

AK/PSYC 3010A 3.00 Intermediate Research Methods

Fall 2024

Classroom: DB 0015

Tues. 8:30 – 11:30 pm

Ed Haltrecht

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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. If you still have your Statistics or Research Design texts, you may want to hold on to them for the duration of the course as optional resources.

There are 4 assignments and no exams.

Course Prerequisite(s): Course prerequisites are strictly enforced

- HH/PSYC 1010 6.00 (Introduction to Psychology), with a minimum grade of 50.
- 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. 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.

Course Enrolment

Last date to enrol without permission of course instructor – Sept 20

Last date to enrol with permission of course instructor – Sept 28

Last date to drop courses without receiving a grade – Nov 8

Course Withdrawal Period (withdraw from a course and receive a grade of "W" on transcript – see note below) Nov 9 – Dec 5

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](#)

Assessment based upon 4 assignments:

1. Research Proposals (PowerPoint presentation)	Nov 5	20% *
2. Electronic paper covering Proposal elements (Introduction & Methods)	Nov 26	20% *
3. Posters – electronic team submission	Dec 3	30% *
4. Research Paper (Results & Discussion- electronic submission)	Dec 22	30% **

(* common group mark; ** individual mark)

Sept 10	Introduction	Forming groups of 3 – 5 students – Selecting research areas
Sept 17	Selecting research areas	
Sept 24		Selecting and reviewing research areas
Oct 1	Conducting a Literature review	
Oct 8	Proposal contents and strategy. Selecting Psychological tests (reliability/validity)	
Oct 15	NO CLASS	_ Reading Week and Victoria Day
Oct 22	Hypotheses & Research Design	
Oct 29	Learning how to use SPSS (stats analysis)	On-line session – Using myapps.yorku.ca
Nov 5	NO CLASS	Assignment 1: Proposal Due - PowerPoint submission Submitted on-line
Nov 12	SPSS data analyses, Posters	On-line session – Using myapps.yorku.ca
Nov 19	Class to help with SPSS etc	
Nov 26	NO CLASS	Assignment 2: Deadline to hand in the written paper covering Proposal elements
Dec 3	NO CLASS	Assignment 3 Poster Presentation submission Submitted on-line –
Dec 22	Assignment 4	Individual Research Paper DUE (Abstract, Results & Discussion- electronic submission)

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. **(Assignment 1) Research Proposals (PowerPoint Presentation)** – to be submitted electronically **20%**
3. **(Assignment 2) Written paper covering Proposal Elements (Introduction, Methods, References) - GROUP SUBMISSION – 20%**

NOTE: Intro and Methods paper (Assignment #2): this isn't just copying the proposal, it is actually the first parts of a complete research paper that you will be writing in 2 sections. Therefore, the paper should be written in **the past tense especially in the methods!** Marks will be lost if this doesn't happen (you can see that in the general writing rubric examples).

GENERAL POINTS:

- Please make sure to follow APA 7. We would like you to use the professional paper formatting, not the student one - this mainly applies to the title page (includes running head, etc).
- You can easily Google the answers to most formatting questions, you really don't need to email us for every little thing. In fact, we will not answer e-mail questions that can be easily found on Google- saving you and us a lot of time. We don't care if you choose to include subheadings in the intro and discussion, and you can format it however they want, as long as you follow APA header and subheading styles.
- Please include title pages for assignments 2 and 4, with the abstract being a part of the final paper.
- Look at the rubrics posted and follow those for the points. There are some out of date APA examples (I think that it isn't italics anymore for the headers and sub headers). Carefully follow the statistical formatting (stats symbols in italics, exact p value reported except when it's .000 which becomes $p < .001$, 2 decimal places for means and standard deviations, etc).
- You can't just blindly follow the examples posted on eClass because a lot of them are written using APA 6 OR were for 4170/4180. BOTTOM LINE: USE APA 7.
- Please include your group number and/or name in the file name!
- Some general feedback that we've noticed previously is that because students do so well on the proposal presentation that they then don't realize they need to do more with everything in the papers. Same thing happens with the poster and final papers. What is acceptable for a presentation/visual piece is different from what is required for a research paper.
- The Intro needs to be properly written out, more integrated and flowing with the literature being used to support and showcase how and why the current research topic came to be. And always aiming to bring it back to that rather than including a bunch of paragraphs that each summarize one article.
- Methods - needs to be detailed and thorough, providing enough explanation that someone could replicate the study. We sometimes find that a lot of the groups didn't mention enough about the participants - in particular, how or where they would get them. There's a lot of unique samples in this course which is great but it's easier when it's not real.....so they have to take that creativity the next step forward and make sure to cover everything that would be needed if they were actually conducting a study.

ASSIGNMENT #2

- 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 – Oct 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 course, 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. **(Assignment 3) Posters – 30%**
- a. Teams will present a single team poster. Sample posters will be available.
7. **(Assignment 4) Research Paper (Abstract, Results, Discussion, Conclusion) INDIVIDUAL SUBMISSION – 30%**
- a. Include:
 - i. Abstract
 - ii. Results - Statistical analysis of the data + graphs
 - iii. Discussion - Interpretation and discussion of the analysis in Results, framing your findings within the larger picture and relating to previous literature
 - iv. Conclusions - Brief summary of your findings
 - v. Appendix (if needed)
 - vi. 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:
<http://owl.english.purdue.edu/owl/resource/560/02/> (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 – [Grading Scheme for 2024-25](#)

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 Oct [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 [Information about the Senate Policy on Academic Honesty](#).

It is recommended that you review Academic Integrity by completing the [Academic Integrity Tutorial](#) and [Academic Honesty Quiz](#)

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 Oct 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: [York University Academic Accommodation for Students with Disabilities Policy](#).

Course Materials Copyright Information

These course materials are designed for use as part of the PSYC 3010 course at York University and are the property of the instructor unless otherwise stated. Third party copyrighted materials (such as book chapters, journal articles, music, videos, etc.) have either been licensed for use in this course or fall under an exception or limitation in Canadian Copyright law.

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