INTERMEDIATE RESEARCH METHODS HH/PSYC 3010 3.0M Winter 2014

Course Instructor: Janice Johnson Office: 246 BSB

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Office Hour: Thurs 3:00-4:00 Secretary: 282 BSB, ext. 66268
Lectures: Tues 2:30-5:30 in CC-208 Course website: moodle.yorku.ca

Required Texts:

Cozby, P.C., & Rawn, C.D. (2012). Methods in behavioural research: Canadian edition.

Whitby, ON: McGraw-Hill Ryerson, ISBN: 978-007105673-1, [CR]

Mitchell, M.L., Jolley, J.M., & O'Shea, R.P. (2013). Writing for Psychology (4th ed).

Belmont, CA: Wadsworth. ISBN 978-1-111-84063-1. [MJO]

See pp. 3 & 4 for additional assigned readings.

Prerequisites: AK/AS/HH/SC/PSYC 1010 6.00 or AK/HH/PSYC 2410 6.00, with a minimum grade of C; AK/AS/HH/SC/PSYC 2030 3.00 or AK/HH/PSYC 2530 3.00; one of AK/AS/HH/SC/PSYC 2020 6.00, AK/AS/HH/SC/PSYC 2021 3.00, AK/HH/PSYC 2510 3.00. NCR note: No credit will be retained for this course for students who have successfully completed or who are currently enrolled in AK/AS/HH/SC/PSYC 4000 6. 00, AS/SC/PSYC 4170 6.00, AK/HH/PSYC 4700 3.00, or AK/HH/PSYC 4800 6.00.

Course Description and Learning Objectives: This is a writing-intensive course that focuses on the active development of research skills. The course will involve readings, discussions, and lectures on research methods and skills. Each student will prepare a proposal for an independent research project, which he or she will present both orally and in writing. Students will be able to:

- Conduct a literature search on a topic of interest
- Conduct a critical analysis of the literature in an area
- Develop a testable research problem
- Provide operational definitions of constructs
- Defend the psychometric properties of a research instrument
- Write a research proposal (including Introduction, Method, and Planned Analyses) in APA style
- Develop an ethics protocol and informed consent form that meet Tri-council ethical standards
- Use SPSS on archival data, given step-by-step guidance by the course director
- Write a Results section in APA style
- Demonstrate ability to present research proposal orally and to constructively critique the work of peers

Evaluation: Grades will be based on the following items weighted as indicated. Note that the last date to withdraw from the course without receiving a grade is March 7, 2014.

Assignment #1 (due Jan. 21): 5%
Assignment #2 (due Feb. 11): 15%
Assignment #3 (due Feb. 25): 10%
Assignment #4 (due Mar. 11) 10%
Presentation (assigned date in March): 15%
Written research proposal (due Apr. 3): 40%
Class participation: 5%

Assignments (brief descriptions):

#1 (due Jan. 21)—Prepare three brief research ideas; write a few sentences describing each idea; and be prepared to discuss ideas in the Jan. 21 class.

#2 (due Feb. 11)—Present in writing your research question and objectives with a brief literature review (must include at least 10 references to the research literature).

#3 (due Feb. 25)—Identify a potential measure for your dependent variable; describe the measure and provide evidence for reliability and validity.

#4 (due Mar. 11) —Write a properly formatted Results section (including Tables and Figures, as needed) for data provided by the Instructor.

Presentation: Students will be assigned a date in March on which to give an oral Power Point presentation of their research plans. The presentation will include a brief review of the relevant research literature, research question and hypotheses, details of proposed method (participants, materials, and procedure), and proposed statistical treatment. Submit a copy of the Power Point presentation to the Instructor.

Written proposal (due April 3): The proposal will consist of a literature review, statement of hypotheses or research questions, a detailed description of the method you plan to use (participant sample; measurement instruments; procedure), a description of how you plan to analyze the data (i.e., which statistical tests you would use), anticipated findings, anticipated conclusions and implications, and a list of references for articles cited in the proposal. Include in an Appendix: copies of tests, questionnaires, or stimuli; detailed instructions to participants; and consent form and debriefing statement. The proposal should be accompanied by proof that you have successfully completed the Tri-council TCPS-2 Core ethics tutorial (http://www.pre.ethics.gc.ca/eng/education/tutorial-didacticiel/) and Faculty of Health academic integrity tutorial (http://health.info.yorku.ca/current-student-information/academic-honesty/). Also hand in a completed Dept. of Psychology/Faculty of Health Ethics FORM 2: Individualized Ethics Protocol (http://www.psych.yorku.ca/ethics).

Grading: The grading scheme for the course conforms to the 9-point grading system used in undergraduate programs at York (e.g., A + = 9, A = 8, B + - 7, C + = 5, etc.). Assignments will bear either a letter grade designation or a corresponding number grade (e.g. A + = 90 to 100, A = 80 to 90, B + = 75 to 79, etc.). For a full description of York grading system see the York University Undergraduate Calendar - http://calendars.registrar.yorku.ca/2010-2011/academic/index.htm

Assignment Submission: Proper academic performance depends on students doing their work not only well, but on time. Accordingly, assignments for this course must be received on the due date specified for the assignment. Submit assignments through Moodle and (when required) personally to the Instructor or to her secretary in 282 BSB.

Lateness Penalty: Assignments received later than the due date will be penalized. Exceptions to the lateness penalty for valid reasons such as illness, compassionate grounds, etc., may be entertained by the Course Instructor but will require supporting documentation (e.g., a doctor's letter).

PSYC3010 3.0M: Schedule of Topics, Readings, and Major Assignments

- Jan. 07 Introduction to the research process. In CR read Ch. 2 & 4; in MJO read Ch. 4 (pp. 119-136) and Ch. 5. Assignment 1 discussed, due Jan. 21.
- Jan. 14 Ethical issues in psychological research; recruitment of research participants. In CR read Ch. 3; in MJO read Ch. 1 (pp. 1-8) and Ch. 3 (pp. 61-70). Read Geraerts et al. (2008) and Otgaar, Candel, Merckelbach, and Wade (2009) articles. Recommended read: http://www.nature.com/news/replication-studies-bad-copy-1.10634
- Jan. 21 **Design and measurement; discussion of research ideas**. In CR read Ch. 5 & 8; in MJO read Ch. 1 and Ch. 3 (pp. 71-78). Read Slatcher and Pennebaker (2006) article. Assignment 1 due. Assignment 2 discussed, due Feb. 11 (for assignment, read Ch. 4, 6, & 7 in MJO).
- Jan. 28 **Questionnaires & correlational methods**. In CR read Ch. 7 &12. Read Schellenberg (2006) article.
- Feb. 04 **Experimental methods.** In CR read Ch. 9 & 10. Read Crum and Langer (2007) and Hahn et al. (2012) articles. Assignment 3 (due Feb. 25) discussed.
- Feb. 11 **Hypothesis testing: Overview of basic stats**. In CR read Ch. 13 & 14; in MJO read Ch. 3 (pp. 79-96). Assignment 2 due. Assignment 4 (due Mar. 11) discussed.
- Feb. 18 Reading Week—no class.
- Feb. 25 APA style and writing a research proposal. In CR read Appendix A; in MJO read Ch. 3 & 4. Assignment 3 due.
- Mar. 04 **Presentation of research proposals** in class.
- Mar. 11 **Presentation of research proposals** in class. Assignment 4 due.
- Mar. 18 **Presentation of research proposals** in class.
- Mar. 25 **Presentation of research proposals** in class.
- Apr. 01 SPSS lab (meet in room 159 BSB). Last class.
- Apr. 03 **Written proposal due**; submit soft-copy through Moodle and hard-copy to Instructor (246 BSB) or her secretary (282 BSB). It will be useful to review Appendix A in CR and Ch. 3-7 in MJO.

ASSIGNED ARTICLES

- Crum, A.J., & Langer, E.J. (2007). Mind-set matters: Exercise and the placebo effect. Psychological Science, 18, 165-171. doi: 10.1111/j.1467-9280.2007.01867.x
- Geraerts, E., Bernstein, D.M., Merckelbach, H., Londers, C., Raymaekers, L., & Loftus, E.F. (2008). Lasting beliefs and their behavioral consequences. *Psychological Science*, *19*(8), 749-753. doi: 10.1111/j.1467-9280.2008. 02151.x
- Hahn, C., Cowell, J.M., Wiprzycka, U.J., Goldstein, D., Ralph, M., Hasher, L., & Zelazo, P.D.(2012). Circadian rhythms in executive function during transition to adolescence: The effect of synchrony between chronotype and time of day. *Developmental Science*, *15*, 408-416. doi: 10.1111/j.1576-7687.2012.01137.x
- Otgaar, H., Candel, I., Merckelbach, H., & Wade, K.A. (2009). Abducted by a UFO:
 Prevalence information affects young children's false memories for an implausible event. *Applied Cognitive Psychology*, 23, 115-125. doi: 10.1002/acp.1445
- Schellenberg, E.G. (2006). Long-term positive associations between music lessons and IQ. *Journal of Educational Psychology*, 98, 457-468. doi: 10.1037/0022-0663.98.2.457
- Slatcher, R.B., & Pennebaker, J.W. (2006). How do I love thee? Let me count the words. *Psychological Science*, *17*(8), 660-664. doi: 10.1111/j.1467-9280.2006.01762.x

USEFUL WEBSITES

Psychology research guide:

http://researchguides.library.yorku.ca/content.php?pid=239475&sid=1975885

Guides to searching electronic data bases (e.g., PSYCINFO, Web of Science):

http://researchguides.library.yorku.ca/psycinfo

http://researchguides.library.yorku.ca/citedref?hs=a&gid=1377

APA Style: http://researchguides.library.yorku.ca/content.php?pid=239475&sid=1976696 http://www.apastyle.org/learn/fags/index.aspx

Locating psychological tests: http://psycentre.apps01.yorku.ca/drpl/

http://researchguides.library.yorku.ca/content.php?pid=239475&sid=1975888

http://www.atkinson.yorku.ca/~rokada/findtest.htm

http://www.webpages.ttu.edu/areifman/qic.htm

http://www.ocf.berkeley.edu/~johnlab/measures.htm

http://darkwing.uoregon.edu/~sanjay/bigfive.html#where

http://www.muhlenberg.edu/depts/psychology/Measures.html

http://www.psy.miami.edu/faculty/ccarver/CCscales.html

http://www.midss.org/

Research ethics: http://www.psych.yorku.ca/ethics

http://www.pre.ethics.gc.ca/eng/education/tutorial-didacticiel/

http://www.yorku.ca/research/support/ethics/index.html

Academic integrity: http://health.info.yorku.ca/current-student-information/academic-honesty/

SPSS: http://psycentre.apps01.vorku.ca/drpl/?g=node/21439

Textbook: http://www.mcgrawhill.ca/olc/cozby/

Methods workshops:

http://wadsworth.cengage.com/psychology_d/templates/student_resources/workshops/index.html

IMPORTANT COURSE INFORMATION FOR STUDENTS

Academic Honesty and Integrity

York students are required to maintain the highest standards of academic honesty and they are subject to the Senate Policy on Academic Honesty (http://www.yorku.ca/secretariat/policies/document.php?document=69). The Policy affirms the responsibility of faculty members to foster acceptable standards of academic conduct and of the student to abide by such standards.

There is also an academic integrity website with comprehensive information about academic honesty and how to find resources at York to help improve students' research and writing skills, and cope with University life. Students are expected to review the materials on the Academic Integrity website at - http://www.yorku.ca/academicintegrity

Access/Disability

York University is committed to principles of respect, inclusion and equality of all persons with disabilities across campus. The University provides services for students with disabilities (including physical, medical, learning and psychiatric disabilities) needing accommodation related to teaching and evaluation methods/materials. These services are made available to students in all Faculties and programs at York University. Student's in need of these services are asked 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. Please note that registering with disabilities services and discussing your needs with your professors is necessary to avoid any impediment to receiving the necessary academic accommodations to meet your needs.

Additional information is available at the following websites:

Counselling & Disability Services - http://www.yorku.ca/disabilityservices

Counselling & Disability Services at Glendon - http://www.glendon.yorku.ca/counselling

York Accessibility Hub - http://www.yorku.ca/accessibilityhub/index.htm

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 in Academic Situations

Students and instructors are expected to maintain a professional relationship characterized by courtesy and mutual respect. Moreover, it is the responsibility of the instructor to maintain an appropriate academic atmosphere in the classroom and other academic settings, 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. The policy and procedures governing disruptive and/or harassing behaviour by students in academic situations is available at -

http://www.yorku.ca/secretariat/policies/document.php?document=82