

PSY4080 6.0B – NEUROPSYCHOLOGY OF ABNORMAL BEHAVIOUR
2012-13

Instructor: Mary Desrocher, Ph.D., C.Psych.

Room: BSB - Room 124

Phone: 736-5115 x33111

Email: mdesroch@yorku.ca (I will answer your email within 24h from M-R, within 48 hours on weekends)

Secretary: Judy Manners, 280 BSB

Office Hour: M 4-5pm or by appointment

Class Time: 11:30-2:30 Thursday, room SC304 (Stong College)

Course Prerequisites: PSYC 1010 6.00 with a minimum grade of C. PSYC 2240 AND PSYC 3140 are both required.

please come to see me about waiving the requirements.

Course Website: A Moodle website will be provided. If this is not accessible, all course notes and readings will be sent to enrolled students via email.

Readings: PDF files to be distributed on a weekly basis via Moodle or email. These will be journal articles, or articles that highlight a key concept for each week's discussion. Students will provide readings to the class for the purpose of their presentation.

Recommended text for applied assignment: Harrington, Mary. 2010. The Design of Experiments in Neuroscience, 2nd ed. Thomson Press.

Course Description: This seminar course is designed to examine neuropsychological underpinnings of various clinical disorders, spanning childhood disorders such as autism and ADHD, though to disorders associated with aging, such as dementia. In all cases, a consideration of the neuroanatomical, neurotransmitter and cognitive correlates of these disorders will be discussed. A critical examination of assessment and treatment issues will form a large portion of the course, as will an exploration of the ethical issues around assigning the label of a biological disorder.

Course Learning Objectives:

- 1) To gain a better understanding of the neuroanatomy of abnormal behaviour.
- 2) To appreciate the cognitive correlates of each type of disorder.
- 3) To learn about assessment and treatment methodologies in the fields of neuropsychology and neuropsychiatry.
- 4) To be able to write clearly on any of the above aspects noted in points 1-3
- 5) To learn how to write case formulations and a basic grant proposal

- 6) To participate in discussions of the neurocognitive correlates of abnormal behaviour.

Evaluation:

Assignment	Proportion of Grade
<ul style="list-style-type: none"> Take Home Examinations – non-cumulative (short answer/ essay tests to assess your knowledge of course material -due January 9th, and April 17th) 	30% - 15% each
<ul style="list-style-type: none"> Case formulation: 15-minute presentation, like a clinical rounds session. Subsequent paper on interview techniques, assessment and treatment of one of the disorders discussed in class [paper will be about 10 pages in length - due 3 weeks after presentation date] Students will post or email a reading to the class 1 week prior to the presentation date. Ideally, 2 presenters per week, so have a back up topic just in case! 	30% - 10% presentation, 20% paper
<ul style="list-style-type: none"> Applied assignment –Group grant writing. Groups of 3 people will get together to write a grant to secure funding for a project that proposes to explore the biological and cognitive correlates of any of the disorders we cover in class. Second term assignment. Will involve a written component and presentation component (20 minutes, with 20 minutes for feedback and questions). Group submissions will be graded on your contribution to the presentation and grant application (Due April 17th) 	30% - 10% presentation, 20% written grant (not all group members may receive the same grade)
<ul style="list-style-type: none"> Participation – includes attendance for a minimum 6/10; if you ask questions or participate in discussion this will be higher 	10%

Extensions: Please contact me as soon as possible regarding the extension (no later than 48 hours before or after the due date). Documentation is necessary for both medical and nonmedical circumstances. Missed presentations may be made up either in class, or during office hours.

Please note the following dates:

October 25th 2013 - Last date to enroll in a Year course with permission of the course instructor

February 14th 2014 – Last date to drop a Year course without receiving a grade

A full list of important dates for students is available at

<http://www.registrar.yorku.ca/enrol/dates/fw12.htm>

COURSE TIMETABLE

Date	Topic	Assignment
September 12	Introduction	
September 19	Functional Neuroanatomy, Neuroembryology	
September 26	Con't from prev week, Neurotransmitters	
October 3	Assessment, Diagnosis, Treatment	
October 10	Treatment (continued) Presentation Structure, Paper Requirements	Last Day to Choose Presentation Topic
October 17	Autism Developmental Disabilities	Class Presentations Begin – please note only 2 per class
October 24	Learning Disabilities ADHD	
October 31	CO-CURRICULAR DAYS	No classes
November 7	Epilepsy	
November 14	Neurological Disorders: Head Injuries, Stroke, Tumors, MS, Tourette's, FASD	
November 21	Neurological Disorders (Con't)	Take Home Test Given
November 28	Sleep Disorders Stress Disorders	
December 5	Anxiety Disorders	
	DECEMBER BREAK	
January 9	Brainstorming on Grant Writing Careers in Neuropsychology	Take Home Test Due
January 16	Depression	
January 23	Eating Disorders	
January 30	Addictions	Choose Grant Topic and Pres. Date
February 6	Schizophrenia	
February 13	Psychopathologies (here are some examples): Borderline Personality Antisocial Personality; Paraphilias	
February 20	READING WEEK	Sleep in!!
February 27	Movement Disorders	
March 6	Dementias	Take Home Given
March 13	Grant Presentations – up to 3 groups per day	
March 20	Grant Presentations	
March 27	Grant Presentations	
April 3	Grant Presentations Course Summary	

ASSIGNMENT DESCRIPTIONS

More detail will be provided on formatting of assignments as we go on in the course. This preliminary information will give you some background on what is expected. I accept all assignments electronically – and prefer to do so!

Take Home Tests

To assess your knowledge of the course materials, two take home tests will be handed out in class. You will have just over a month to work on them. These exams will entail answering your choice of questions on a list to be provided. There may be one mandatory question for all students. Typically, you will be given 10-12 questions and you choose 6-8 of them (details on the exam). These are short essays (2-3 pages).

These tests will assess your ability to integrate all of the course information, including: lecture notes, readings, student presentations. You need not do any additional library research, as you should be able to answer the questions based on your having attended lectures and read the required materials.

Presentation and Paper Requirements

You will choose a topic from amongst the list of course topics. I will present on the neuroanatomical, cognitive, and psychosocial outcomes for each disorder or disease. I will also provide relevant definitions of the key terms for each topic. You will present a “rounds” presentation, to discuss the following: what questions you would ask someone presenting with the disorder you choose, what assessment tools you will choose (justify your choices with appropriate reference materials), and what type of treatment course you will choose (again provide a justification with references).

Some suggestions for assessment tools include the following (although you can ask me about things that aren't on the list): Magnetic Resonance Imaging (MRI), Magnetic Resonance Spectroscopy (MRS), Positron Emission Tomography, Electroencephalograms, Psychological Tests (e.g. standardized intelligence tests, memory tests), psychiatric questionnaires, and qualitative interview techniques.

For treatment, some suggestions include: pharmacotherapy, electroshock treatment, hypnosis, cognitive therapy, psychodynamic therapy, humanistic therapy, art therapy, and family therapy. Multiple treatments are typically used in ideal situations. If you are not sure about your selection, please come to see me.

You will present for 20 minutes, following my lecture for that day. Ideally 2, but no more than 3 presenters will speak each day. You will get immediate feedback from me on the grade range for your presentation (A, B, C). I will also give you some suggestions for how to structure your case formulation, based on what you presented.

Paper Requirements

Your paper will be an expanded version of the presentation you gave in class. You will expand on the research studies that you explored in determining how successful the method of assessment or treatment has been shown to be in the literature.

You should have at least 6 empirical articles that form the body of your paper. That is, use journal articles (not web-based articles) that test how effective your chosen methodology is in the assessment or treatment of the disorder you are studying. I am not requiring a date limit (i.e., you can use articles from the 1980s or 90s if they are classic articles); however, recent research will be of greater interest to the class. You can also use book chapters and review articles for sections of the paper that include background information on the technique you are presenting. Web-based information is fine to write about; however, it should come from a reputable source (a university, hospital, registered private practitioners), as there is a lot of information on the web that is not necessarily based on scientific principles.

The paper will be at least 10 pages in length, and no more than 20. You will use APA format, and we will discuss this format in class when we talk about the paper in more detail. I would like papers in 12-point font, double-spaced. I will present you with a template for the paper, with sections that you can adapt for your particular case.

Grant Assignment

This will be a group assignment, with 3 group members (although we may have one group of 2, depending on final enrollments). You will work together as a team to write a grant that proposes to explore the brain and behaviour relationships for one of the disorders that we discussed in class. You can choose as a group. The goal of this exercise is to help you learn how to propose research that could potentially be funded by a granting agency, and to work in a team environment.

You will be given a template in early January for what to include in the grant. The typical sections include: background literature, proposed research, hypotheses and guiding questions, methods, and analyses. The recommended text by Harrington provides some guidelines for issues important in conducting research. I will present in class some of my funded research, and provide you with copies of the grant proposals from which to work.

Because you are proposing to study brain and behaviour relationships, you will likely include an assessment technique that looks at brain function. You will also likely be interested in memory, attention, learning, executive functioning, social functioning, mental health, or the like. You may also be interested in treatments and how they affect the brain and cognitive or social functioning. Pretty much anything goes for what you might be interested in. Again, our grant session will discuss some of the general ideas for topics and how to structure the grant.

You will give a short presentation in class on the grant, as a group. This will be 30 minutes for the presentation, and 20 minutes for class feedback and discussion. You will then take the feedback and fix the grant (if necessary), and hand in a paper copy to me 3

weeks later). You will also include a short note on each group member's contribution to the grant. You can decide how you want to divide the work up, but each member should do an equal share of the preparation and grant formulation.

IMPORTANT COURSE INFORMATION FOR STUDENTS **(available as a PDF file on the Registrar's Website)**

Academic Honesty and Integrity

York students are required to maintain high standards of academic integrity and are subject to the Senate Policy on Academic Honesty

(<http://www.yorku.ca/secretariat/legislation/senate/acadhone.htm>).

There is also an academic integrity website with complete information about academic honesty. Students are expected to review the materials on the Academic Integrity website

(<http://www.yorku.ca/academicintegrity/students.htm>).

Access/Disability

York provides services for students with disabilities (including physical, medical, learning and psychiatric disabilities) needing accommodation related to teaching and evaluation methods/materials.

It is the student's responsibility to register with disability services as early as possible to ensure that appropriate academic accommodation can be provided with advance notice. You are encouraged to schedule a time early in the term to meet with each professor to discuss your accommodation needs. Failure to make these arrangements may jeopardize your opportunity to receive academic accommodations.

Additional information is available at www.yorku.ca/disabilityservices or from disability service providers:

- **Office for Persons with Disabilities:** N108 Ross, 416-736-5140, www.yorku.ca/opd
- **Learning and Psychiatric Disabilities Programs - Counselling & Development Centre:** 130 BSB, 416-736-5297, www.yorku.ca/cdc
- **Atkinson students - Atkinson Counselling & Supervision Centre:** 114 Atkinson, 416-736-5225, www.yorku.ca/atkcsc
- **Glendon students - Glendon Counselling & Career Centre:** Glendon Hall 111, 416-487-6709, www.glendon.yorku.ca/counselling

Ethics Review Process

York students are subject to the York University *Policy for the Ethics Review Process for Research Involving Human Participants*. In particular, students proposing to undertake research involving human participants (e.g., interviewing the director of a company or government agency, having students complete a questionnaire, etc.) are required to submit an Application for Ethical Approval of Research Involving Human Participants at least one month before you plan to begin the research. If you are in doubt as to whether this requirement applies to you, contact your Course Director immediately

Religious Observance Accommodation

York University is committed to respecting the religious beliefs and practices of all members of the community, and making accommodations for observances of special significance to adherents. Should any of the dates specified in this syllabus for an in-class test or examination pose such a conflict for you, contact the Course Director within the first three weeks of class.

Similarly, should an assignment to be completed in a lab, practicum placement, workshop, etc., scheduled later in the term pose such a conflict, contact the Course director immediately. Please note that to arrange an alternative date or time for an examination scheduled in the formal examination periods (December and April/May), students must complete an Examination Accommodation Form, which can be obtained from Student Client Services, Student Services Centre or online at http://www.registrar.yorku.ca/pdf/exam_accommodation.pdf

Student Conduct

Students and instructors are expected to maintain a professional relationship characterized by courtesy and mutual respect and to refrain from actions disruptive to such a relationship. Moreover, it is the responsibility of the instructor to maintain an appropriate academic atmosphere in the classroom, and the responsibility of the student to cooperate in that endeavour. Further, the instructor is the best person to decide, in the first instance, whether such an atmosphere is present in the class. A statement of the policy and procedures involving disruptive and/or harassing behaviour by students in academic situations is available on the York website <http://www.yorku.ca/secretariat/legislation/senate/harass.htm>

Please note that this information is subject to periodic update. For the most current information, please go to the CCAS webpage (see Reports, Initiatives, Documents):

http://www.yorku.ca/secretariat/senate_cte_main_pages/ccas.htm.

March 22, 2006.