AK/PSYC 3010A 3.00 Intermediate Research Methods

Summer 2020

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

<u>Day/Time:</u> Online via Zoom **<u>Course Webpage</u>**: This course uses Moodle and Zoom

Ed contact: 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.

Prerequisites: AK/AS/SC/PSYC 1010 6.00 or AK/PSYC 2410 6.00, with a minimum grade of C; AK/AS/SC/PSYC 2030 3.00 or AK/PSYC 2530 3.00; one of AK/AS/SC/PSYC 2020 6.00, AK/AS/SC/PSYC 2021 3.00, AK/PSYC 2510 3.00. Degree credit exclusions: AK/PSYC 3180 3.00. Note: Not open to students who have passed or are taking AK/AS/SC/PSYC 4000 6.00, AS/SC/PSYC 4170 6.00, AK/PSYC 4700 3.00, or AK/PSYC 4800 6.00.

Time and Location

Audio-visual Lectures available on MOODLE prior to live sessions on ZOOM Online active support Mon/Weds 2:30 – 5:30 pm

Please note that this is a course that depends on remote teaching and learning. There will be no activities on campus.

Technical requirements for taking the course:

- 1. Students will need equipment to gain access to Moodle.
- 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

Evaluation:

1. Research Proposals (PowerPoint presentation)	June 3	20% *
2. Electronic paper covering Proposal elements (Introduction & Methods)	June 10	20% *
3. Posters - electronic	June 15	30% **
4. Research Paper (Results & Discussion- electronic submission)	June 26	30% **
(* common group mark; ** individual mark)		

Course Enrolment

Last date to enrol without permission of course instructor – May 25 Last date to enrol with permission of course instructor – June 8 Last date to drop courses without receiving a grade – July 17

PROGRAM LEARNING OUTCOMES

Apply knowledge of research methods in designing a research project

- Locate and summarize relevant empirical knowledge
- Communicate knowledge of research methods orally and in written form

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
- May 11 Introduction Forming groups of 3 5 students Selecting research areas
- May 13 Selecting research areas
- May 18 Victoria Day Holiday
- May 20 Selecting research areas
- May 25 Hypotheses & Research Design
- May 27 Selecting research areas working in teams
- June 1 Analysis using SPSS
- June 3 Proposal Presentations
- June 8 Creating data set & SPSS data analyses
- June 10 SPSS data analyses
- June 15 Poster Presentations
- June 17 Finalizing papers
- June 22 Final paper issues

Moodle will be used in the course.

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 discussed in class with supportive material 20%
- 3. Written paper covering Proposal Elements (Introduction, Methods, References) GROUP SUBMISSION 20%
 - a. Include:
 - 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. Individuals will submit a poster electronically. 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.

ETHICS AND LEGAL OBLIGATIONS

All students are expected to familiarize themselves with the following information, available on the Senate Committee on Academic Standards, Curriculum & Pedagogy webpage (see Reports, Initiatives, Documents) - <u>http://www.yorku.ca/secretariat/senate/committees/ascp/index-ascp.html</u>

- Senate Policy on Academic Honesty and the Academic Integrity Website
- Ethics Review Process for research involving human participants
- Course requirement accommodation for students with disabilities, including physical, medical, systemic, learning and psychiatric disabilities
- Student Conduct Standards
- Religious Observance Accommodation

Audio-visual recordings – both on Moodle and Zoom: 1) the recordings should be used for educational purposes only and as a means for enhancing accessibility; 2) students do not have permission to duplicate, copy and/or distribute the recordings outside of the class (these acts can violate not only copyright laws but also FIPPA and intellectual property rights); and 3) all recordings will be destroyed after the end of classes. Please see the Teaching commons going remote website particularly the section on Copyright and intellectual property at https://bold.info.yorku.ca/ and https://copyright.info.yorku.ca/students-reuse-of-teaching-materials-from-york-courses-2/ for some statements to use in your course outline about intellectual property.

1) Information about Academic Resources

Textbooks: See notes in this outline and on Moodle.

Digital content: York University Libraries also has access to online content that can be linked (using permalinks) through Moodle. A Library guide on creating permalinks/stable links to articles/ebooks/electronic resources can be found in various databases/Omni (the new library

catalogue) at https://researchguides.library.yorku.ca/permalinks -- that can be used in Moodle. When students click on the stable link, they will be asked to authenticate through Passport York and then they have full access to the online resource. Using these permalinks addresses copyright issues.

2) Information about Academic honesty and integrity

Please see the library resources, academic integrity, and copyright section of the Going Remote website at https://bold.info.yorku.ca/

In this course, we strive to maintain academic integrity to the highest extent possible. Please familiarize yourself with the meaning of academic integrity by completing SPARK's Academic Integrity module at the beginning of the course. Breaches of academic integrity range from cheating (i.e., the improper crediting of another's work, the representation of another's ideas as your own, etc.) to aiding and abetting (helping someone else to cheat). All breaches in this course will be reported to the appropriate university authorities, and can be punishable according to the Senate Policy on Academic Honesty."

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/

Electronic Device Policy

This course will be delivered in an online format and therefore electronic devices (e.g., tablets, laptops) as permitted during class time for course-related purposes. It is expected that you would complete tests/exams in a manner that does not require consulting an unauthorized source during an examination.