

Neuropsychology: 2N03

Venue of lectures TSH/128

Time: M & W 11:30 am to 12:20 pm; F 1:30 pm to 2:20 pm

COURSE-OUTLINE

Instructor: Dr. Ullal, G.

Contact: ullalg@mcmaster.ca (Ext. 21331) Department of Psychology, Neuroscience and Behaviour Room 108.

Teaching Assistants: Names and contacts of the TAs will be announced.

Office Hours: I am available on every Monday between 4:30 pm to 8:30 pm. However, please schedule a prior appointment to confirm the exact time. Besides this, special office hours will be assigned with the TAs before and after the examinations. The exact schedule will be posted.

Course Objectives:

Neuropsychology is a branch of psychology that deals with normal and abnormal behaviour as determined by the neural substrates. The traditional and most popular approach would be to gain insights with the help of unfortunate “experiments of nature” in the form of disorders or syndromes. On many occasions, classical case reports have been the “textbooks” for neuropsychology. Owing to the recent advancement in the non-invasive tools of investigations such as functional neuroimaging and electrophysiology, it has become possible to study the healthy individuals or animals while they are performing various tasks. In this course we will use syndromic approach, case-study approach and on several occasions study the healthy subjects.

The **required textbook** for the course: Bryan Kolb and Ian Q. Whishaw. Fundamentals of Human Neuropsychology 6th Edition, Worth Publishers USA. 2008.

1. **Course website:** A scheme of every forthcoming lecture along with important slides will be posted on the E-Learn@Mac (ELM) (available at elm.mcmaster.ca). Students are encouraged to visit the site regularly to look for any important announcements that would appear periodically.
2. **Text:** The lectures will cover material from the textbook as well as from outside sources. Skeleton slides pertaining to the lecture will be posted prior to every class. Students are advised to make their own notes in class.
3. **Home-Assignments:** Besides the textbook, two journal articles will be reviewed in the course. The PDF format of the papers will be posted at an appropriate time during the course.
 - a. Students are required to study the article and address a few questions pertaining to it in the form of home-assignments. The questions will be provided.
 - b. Both the assignments **together**, will be worth **20%** of the final grade.
 - c. Due dates for submission of both the assignments is indicated in the schedule provided below. **The assignments must be submitted prior to the specified dates.** A penalty of 10% /day will be applied for delayed submission. By 3rd day, the assignment will get a zero. In the event of an illness or any legitimate reasons, an official permission should be routed through the Administration excusing the delayed submission.
 - d. The assignments must be typed, with double-line spacing. **Emailing of assignments is not permitted.**
 - e. Language will not be an issue in the marking. Point-form of answers would suffice.
 - f. Please pay attention to the issues about **Academic Dishonesty** provided below.

4. Evaluations

1. **First midterm examination:** The midterm examinations will be worth **20%** of the final grade. About 90% of the material covered in class prior to 1st midterm examination and 10% from assigned readings in the text will be on 1st midterm

examination. Page numbers of the assigned readings will be posted prior to every lecture. Besides **multiple choice questions** there will be a few **short answer** type questions comprising of definitions and some important concepts discussed in class. **Material from the assignments will NOT be tested.**

2. **Second midterm examination:** The midterm examinations will be worth **20%** of the final grade. About 90% of the material covered in class after the 1st midterm examination and prior to 2nd midterm examination and 10% from assigned readings in the text will be on 2nd midterm examination. Page numbers of the assigned readings will be posted prior to every lecture. Besides **multiple choice questions** there will be a few **short answer** type questions comprising of definitions and some important concepts discussed in class. **Material from the home-assignments will NOT be tested.**
3. **Final examination:** It will be worth **40%** of final grade. It will test 90% of the material covered in the entire course and 10% from the entire assigned readings. There will be greater emphasis on what is covered after the 2nd midterm examination. Besides **multiple choice questions** there will be a few **short answer** type questions comprising of definitions and some important concepts discussed in class. **Material from the home-assignments will NOT be tested.** Dates for the midterm examinations are indicated in the List of Lectures below. Date for the final examination will be determined by the Registrar's Office.
4. **Assignments:** There will be **TWO** home assignments, **together** worth **20%** of the final grade. They will be based on two journal articles. **They have to be submitted by the absolute deadlines that are indicated in the table of schedule provided below.**

Remarking of Assignments or Short Answers: Requests for remarking of an Assignment or a Short Answer is only considered after a student provides a written request giving the reasons for the request to either, Dr. Ullal or the concerned TA.

MISSED EXAMINATIONS: There will **NOT** be a re-examination for missing any of the midterm examinations. However, if a student misses any examination owing to an illness or any other legitimate reason, the final examination will be rated proportionately

higher provided an official permission is routed through the University Administration. No examination will be re-scheduled unless there is cancellation of the class by the University.

CONFLICT OF EXAMINATIONS: Both the midterm examinations are conducted during the regular class-hour. If any other examination conflicts with this examination, please contact the authorities conducting the other examination.

“IMPORTANT ANNOUNCEMENTS”: Important announcements regarding the course will be periodically posted in the **Announcement Box** of the course. Please remain updated.

MCMASTER UNIVERSITY GRADING SCALE:

| Grade | Equivalent Grade Point | Equivalent Percentages |
|-------|------------------------|------------------------|
| A+ | 12 | 90-100 |
| A | 11 | 85-89 |
| A- | 10 | 80-84 |
| B+ | 9 | 77-79 |
| B | 8 | 73-76 |
| B- | 7 | 70-72 |
| C+ | 6 | 67-69 |
| C | 5 | 63-66 |
| C- | 4 | 60-62 |
| D+ | 3 | 57-59 |
| D | 2 | 53-56 |
| D- | 1 | 50-52 |
| F | 0 | 0-49 |

Schedule of Lectures

PLEASE NOTE:

- 1. The topics listed for the lectures below will follow the dates against them approximately.**
- 2. About 90% of the material covered in class and 10% from assigned readings in the text will be on each of the examinations. *Page numbers of the assigned readings from the textbook will be posted prior to every lecture.**

| | <u>Schedule</u> |
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| Day 1 11 th Sept. | Course Outlines |
| Day 2 14 th Sept. | Realms of Neuropsychology |
| Day 3 and 4 16 th Sept. and 18 th Sept. | General Organization of Nervous System |
| Day 5 to 10 21 st Sept to 2 nd Oct. | Gross Neuroanatomy |
| Day 11 to 13 5 th to 9 th Oct. | Organization of a Neuron |
| <u>Day 14</u> October 14th | 1st midterm examination during the class hour (venue will be posted). All the material covered till day 13 (including day 13) and the *assigned readings from the textbook will be tested. |

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| Day 15 to 18 16 th to 23 rd Oct. | Communication between Neurons 1st Assignment is due on October 19th |
| Day 19 26 th Oct. | Neuroimaging |
| Day 20 28 th Oct. | Levels of Consciousness |
| Day 21 and 22 30 th Oct. and 2 nd Nov. | Occipital Lobe |
| Day 23 and 24 4 th and 6 th Nov. | Temporal Lobe |
| Day 25 and 26 9 th and 11 th Nov. | Somatic Sensations and Parietal lobes |

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| <p style="text-align: center;"><u>Day 27</u> November 13th</p> | <p>2nd midterm examination during the class hour (venue will be posted). Only material covered after the 1st midterm examination till day 26 (including day 26) and the *assigned readings from the textbook will be tested</p> |
| <p>Day 28 and 29 16th and 18th Nov.</p> | <p>The Acting Brain: Organization of the Motor System</p> |
| <p>Day 30 and 31 20th and 23rd Nov.</p> | <p>Extrapyramidal System 2nd Assignment is due on November 23rd</p> |
| <p>Day 32 25th Nov.</p> | <p>The Open Loop-Motor Mechanisms</p> |
| <p>Day 33 and 34 27th and 30th Nov.</p> | <p>Servo- Mechanism of Cerebellum</p> |
| <p>Day 35 and 36 2nd and 4th Dec.</p> | <p>The “Moral/Emotional Social” Brain</p> |

Continued

NOTE ABOUT THE FINAL EXAMINATION

- The University will announce dates for the final examination.
- The final examination is **cumulative**. It will cover the **entire material** covered in the lectures (90%) and the entire assigned textbook readings (10%).
- Final examination follows similar pattern as the midterm examinations. There will be both **multiple choice questions** as well as **short answer** type questions on the final examination.

DISCLAIMER

The instructor and University reserve the right to modify elements of the course during the term. The University may change the dates and deadlines for any or all courses in extreme circumstances. If either type of modification becomes necessary, reasonable notice and communication with the students will be given with explanation and the opportunity to comment on changes. It is the responsibility of the student to check their McMaster email and course websites weekly during the term and to note any changes.

A Note on Academic Dishonesty

You are expected to exhibit honesty and use ethical behaviour in all aspects of the learning process. Academic credentials you earn are rooted in principles of honesty and academic integrity.

Academic dishonesty is to knowingly act or fail to act in a way that results or could result in unearned academic credit or advantage. This behaviour can result in serious consequences, e.g. the grade of zero on an assignment, loss of credit with a notation on the transcript (notation reads: “Grade of F assigned for academic dishonesty”), and/or suspension or expulsion from the university.

It is your responsibility to understand what constitutes academic dishonesty. For information on the various types of academic dishonesty please refer to the Academic Integrity Policy, located at <http://www.mcmaster.ca/academicintegrity>

The following illustrates only three forms of academic dishonesty:

1. Plagiarism, e.g. the submission of work that is not one's own or for which other credit has been obtained.
2. Improper collaboration in group-work.
3. Copying or using unauthorized aids in tests and examinations.

Message from the Chair of Psychology

The Instructor cannot be responsible for returning long distance calls from students. Any student wishing to reach an Instructor is invited to e-mail the instructor. Emails should be sent through the McMaster email ID.