HH/PSYC 3010A 3.00 Intermediate Research Methods

Summer 2023

Term: S1 Classroom: DB0004 Mon. and Wed. 2:30 – 5:30 pm Ed Haltrecht

Ed's e-mail: haltrech@yorku.ca

Crosslistings:

AS/PSYC 3010 3.00, SC/PSYC 3010 3.00, HH/PSYC 3010 3.00

Course Description:

An intermediate course to provide further experience with the design, execution, analysis, interpretation and communication of psychological studies. Building on the foundation established in AK/AS/SC/PSYC 2030 3.00, the course further prepares students for many types of advanced-research and Honours thesis projects.

No Text Required.

Course Prerequisite(s): Course prerequisites are strictly enforced

- HH/PSYC 1010 6.00 (Introduction to Psychology)
- HH/PSYC 2021 3.00 (Statistical Methods I) or HH/PSYC 2020 6.0 (Statistical Methods I and II) or substitute
- HH/PSYC 2030 3.0 (Introduction to Research Methods)

Course Credit Exclusions

Please refer to York Courses Website for a listing of any course credit exclusions.

How the course will be delivered:

This is an in-class course. However, there are sections of the course where it works much better on-line. The first such section is the learning of the SPSS (Statistical Program for the Social Sciences) (synchronously and asynchronously). Learning the statistical program will be done on-line since the computer lab normally used to teach SPSS in class is not yet available for in class sessions.

Students will be graded in teams and for individual work. Student meetings will be held with visit by the professor in Breakout Rooms. Assignments will be presented by students in electronic format.

Program Learning Outcomes

Upon completion of this course, students should be able to:

- 1. Explain and critique psychological methodologies across sub-disciplines.
- 2. Analyse and interpret results from simple psychological studies.

- 3. Generate testable hypotheses in psychology.
- 4. Express in written form psychological findings using APA style.
- 5. Demonstrate knowledge that conclusions are limited by methods.

Evaluation:

1. Research Proposals (PowerPoint presentation submitted electronically)	June 12	20% *
2. Written paper covering Proposal elements (Introduction & Methods)	June 16	20% *
3. Posters	June 21	30% *
4. Research Paper (Results & Discussion- electronic submission)	June 28	30% **
(* common group ma	rk; ** indivi	dual mark)

Course Enrolment

Last date to enrol without permission of course instructor – May 12

Last date to enrol with permission of course instructor – May 19

Last date to drop courses without receiving a grade – June 5

Course Withdrawal Period (withdraw from a course and receive a grade of "W" on transcript – see note below) June 13

– June 26.

TOPICS COVERED

Generating Research Ideas

- Conducting a Literature Search
- Summarizing the Scientific Literature
- Designing a study to address a research idea
- Finding and Selecting Measures
- Writing in APA Format
- Oral Communication of Methods Knowledge

Please note that this is a course that, in part, depends on remote teaching and learning.

Technical requirements for taking the course:

- 1. Students will need equipment to gain access to eClass...
- 2. Students will also need access to Zoom for video conferencing during tutorial sessions.
- **3.** In addition to stable, higher-speed Internet connection, students will need a computer with webcam and microphone, and/or a smart device with these features.

A way to determine Internet connection and speed: there are online tests, such as Speedtest, that can be run.

Useful links describing computing information, resources and help for students:

Student Guide to Moodle

Zoom@YorkU Best Practices

Zoom@YorkU User Reference Guide

Computing for Students Website

Student Guide to eLearning at York University

May 8	Introduction Forming groups of $3-5$ students – Selecting research areas
May 10	Selecting research areas
May 15	Selecting research areas
May 17	Selecting research areas - Conducting a Literature review
May 22	NO CLASS _ VICTORIA DAY
May 24	Proposal contents and strategy. Selecting Psychological tests (reliability/validity)
May 29	NO CLASS – University Summer Break
May 31	NO CLASS – University Summer Break
June 5	Hypotheses & Research Design
June 7	Learning how to use SPSS (stats analysis) On-line session – Using myapps.yorku.ca
June 12	Proposal PowerPoint Presentation submission Submitted on-line – NO CLASS
June 14	SPSS data analyses, Posters On-line session – Using myapps.yorku.ca
June 16	Deadline to hand in the written paper covering Proposal elements (Intro & Methods
June 19	Posters, Abstracts, Discussions, Conclusions
June 21	Poster Presentation submission Submitted on-line – NO CLASS
Juna 26	Final paper issues. Individual Team Rreakout Rooms. On-line session. NO CLASS

Additional Information regarding your assignments- both group and individual

- 1. The class will form into groups of 3 5 students based on areas of common interest- selected by students.
- 2. Research Proposals (PowerPoint Presentation) to be submitted electronically 20%
- 3. Written paper covering Proposal Elements (Introduction, Methods, References) GROUP SUBMISSION 20%

Deadline for individual Research Paper (Results & Discussion- electronic submission)

a. Include:

June 28

- i. Title Page + the name of the authors
- ii. Introduction Includes background literature and your hypothesis
- iii. Methods Describes the experimental methods you used (your surveys, demographic info, procedures etc)
- iv. Appendix (if needed may contains items such as stimuli used in the experiment, unique tests, etc)
- v. Bibliography
- b. In the Introduction describe the general area of interest, summarize the relevant literature and describe the question/hypothesis you are going to address. Here is where you also define the terminology related to your question. It is important to refer to the related theories and main articles on your topics in order to provide enough background and a good rationale for your study and hypothesis in introduction.
- c. In the Methods you put all the details of your experimental methods the surveys you used (if you made your own, provide the survey in the Appendix), the demographic information of your subjects (how many, gender, age etc), experimental procedures (how the subjects were selected, where/how the surveys were administered etc.), materials (if you conducted an actual experiment). If you're in doubt whether some information is relevant, it is better to put it in. Other researchers should be able to replicate your study using only the information in your paper. If you have used props or tools, you can provide images/diagrams of these items in this section.
- d. Longer papers are not better papers. Good papers are the succinct ones that cover everything that needs to be covered without being redundant.
- e. It is also necessary to give references about the scales/measures used in your method section. When all this is done well enough, there should already be enough citations.
- f. The Introduction and Methods sections will normally be about 6-10 pages long.

- g. Normally there will be about 10+ references. The Bibliography is the list of all the articles you cite in your paper. Use APA citation format. You can use this resource for your reference: http://owl.english.purdue.edu/owl/resource/560/02/ (look at the menu on the left hand side of the website for relevant information).
- 4. SPSS we will learn how to perform statistical analyses using SPSS
- 5. **Data Generation**: Because time is short for the summer session of 3010, we will not collect data, but generate data. Each team will have at least 2 hypotheses. Statistically, one hypothesis should be supported and one hypotheses should fail to be supported.

6. Posters - 30%

- a. Teams will present a single team poster. Sample posters will be available.
- 7. Research Paper (Results, Discussion, Conclusion) INDIVIDUAL SUBMISSION 30%
 - a. Include:
 - i. Results Statistical analysis of the data + graphs
 - ii. Discussion Interpretation and discussion of the analysis in Results, framing your findings within the larger picture and relating to previous literature
 - iii. Conclusions Brief summary of your findings
 - iv. Appendix (if needed)
 - v. Bibliography
 - b. In the Results section you will describe the statistical analysis that you have performed on your data and summarize the results of this analysis. Do not paste in tables from SPSS. Reporting statistical findings needs to be done in APA format. If you are not familiar with how to report stats, here are some useful resources:

http://my.ilstu.edu/~jhkahn/apastats.html http://abacus.bates.edu/~ganderso/biology/resources/writing/HTWstats.html

You can also find this information in most stats textbooks.

You will also need to represent your data graphically. You can either use SPSS graphs or Excel or any other graphing software you're comfortable with. Make sure your axis are properly labeled and there is a legend (if necessary). Make sure you have error bars where appropriate (standard errors, deviations or confidence intervals). Having error bars helps to assess the statistical significance of your data visually. Provide a caption below each graph describing what the graph is showing.

Draw conclusions from the statistic analysis but don't discuss your findings in detail in this section, this is what the Discussion section is for.

- c. In the Discussion section you relate your findings to previous literature and discuss them in more details. Here you can mention the limitations of your study, highlight the interesting features as well as describe possible future work.
- d. In the Conclusions section you briefly summarize your findings and emphasize the main take home message.
- e. Appendix is place to put all the relevant information that is too long to go in the body of the paper. For example, some analyses or graphs.
- f. Bibliography is the list of all the articles you cite in your paper. Use APA citation format. You can use this resource for your reference:
 - <u>http://owl.english.purdue.edu/owl/resource/560/02/</u> (look at the menu on the left hand side of the website for relevant information).
- g. The Results, discussion, and conclusion sections will normally be about 6-10 pages long.

Grading as per Senate Policy

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 and tests* will bear either a letter grade designation or a corresponding number grade (e.g. A+=90 to 100, A=80 to 89, B+=75 to 79, etc.) For a full description of York grading system see the York University Undergraduate Calendar

Missed Tests/Midterm Exams/Late Assignment

If you will miss an assignment due date- e-mail Ed Haltrecht (haltrech@yorku.ca).

Add and Drop Deadline Information

There are deadlines for adding and dropping courses, both academic and financial. Since, for the most part, the dates are **different**, be sure to read the information carefully so that you understand the differences between the sessional dates below and the Refund Tables.

You are strongly advised to pay close attention to the "Last date to enrol without permission of course instructor" deadlines. These deadlines represent the last date students have unrestricted access to the registration and enrolment system.

After that date, you must contact the professor/department offering the course to arrange permission.

You can drop courses using the registration and enrolment system up until the last date to drop a course without receiving a grade (drop deadline).

You may withdraw from a course using the registration and enrolment system after the drop deadline until the last day of class for the term associated with the course. When you withdraw from a course, the course remains on your transcript without a grade and is notated as 'W'. The withdrawal will not affect your grade point average or count towards the credits required for your degree.

Academic Integrity for Students

York University takes academic integrity very seriously; please familiarize yourself with <u>Information about the Senate</u> Policy on Academic Honesty.

It is recommended that you review Academic Integrity by completing the <u>Academic Integrity Tutorial</u> and <u>Academic Honesty Quiz</u>

Academic Accommodation for Students with Disabilities

While all individuals are expected to satisfy the requirements of their program of study and to aspire to do so at a level of excellence, the university recognizes that persons with disabilities may require reasonable accommodation to enable them to do so. The university encourages students with disabilities to register with Student Accessibility Services (SAS) to discuss their accommodation needs as early as possible in the term to establish the recommended academic accommodations that will be communicated to Course Directors as necessary. Please let me know as early as possible in the term if you anticipate requiring academic accommodation so that we can discuss how to consider your accommodation needs within the context of this course. https://accessibility.students.yorku.ca/

Excerpt from Senate Policy on Academic Accommodation for Students with Disabilities

1. Pursuant to its commitment to sustaining an inclusive, equitable community in which all members are treated with respect and dignity, and consistent with applicable accessibility legislation, York University shall make reasonable and appropriate accommodations in order to promote the ability of students with disabilities to fulfill the academic requirements of their programs. This policy aims to eliminate systemic barriers to participation in academic activities by students with disabilities.

All students are expected to satisfy the essential learning outcomes of courses. Accommodations shall be consistent with, support and preserve the academic integrity of the curriculum and the academic standards of courses and

programs. For further information please refer to: <u>York University Academic Accommodation for Students with Disabilities Policy.</u>

Course Materials Copyright Information

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