took the pre-requisites.

**Q: I am not happy with my mark; is there anything I can do to improve it – like an extracurricular assignment?**

**A:** The best way to improve a mark is to study, study, study. The more you review the material, the more you will be able to 'speak the language' of clinical neuropsychology. Ask us questions – we're here for you. Sorry, no extracurricular assignments.

**Q: I missed the makeup; can I write another exam or can I have my marks reweighed?**

**A:** If you have another valid medical reason for missing the makeup, please follow the instructions outlined on the previous page for missed term work.

**Q: I am on academic probation, and I need to bump up my final mark; otherwise, I will be kicked out of school! Can you please bump my mark?**

**A:** This situation is unfortunate and as much as we would like to help, it would be unethical and unfair to the rest of the students to bump a mark for an individual. Please do not email us with such requests.