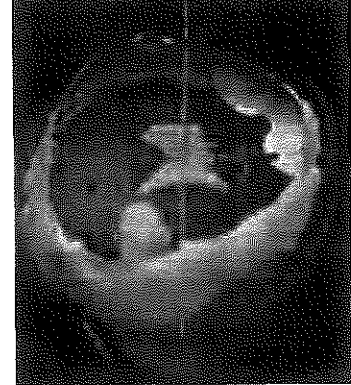
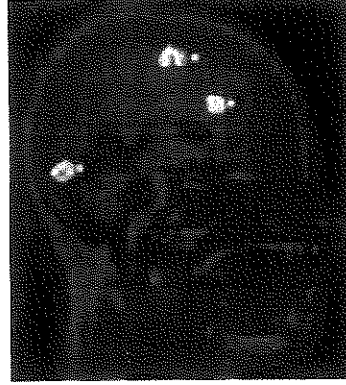


# Current topics in Abnormal Psychology



Course: PSYD33  
Wednesday  
Time: 7 to 9pm  
Room: BV363

Professor: Guy Proulx

Office: 2 hrs. in BV363 prior to class start time

Website: [www.baycrest.org/psychology/lecture\\_notes/dr\\_proulx/default.asp](http://www.baycrest.org/psychology/lecture_notes/dr_proulx/default.asp)

Telephone: (416) 785-250 ext. 2448

Fax: (416) 785-4235

Prerequisites:

PSYB32 (introduction to abnormal psychology) plus one C level half course in psychology.

Required readings:

Heilman, Kenneth M., (2002). *Matter of Mind: a neurologist's view of brain-behaviour relationships*. Oxford University Press.

Recommended Readings:

Banish, M.T. (2004). *Cognitive neuroscience and neuropsychology* (2<sup>nd</sup> edition). Houghton Mifflin Company, Boston.

Kolb, B. & Whishaw, I.Q. (2003). *Fundamentals of human neuropsychology* (5<sup>th</sup> edition). Worth Publishers, New York.

Darby, D. & Walsh, K. (2005). *Neuropsychology: A clinical approach* (5<sup>th</sup> edition). Elsevier, Toronto.

## Course Overview

Much of what we know about the relationships between brain and behaviour comes from experiments of nature where a stroke or other damage to the brain produces changes in a person's behaviour. The goal of this seminar is for students to get a sense of the excitement and the significant increase in the knowledge that has been gained in recent years about brain functions such as speaking, reading, writing, attention, memory, emotion, skilled movement, perception and motivation. Students will be exposed to various neuropsychological disorders and how they relate to both the cognitive and neurological aspects. Main disorders like Alzheimer's, Fronto-temporal dementia, Parkinson's disease, Vascular dementia, Lewy-body disease, Pick's disease, and Mild Cognitive Impairments (MCI) will also be reviewed. Brief case studies and patient vignettes will be presented.

## Evaluation

Exams: (35% + 35%)

Two short exams of 35% each will be given. Exams will include multiple choice, short answers and essay questions.

Presentation: (20%)

Students are required to present a topic area to the class. Each presentation will last 30 minutes including discussion and questions. Guidance on how to make an effective oral presentation will be offered by the professor. A draft will be reviewed with the professor before it is presented to the class. Topics must be selected from the following areas:

- Language disorders (aphasia, alexia, agraphia)
- Skilled movement disorders (limb apraxia, ideomotor/ideational apraxias, constructional apraxia)
- Recognition disorders (prosopagnosia)
- Attentional disorders
- Executive disorders

- Visuo-perceptual disorders
- Memory disorders
- Neurodegenerative diseases (& their neuropsychological aspects)

#### Synopsis: (10%)

Overview of one major neurobehavioural disorder. The goal is to survey the selected disorder to cover issues including a description of the disorder; its symptoms (behavioral, emotional, physical, neurological); who is susceptible; how it is assessed and diagnosed (differential diagnosis); how it is treated (care, rehabilitation); what research is being done (provide at least 3 current references). The main focus should be on the neuropsychological aspects of the disorder. The synopsis should not exceed four double-spaced pages. A list of possible topics is included in the syllabus.

#### **Class participation**

A seminar is a group effort to understand issues and generate ideas that might improve the area of study. Your contributions and responses to others will influence the tone, direction, and success of the group. This is your time to think and talk to others about brain-behaviour relationships. Preparing in advance shows respect for the time of your colleagues and maximizes everyone's learning. All students are expected to read text assignments prior to class meeting and to contribute to class discussions.

#### **Missed Exam Policy**

Students who miss the midterm exam will have their grade prorated over the oral Presentation, synopsis and final exam. This prorating option will NOT be granted unless the instructor receives appropriate documentation, such as a signed medical certificate or registrar's note within one week of the missed exam.

## List of possible topics for synopsis paper

### **Disorders**

Alzheimer's disease	Fronto-temporal dementia	Semantic dementia
Primary progressive aphasia	Dementia with Lewy Nodies (Lewy Body Dementia)	Pick's disease
Vascular dementia	Posterior Cortical Atrophy	Parkinson's disease
Huntington's disease	Spicocerebellar degeneration	Idiopathic basal ganglia calcification
Hydrocephalus	Mild Cognitive Impairment (MCI)	Human Immunodeficiency Virus (HIV)
Wernicke-Korsakoffs syndrome	Toxic and metabolic encephalopathies	Industrial dementias (e.g., heavy metal exposures)
Focal neurological symptoms (amnesia, apraxia, neglect, aphasia, agraphia, alexia)	Delirium	Dementia Pugilistica (Punch Drink Syndrome)
Progressive Supranuclear Palsy	Wilson's disease	

## Lecture Dates and Topics

<b>DATE</b>	<b>TOPIC</b>	<b>READINGS</b>
May 10	Overview of clinical neuropsychology	<ul style="list-style-type: none"> <li>• Text pp. 1-10</li> </ul>
May 17	Functional Neuroanatomy: The Nervous system and behaviour	<ul style="list-style-type: none"> <li>• Walsh &amp; Darby</li> </ul>
May 24	Aphasia: language disorders	<ul style="list-style-type: none"> <li>• Text pp.11-34</li> <li>• Devinsky &amp; D'Esposito</li> </ul>
May 31	Alexia or Dyslexia: reading disorders Agraphia or Dysgraphia: writing disorders	<ul style="list-style-type: none"> <li>• Text pp.35-52</li> <li>• Hauser et al.</li> </ul>
June 7	Emotional Communication: Speech prosody and facial expression	<ul style="list-style-type: none"> <li>• Text pp.53-68</li> </ul>
June 14	Emotional Expression Stress and the brain	<ul style="list-style-type: none"> <li>• Text pp.69-86</li> <li>• Sapolsky</li> </ul>
June 21	Attention - sensory awareness - focused and distributed attention	<ul style="list-style-type: none"> <li>• Text pp.87-116</li> <li>• Devinsky &amp; D'Esposito</li> </ul>
June 28	<b>MID-TERM EXAM</b> Self Awareness	<ul style="list-style-type: none"> <li>• Text pp.117-140</li> <li>• Gazzaniga</li> </ul>
July 4-7	<b>READING WEEK</b>	
July 12	Memory Dementia	<ul style="list-style-type: none"> <li>• Text pp.141-158</li> <li>• Roediger et al.</li> <li>• Knopman &amp; Selnes</li> </ul>
July 19	Cognitive - Motor Skills	<ul style="list-style-type: none"> <li>• Text pp.161-179</li> <li>• Hebert &amp; Roy</li> </ul>
July 26	Sensory Perception and Recognition (Agnosia)	<ul style="list-style-type: none"> <li>• Text pp.181-198</li> <li>• Bauer &amp; Demery</li> </ul>
Aug. 2	Intention and Motivation Mild Cognitive Impairment (MCI)	<ul style="list-style-type: none"> <li>• Text pp.199-214</li> <li>• Beardsley</li> <li>• Knopman et al.</li> <li>• Grundman et al.</li> </ul>
Aug. 12-24	<b>FINAL EXAM PERIOD</b>	

## Reading List

### May 17

- Walsh, K.W. & Darby, D. (2005). Elements of neurology. Chap. 3. In: Darby, D. & Walsh, K.W. Neuropsychology, a clinical approach, 5<sup>th</sup> ed. Churchill Livingstone, pp. 65-115.

### May 24

- Devinsky, O. & D'Esposito, M. (2004). Language, Aphasia, and other speech disorders. In: Neurology of cognitive and behavioral disorders, Chap. 6, pp. 166-225, Oxford University Press.

### May 31

- Hauser, M.D., Chomsky, N., & Fitch, W.T. (2002). The faculty of language: what is it, who has it, and how did it evolve? Science, 298: 1569-1579.

### June 14

- Sapolsky, R. (2003). Taming Stress. Scientific American, Special Issue, pp. 87-95.

### June 21

- Devinsky, O. & D'Esposito, M. (2004). Attention and Attentional Disorders. In: Neurology of cognitive and behavioral disorders, Chap. 4, pp. 103-121, Oxford University Press.

### June 28

- Gazzaniga, M.S. (1998). The split brain revisited. Scientific American, July, pp. 51-55.

### July 12

- Roediger, H.L., Marsh, E.J., & Lee, S.C. (2002). Kinds of Memory. In: Steven's Handbook of Experimental Psychology. 3<sup>rd</sup> Ed., Vol. 2, Chap. 1, pp. 1-41, John Wiley & Sons Inc.
- Knopman, D. & Selnes, O. (2003). Neuropsychology of dementia. Chapt. 19. In: Heilman, K.M. & Valeinstein, E. Clinical Neuropsychology. 4<sup>th</sup> Ed. Oxford University Press. Pp. 574-616.

### July 19

- Heber, D. & Roy, E. (2002). Limb apraxia: a clinical perspective. Geriatrics and Aging. Vol. 5 (4), pp. 15-21

### July 26

- Bauer, R.M. & Demery, J.A. (2003). Agnosia. Chap. 12. In: Heilman, K.M. & Valenstein, E. Clinical Neuropsychology 4th Ed. Oxford University Press, pp. 236-295.

### August 2

- Beardsley, T. (1997). The machinery of thought. Scientific American. August, 401-406.
- Knopman, D.S., Boeve, B.F. & Petersen, R.C. (2003). Essentials of the proper diagnosis of mild cognitive impairment, dementia, and major subtypes of dementia. Mayo Clinic Proceedings: 78 (10) 1290-1308.
- Grundman, M, Petersen, R.C., et al. (2004). Mild cognitive impairment can be distinguished from Alzheimer's disease and normal aging for clinical trials. Archives of Neurology. Vol. 61, 59-66.