

**YORK UNIVERSITY**  
**DEPARTMENT OF PSYCHOLOGY**  
**PSYC 3010 3.0 (A) FALL 2015: INTERMEDIATE RESEARCH METHODS**

**Course Director:** Tina Weston  
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**Office/Phone:** Calumet 313 / x44037  
**Office Hour:** By appointment

**Lectures:** Wed 2:30-5:30 p.m. in FC 117  
**Website:** <http://www.moodle.yorku.ca>  
**Secretary:** Agnes Levstik (BSB 281)  
**Mailbox:** BSB 101

**Prerequisites:** AK/AS/HH/SC/PSYC 1010 6.00 or AK/HH/PSYC 2410 6.00 (min. 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. 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 credit exclusions:* AK/PSYC 3180 3.00 (prior to Summer 2002), GL/PSYC 3525 3.00.

### **Course Description and Objectives**

Much of what we know about human behaviour and the brain is the result of carefully and creatively designed research studies. In this course, students will refine and apply prerequisite knowledge in research methods and statistics to develop their own research proposals. Students will learn to:

- Conduct a literature search on a topic of interest; read and critique academic journal articles.
- Design a hypothetical experiment to test a hypothesis, with consideration of independent/dependent variables, participants, ethics, materials, and measures.
- Use statistical software to describe and conduct analyses on real experimental data.
- Write for a scientific audience, using APA style.
- Give an academic presentation.
- Engage in scientific discussions and work collaboratively with others.

This course is excellent preparation for students who are interested in pursuing a future independent study project and/or Honours thesis. It also provides insight into the world of graduate school in psychology and/or careers in research settings. Emphasis is placed on development of reading, writing, and oral presentation skills.

### **Required Reading**

- Miller, S. A. (2014). *Writing in psychology*. New York, NY: Routledge.
- Journal Club: Weekly articles posted to Moodle.

### **Recommended Reading/References (on reserve at Scott Library)**

- American Psychological Association (APA). (2010). *Publication manual of the American Psychological Association (6<sup>th</sup> Ed.)*. Washington, DC: APA.
- Goodwin, C. J., & Goodwin, K. A. (2013). *Research in psychology: Methods and design (7<sup>th</sup> Ed.)*. Hoboken, NJ: John Wiley & Sons Inc.

## Evaluation Overview

Assignment	Due Date	Grade Weighting
Literature Review	Oct 14	10%
Experimental Design and Measures	Oct 28	20%
Data Analysis Assignment	Nov 18	20%
Conference Presentation	<i>TBD</i>	10%
Final Proposal	Dec 9	30%
Participation		10%

**Evaluation Details:** Students will be assigned a lab partner to work with for the duration of the course. All assignments must be submitted as a hard copy at the start of class on the specified due date. Late assignments will be penalized (10% of the value of the work for the first day and 5% for any subsequent day, including weekends) unless accompanied by appropriate documentation (e.g., Attending Physician’s Statement; see Moodle to download). Each assignment is summarized below. Detailed grading rubrics will be discussed in class prior to the deadlines.

Literature Review: The lab team will locate 8-10 scholarly articles related to their research question, at least two of which should be theory-driven. A brief summary of the key findings should be provided for each article.

Experimental Design and Measures: The lab team will submit a plan for testing their hypothesis, including descriptions of the participants, a list of specific measures/materials to be used in the study (e.g., surveys, computer tasks, clinical measures), and a review of all variable(s).

Data Analysis Assignment: The lab team will exercise the training they received in the computer lab to analyze novel experimental data using SPSS software and report on the major findings.

Conference Presentation: The lab team will formally introduce their research proposal to the class in a 15-min presentation. The presentation should include a background to the research question, and the design, measurement, and procedure of the proposed study.

Final Proposal: The lab team will address edits from previous assignments and submit a final draft of their research proposal. The proposal should include the following sections: Introduction, Method, Proposed Data Analysis, and an appendix for Ethics documents.

Participation: Come to class! Join the discussion! Students will be assigned an independent participation grade based on class attendance and contributions to weekly Journal Club discussions, online Moodle activities, and Conference presentations.

## Lecture Schedule

Date	Topic	Readings
Sept 16 <sup>th</sup>	Developing Research Ideas	<b>Miller:</b> Chapters 1 and 6
Sept 23 <sup>rd</sup>	Theory in Research	<b>Journal Club:</b> Verkoeijen et al. (2004)
Sept 30 <sup>th</sup>	The Literature Search	<b>Miller:</b> Chapter 3
Oct 7 <sup>th</sup>	Experimental Design	<b>Journal Club:</b> Bushman & Bonacci (2002)
Oct 14 <sup>th</sup> *	Experimental Design (cont'd)	<b>Journal Club:</b> Major et al. (2012)
Oct 21 <sup>st</sup>	Measurement and Data Collection	<b>Journal Club:</b> Schellenberg (2004)
Oct 28 <sup>th</sup> *	Data Analysis (cont'd) (Meet in HEBB Computer Lab)	<b>Journal Club:</b> TBC
Nov 4 <sup>th</sup>	Data Analysis (cont'd) (Meet in HEBB Computer Lab)	
Nov 11 <sup>th</sup>	Data Analysis (cont'd) (Meet in HEBB Computer Lab)	
Nov 18 <sup>th</sup> *	Conference Day 1	<b>Miller:</b> Chapters 2, 8, 9
Nov 25 <sup>th</sup>	Conference Day 2	
Dec 2 <sup>nd</sup>	Ethics and Grad School Q & A	<b>Journal Club:</b> Kramer et al. (2014)
Dec 9 <sup>th</sup> *	Final Proposals due no later than 4:00 pm to BSB 101 ( <i>Weston, T</i> mailbox). Assignments must be time/date stamped by the secretary.	

\* Denotes an assignment deadline

(Full references for Journal Club articles will be made available on Moodle)

**Undergraduate Calendar Dates:** <http://www.registrar.yorku.ca/enrol/dates/fw15.htm>

**Course Drop Date:** Nov 9, 2015

**Fall Co-Curricular Days:** Oct 29 – Nov 1, 2015

## YorkU Academic Policies

- Senate Policy on Academic Honesty  
<http://www.yorku.ca/secretariat/policies/document.php?document=69>
- Academic Accommodations for Students with Disabilities  
<http://www.yorku.ca/secretariat/policies/document.php?document=68>
- Code of Students Rights and Responsibilities  
<http://www.yorku.ca/secretariat/policies/document.php?document=202>
- Senate Policy on Religious Observance  
<https://w2prod.sis.yorku.ca/Apps/WebObjects/cdm.woa/wa/regobs>
- Senate Policy on Research Involving Human Participants  
<http://www.yorku.ca/secretariat/policies/document.php?document=94>

## Grade Conversion Chart

Letter	Percentage (%)
A+	90-100
A	80-89
B+	75-79
B	70-75
C+	65-69
C	60-64
D+	55-59
D	50-54
E	40-49
F	0-39