



### **Land Acknowledgement**

I would like to acknowledge that UBC Okanagan is situated on the traditional, ancestral, and unceded territory of the Syilx Okanagan Nation. As a settler and uninvited guest, I am grateful to the caretakers to be able to live and work on these beautiful and bountiful lands especially knowing that I have benefited greatly from the colonial system that has harmed and continues to harm the Syilx peoples. As you engage with this course, please do so thoughtfully as we learn and acknowledge the ways in which research has been harmful to Indigenous peoples for generations. I invite you to reflect on and commit to the work needed to decolonize the research process and in supporting research that is conducted with and not on Indigenous communities.

## **HES 240: Health Research Methods**

**Faculty:** Faculty of Health and Social Development

**School:** Health and Exercise Sciences

**Duration:** Term 1 Winter 2023

**Instructor(s):** Tanya Forneris

**Delivery Modality:** In-Person

**Course Location:** FIP 204

**Course Days & Time:** Wednesdays and Fridays from 5:00-6:30pm

**Office Hours:** Wednesdays 3:00-4:00pm

### **Teaching Assistants**

Kierstyn Palmer

Haley Berrisford

### **Course Description**

Introduction to the research methods commonly encountered in health research, including quantitative and qualitative designs; provides a basis for comprehending more fully the research literature relevant to health studies. Formerly offered as HMKN 206. Credit will be granted for only one of HES 240 or HMKN 206. Prerequisite: Either (a) HES 100 or (b) HMKN 100 and second-year standing in the B.H.E.S or B.H.K.

### **Course Overview**

This course consists of two 80-minute lectures most weeks as there will be occasional asynchronous activities in place of an in-person lecture. Students are expected to complete the required readings and/or watch the assigned videos prior to attending class. In class, content will be delivered using a combination of powerpoint slides, videos, and activities designed to engage you in the learning process.

Each week you will be provided a detailed plan for the week. This plan will include an overview of the learning outcomes for the week, the required prep for the week, a list of summary questions to help you review the material and reminders of any upcoming deadlines for the various evaluation components.

### **Learning Materials**

All required readings for this course will be available via Canvas. Under each weekly module within Canvas you will see a "weekly prep" section. In this section you will find links to all of the required readings and assigned videos that are freely available.

## Learning Outcomes

At the end of this class students who have excelled will be able to:

1	Summarize the reasons why it is important to be a critical consumer and identify ways in which research can be misrepresented in the media.
2	Differentiate types of potential harm that can impact research participants and how researchers can engage in ethical research.
3	Recognize how colonialism has oppressed indigenous communities and the steps needed to decolonize the research process.
4	Describe the main approaches to both quantitative, qualitative and mixed-methods research.
5	Distinguish between different types of quantitative, qualitative and/or mixed methods research.
6	Critique methods used in both quantitative and qualitative research studies.

## Assessments of Learning

1	Assignment # 1 (LO 1) – 10%; Due: Wednesday, October 4th
2	Assignment # 2 (LO's 3 & 4) – 20%; Due: Friday, November 24th
3	Midterm (LO's 1-3) - 25%; Wednesday, October 25th
4	Final Exam (LO's 1-5) – 35%; Date TBD
5	Engagement Activities 10% <ul style="list-style-type: none"><li>• Ethics Module or Reflection Paper (2%) – Friday, September 22<sup>nd</sup></li><li>• Experimental Research &amp; Validity Activity (2%) – Tuesday, October 10<sup>th</sup></li><li>• Midterm Practice Quiz (2%) – Wednesday, October 18th</li><li>• Trustworthiness in Qualitative Research Activity (2%) – Wednesday, November 8th</li><li>• Mixed-Methods Research Activity (2%) – Friday, December 1st</li></ul>

### **Assignment # 1 – Learning to be a Critical Consumer of Research (Wednesday, October 4<sup>th</sup>)**

This assignment consists of comparing a news headline or short excerpt from a recent health/fitness magazine (provided on Canvas) and comparing the headline/excerpt to the original research article. The purpose is to determine whether the headline or excerpt truthfully represents the findings from the article. You will have to justify your response and also find relevant peer-reviewed articles and discuss whether the findings in the literature provide any consensus on the issue. Specific guidelines, the headline/excerpt, original research article and the grading rubric will be posted on Canvas under Assignment 1. All of the completed work will be uploaded on Canvas – directions will be provided.

## **Assignment # 2 – Article Critique (Friday, November 24th)**

For this assignment you will have to critique two peer-reviewed research articles, one quantitative and one -have covered in class and to discuss how you would improve this research design. The articles and specific guidelines to follow for the critique will be available on Canvas under Assignment 2.

### **Notes regarding assignments:**

- It is your responsibility to uphold the highest standards of academic integrity.
- All assignments must be typed, state your name and student number and be submitted online – instructions to be provided.
- You are responsible for keeping back-up copies of all work. You should always have at least two copies of your work saved. Computer problems will not be accepted as an excuse for a late assignment.
- Remarking will only be considered if a mistake has been made. You cannot revise an assignment or do an additional assignment to increase your mark.

### **Engagement Activities**

There are 5 online course engagement activities. These activities are designed to be low-stakes assignments that support your learning by applying the content and/or principles of research we cover in class.

### **Midterm Exam**

The midterm will be an open-book exam consisting of multiple-choice and short answer questions. You will have the class time (80min) to complete it. Specifics regarding the precise number of questions will be outlined in the exam review session. Typically, there have been 25-30 multiple choice & 2-3 short answer questions.

### **Final Exam**

The final exam will be open book exam consisting of multiple-choice, short answer and long answer question(s). You will have 2.5 hours to complete it. Specifics regarding the precise number of questions will be outlined in the exam review session. Typically there are 40-45 multiple choice, 2-3 short answer and 1 long answer question.

### **Late policy**

Every evaluation component for this course has a specified due date however there are different late policies based on the type of evaluation component.

- For low-stakes engagement activities the due date is fixed – if submitted late will be docked by 10% per day.
- For Assignments 1 & 2 there is a 48-hour no penalty flex period. After 48 hours a late deduction of 10% per day applies. The due date is clearly specified and the expectation is to submit by the deadline. Part of the learning experience involves managing your time effectively to avoid overload and balancing your academic and non-academic commitments as it is common to have several exams and/or assignments due on the same day or within the same week. However, life circumstances often fluctuate which is the rationale for the 48 hours of flexibility. You do not have to ask for this extension it is automatically applied to everyone.

### **Use of AI Tools**

- You are permitted to use AI tools for formative work such as gathering information or brainstorming BUT may not use it on any assessed work or in any final submission of an assignment.
- This means that the use of generative AI tools, including ChatGPT and other similar tools, to complete or support the completion of any form of assignment or assessment in this course is not allowed and would be considered academic misconduct.

### **Missed exam policy**

If you are ill or have another extenuating circumstance arise that permits you to miss the midterm or final exam a make-up exam will be arranged. Please note writing final exams early is not permitted unless under very exceptional circumstances and approved by the HES undergraduate curriculum committee.

Week	Date	Topics and/or exam	Required Reading (s) and/or Videos	Learning Outcome
1	Sept 6th	Course Overview	No Reading	
	Sept 8th	Introduction to Research	<a href="#">Research Methods in Psychology 4<sup>th</sup> Edition</a> – Chapter.1 (Sections 1-4; pgs 3-14) and Ch. 2 (Sections 7-14; Pgs 23-55) <b>AND</b> TED Talk video - <a href="https://www.ted.com/talks/naomi_oreskes_why_we_should_believe_in_science">https://www.ted.com/talks/naomi_oreskes_why_we_should_believe_in_science</a>	LO's 1-3
2	Sept 13th	Ethics & Research Part I	<a href="#">Research Methods in Psychology 4<sup>th</sup> Edition</a> – Chapter. 3 (Sections 15-18; pgs 57-79)	LO 3
	Sept 15th	Ethics & Research Part II	MacDonald et al (2014) Canada's shameful history of nutrition research on residential school children; <b>AND</b> OCAP by Alberta First Nations Information Governance Centre.	LO 3
3	Sept 20th	Being a Critical Consumer Part I	Korownyk, Kolber et al. (2014). – Televised Medical Talk Shows...British Medical Journal, 349, g7346	LO's 1-2
	Sept 22nd	Being a Critical Consumer Part II	Robeldo & Jankovic (2017) – Media Hype Patient and Scientific Perspectives on Misleading Medical News. <i>Movement Disorders</i> , 32 (9), 1319-1323 <b>AND</b> Lazarus, et al., (2016). Peer reviewers identified spin in manuscripts of nonrandomized studies assessing therapeutic interventions, but their impact on spin in abstract conclusions was limited. <i>Journal of clinical epidemiology</i> , 77, 44-51. <b>Ethics Module or Reflection Paper Due</b>	
4	Sept 27th	Quantitative Research – Measurement	<a href="#">Research Methods in Psychology 4<sup>th</sup> American Edition</a> – Chapter 4 (Sections 19-22; pgs 81-106)	LO's 3-5
	Sept 29th	Quantitative Research – Sampling	<a href="#">Research Methods in Psychology 4<sup>th</sup> American Edition</a> – Chapter 7 (Section 36; pgs 198-204) - <b>ASYNCHRONOUS LECTURE</b>	
5	Oct 4th	Quantitative Research Design Part I	<a href="#">Research Methods in Psychology 4<sup>th</sup> American Edition</a> – Chapter. 5 (Sections 23-27; pgs 107-139) <b>Assignment # 1 Due</b>	LO's 3-5
	Oct 6th	Quantitative Research Design Part II	<a href="#">Research Methods in Psychology 4<sup>th</sup> American Edition</a> – Chapter 8 Sections 38-40 (pgs 207-219) – <b>ASYNCHRONOUS LECTURE</b> <b>Experimental Research &amp; Validity Activity Due Tuesday, October 10<sup>th</sup></b>	
6	Oct 11th	Quantitative Research – Internal & External Validity	Reading above covers this material on Internal and External Validity	LO's 3-5
	Oct 13th	Quantitative Research – Survey research	<a href="#">Research Methods in Psychology 4<sup>th</sup> American Edition</a> - Chapter 7 (Sections 35 & 36; pgs 183-197)	
7	Oct 18th	Quantitative Research – Non-reactive Research & moving forward using quantitative research	<a href="#">Research Methods in Psychology 4<sup>th</sup> American Edition</a> – Chapter 6 (Section 32; pgs 169-178) <b>AND</b> Greenhalgh, T. (1997). How to read a paper: Papers that summarise other papers (systematic reviews and meta-analyses). <i>Bmj</i> , 315(7109), 672-675 <b>AND</b> Hayward, A., Wodtke, L., Craft, A., ...et al (2021). Addressing the need for indigenous and decolonized quantitative research methods in Canada. <i>SSM-Population Health</i> , 15, 100899 <b>Midterm Practice Quiz Due</b>	LO's 3-5
	Oct 20th	Midterm Review	No Readings	

8	Oct 25th	Midterm Exam	No Readings	
	Oct 27th	Qualitative Research – Overview & Methods	DiCicco-Bloom & Crabtree (2006). The qualitative research interview. <i>Medical education</i> , 40(4), 314-321 <b>AND</b> Mulhall, A. (2003). In the field: notes on observation in qualitative research. <i>Journal of advanced nursing</i> , 41(3), 306-313	LO's 4-5
9	Nov 1 <sup>st</sup>	Qualitative Research – Sampling & Trustworthiness	Tracy, S. J. (2010). Qualitative quality: Eight “big-tent” criteria for excellent qualitative research. <i>Qualitative inquiry</i> , 16(10), 837-851.	LO's 4-5
	Nov 3rd	Qualitative Research – Methodologies Part I	Crowe, S., Cresswell, K., Robertson, A., Huby, G., Avery, A., & Sheikh, A. (2011). The case study approach. <i>BMC medical research methodology</i> , 11(1), 100.	LO's 4-5
10	Nov 8 <sup>th</sup>	Qualitative Research – Methodologies Part II	Bjorbærkmo, W. S., & Shaw, J. (2018). Physiotherapy at the intersection between standardization and individual adaptation. <b>Trustworthiness in Qualitative Research Activity Due</b>	LO's 4-5
	Nov 10th	Critiquing Research Design	Marshall, G. (2005). Critiquing a research article. <i>Radiography</i> , 11(1), 55-59.; <b>AND</b> Caldwell, K., Henshaw, L., & Taylor, G. (2011). Developing a framework for critiquing health research: an early evaluation. <i>Nurse education today</i> , 31(8), e1-e7.  <b>Extra Resources for Assignment 2:</b> Coughlan, M., Cronin, P., & Ryan, F. (2007). Step-by-step guide to critiquing research. Part 1: quantitative research. <i>British journal of nursing</i> , 16(11), 658-663. <b>AND</b> Beck, C. T. (2009). Critiquing qualitative research. <i>AORN journal</i> , 90(4), 543-554	LO 6
11	Nov 15th	Reading Week		
	Nov 17th	Reading Week		
12	Nov 22 <sup>nd</sup>	Indigenous Methodologies	Kovach, M. (2016). Moving forward, pushing back: Indigenous methodologies in the academy. Chapter 2 in <i>Qualitative inquiry through a critical lens</i> (pp. 39-48). Routledge	LO 3
	Nov 24th	Mixed Methods Research	Johnson, R.B. and Onwuegbuzie, A.J., 2004. Mixed methods research: A research paradigm whose time has come. <i>Educational researcher</i> , 33(7), pp.14-26 <b>AND</b> Wright, A. L., Gabel, C., Ballantyne, M., Jack, S. M., & Wahoush, O. (2019). Using two-eyed seeing in research with indigenous people: an integrative review. <i>International Journal of Qualitative Methods</i> , 18 <b>Assignment 2 Due</b>	LO's 3-5
13	Nov 29th	Knowledge Mobilization: Research into Practice	Guide to Knowledge Translation Planning at CIHR: Integrated and End-of-Grant Approaches <a href="https://cihr-irsc.gc.ca/e/documents/kt_lm_ktplan-en.pdf">https://cihr-irsc.gc.ca/e/documents/kt_lm_ktplan-en.pdf</a>	LO 4-5
	Dec 1	Pursuing Research as a Career	No Reading <b>Mixed-Methods Research Activity Due</b>	
14	Dec 6 <sup>th</sup>	Catch-up & Final Exam Review	No Reading	

## UBC Policies & Resources

## **Academic Integrity**

The academic enterprise is founded on honesty, civility, and integrity. As members of this enterprise, all students are expected to know, understand, and follow the codes of conduct regarding academic integrity. At the most basic level, this means submitting only original work done by you and acknowledging all sources of information or ideas and attributing them to others as required. This also means you should not cheat, copy, or mislead others about what is your work. Violations of academic integrity (i.e., misconduct) lead to the breakdown of the academic enterprise, and therefore serious consequences arise and harsh sanctions are imposed. For example, incidences of plagiarism or cheating usually result in a failing grade or mark of zero on the assignment or in the course. Careful records are kept to monitor and prevent recidivism.

A more detailed description of academic integrity, including the University's policies and procedures, may be found in the [Academic Calendar](#).

## **Final Examinations**

You can find the [Senate-approved term and examination dates here](#). Except in the case of examination clashes and hardships (three or more formal examinations scheduled within a 27-hour period) or unforeseen events, students will be permitted to apply for out-of-time final examinations only if they are representing the University, the province, or the country in a competition or performance; serving in the Canadian military; observing a religious rite; working to support themselves or their family; or caring for a family member. Unforeseen events include (but may not be limited to) the following: ill health or other personal challenges that arise during a term and changes in the requirements of an ongoing job.

Further information on Academic Concession can be found under Policies and Regulation in the [Okanagan Academic Calendar](#).

## **Grading Practices**

Faculties, departments, and schools reserve the right to scale grades in order to maintain equity among sections and conformity to University, faculty, department, or school norms. Students should therefore note that an unofficial grade given by an instructor might be changed by the faculty, department, or school. Grades are not official until they appear on a student's academic record.

Further information on Grading Practices can be found in the [Okanagan Academic Calendar](#).

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### ***RESOURCES TO SUPPORT STUDENT SUCCESS:***

#### **UBC Okanagan Disability Resource Centre**

The DRC facilitates disability-related accommodations and programming initiatives to remove barriers for students with disabilities and ongoing medical conditions. If you require academic accommodations to achieve the objectives of a course please contact the DRC at:

Email: [drc.questions@ubc.ca](mailto:drc.questions@ubc.ca)

Web: [www.students.ok.ubc.ca/drc](http://www.students.ok.ubc.ca/drc)

#### **UBC Okanagan Equity and Inclusion Office**

Through leadership, vision, and collaborative action, the Equity & Inclusion Office (EIO) develops action strategies in support of efforts to embed equity and inclusion in the daily operations across the campus. The EIO provides education and training from cultivating respectful, inclusive spaces and communities to understanding unconscious/implicit bias and its operation within in campus environments. UBC Policy 3 prohibits discrimination and harassment on the basis of BC's Human Rights Code. If you require assistance related to an issue of equity, educational programs, discrimination or harassment please contact the EIO.

Email: [equity.ubco@ubc.ca](mailto:equity.ubco@ubc.ca)

Web: [www.equity.ok.ubc.ca](http://www.equity.ok.ubc.ca)

### **Student Wellness**

At UBC Okanagan health services to students are provided by Student Wellness. Nurses, physicians and counsellors provide health care and counselling related to physical health, emotional/mental health and sexual/reproductive health concerns. As well, health promotion, education and research activities are provided to the campus community. If you require assistance with your health, please contact Student Wellness for more information or to book an appointment.

Email: [healthwellness.okanagan@ubc.ca](mailto:healthwellness.okanagan@ubc.ca)

Web: [www.students.ok.ubc.ca/health-wellness](http://www.students.ok.ubc.ca/health-wellness)

### **Office of the Ombudperson**

The Office of the Ombudperson for Students is an independent, confidential and impartial resource to ensure students are treated fairly. The Ombuds Office helps students navigate campus-related fairness concerns. They work with UBC community members individually and at the systemic level to ensure students are treated fairly and can learn, work and live in a fair, equitable and respectful environment. Ombuds helps students gain clarity on UBC policies and procedures, explore options, identify next steps, recommend resources, plan strategies and receive objective feedback to promote constructive problem solving. If you require assistance, please feel free to reach out for more information or to arrange an appointment.

Email: [ombuds.office.ok@ubc.ca](mailto:ombuds.office.ok@ubc.ca)

Web: [www.ombudsoffice.ubc.ca](http://www.ombudsoffice.ubc.ca)

### **Student Learning Hub**

The Student Learning Hub is your go-to resource for free math, science, writing, and language learning support. The Hub welcomes undergraduate students from all disciplines and year levels to access a range of supports that include **tutoring in math, sciences, languages, and writing, as well as help with study skills and learning strategies**. Students are encouraged to visit often and early to build the skills, strategies and behaviors that are essential to being a confident and independent learner. For more information, please visit the Hub's website.

Email: [learning.hub@ubc.ca](mailto:learning.hub@ubc.ca)

Web: [www.students.ok.ubc.ca/slh](http://www.students.ok.ubc.ca/slh)

### **The Global Engagement Office**

The Global Engagement Office provides advising and resources to assist International students in navigating immigration, health insurance, and settlement matters, as well as opportunities for intercultural learning, and resources for Go Global experiences available to all UBC Okanagan students, and more.

Email: [ubco.global@ubc.ca](mailto:ubco.global@ubc.ca)

Web: [www.students.ok.ubc.ca/global-engagement-office/](http://www.students.ok.ubc.ca/global-engagement-office/)

### **Safewalk**

Don't want to walk alone? Not too sure how to get somewhere on campus? Call Safewalk at **250-807-8076**.

Web: [www.security.ok.ubc.ca](http://www.security.ok.ubc.ca)