

Psychology 650**Clinical Research****Fall 2023**

Instructor:	Dr. Andrew (Hyouonsoo) Kim	Lecture Location:	TBD
Phone:	N/A	Lecture Days/Time:	Alternate R 9:00-10:50
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Office Hours:	By appointment		

Course Description and Objectives

The primary focus of this course is to provide students with a strong background in conducting and evaluating research in clinical psychology. This course will cover all facets of research from the inception of a research idea to its eventual dissemination. The textbook provides a high level of detail regarding research design, methodology, and statistical issues - which can be used as more of a reference guide rather than something to memorize. The lectures and assignments will focus on the application of research methods and evaluation skills to both published articles and students' own research. Students will be encouraged to think broadly about their research (e.g., theoretical/conceptual foundations and contributions, practice and policy implications, etc.). They will also be expected to justify decisions made in the context of designing their research, consider the pros and cons of alternative designs, and take a position on topical issues. Specific course objectives include: (1) allowing students to share and develop their own research ideas and plans, (2) developing and enhancing skills in critical thinking and integrating research findings, (3) developing oral and visual presentation skills, and (4) providing exposure to selected research-related professional issues. My hope is that throughout the course we will help each other become more critical thinkers and better researchers through lectures, presentations, constructive feedback, and discussions. Lively, thoughtful discussions will make the class more interesting and enjoyable for all so your efforts to participate will pay off.

Acknowledgments and Respect for Diversity

Our classrooms view diversity of identity as a strength and resource. Your experiences and different perspectives are encouraged and add to a rich learning environment that fosters critical thought through respectful discussion and inclusion. The Department of Psychology would like to acknowledge the traditional territories of the people of the Treaty 7 region in southern Alberta. The City of Calgary is also home to Métis Nation of Alberta, Region III.

Course Format

This year-long course meets for two hours biweekly. It will be held virtually from September to October and in person from November onwards.

Prerequisites

Admission to the Graduate Program in Clinical Psychology/Psychology or by permission of the Instructor.

Required Texts and Readings

- Kazdin, A. E. (2017). *Research design in clinical psychology* (5th ed.). New York: Pearson. Print and digital formats of this text are available through the University of Calgary bookstore.
- Other readings will be assigned.
- The following website provides an overview of reporting guidelines for various types of studies: <http://www.equator-network.org>

Assessment Methods

- Attendance and participation (40%)
- Article critique midterm (25%) – essay format, content from text/readings/lectures, open book
- Research presentation (25%)
- Research feedback (10%)

Attendance and participation (40%)

Attendance at each class and participation in discussions/research feedback is important for success, and to receive credit, for this course. Students are encouraged to make every effort to attend all classes, and are asked to notify the instructor in advance if they must miss a class. As part of your attendance and participation mark, you will be asked to complete the following two in-class, group exercises:

In Class Group Exercise: Part I – September 21

Students will be given research articles to read prior to coming to class. Drawing on the course readings, you will identify the major strengths and limitations of the research, and distinguish these from less significant issues. Please consider theoretical, ethical, methodological, and statistical issues when critiquing the articles. We will discuss your article critiques in class.

In Class Group Exercise: Part II – October 5

Students will be asked to choose an interesting research question/hypothesis that follows from one of the articles and extends the research in an important way (i.e., not just “more participants” for “more power”). Using one of the designs in Kazdin, describe a follow-up study to address this research question/hypothesis. Please justify why you chose this design over others. For each design, Kazdin highlights issues that need to be considered for implementation (e.g., sampling, rationale for control group, selection of measures, etc.). Please address these issues in the study you are proposing. Assume that you have unlimited resources. Finally, no study is perfect (even in our imaginary world of unlimited resources)! Describe the major limitations of your study. We will discuss your follow-up study in class.

Article critique midterm (25%) – January 11 (due at 10:50am MST)

Students will be given an article to critique as an in-class, open-book exercise, noting both strengths and weaknesses of the research. Students will choose one article from a list of three articles, each relating to different subfield of psychology. Students will be asked to critique the article on theoretical, methodological, and statistical grounds, suggesting alternative strategies where possible to improve the research.

Exams in this course are open book. For this course, an open book exam means that the use of class notes and the textbook is permitted. The use of online resources and calculators is permitted. Students may not

communicate with others about course material or the exam either in person or electronically during exams.

Research presentation (25%) – January 25-March 28

Students will each give a 30-minute presentation on their thesis research, following the outline you will be given. Following your presentation, you will be asked questions about your research and you will receive written feedback from the class. I will also provide you with feedback on each of the following criteria:

The general criteria for marking your presentation are as follows (note that criteria/weights for criteria will be different for M.Sc. vs. PhD students, reflecting stages of the research):

- Organization and clarity of content
- Knowledge of the extant literature (including relevant theory) and your study as an extension of this
- Your ability to demonstrate the significance of the research and the rationale for your study
- Critical evaluation of your methodology (strengths and weaknesses) and suggestions for improvement (e.g., in an ideal world with vast resources of time and money)
- Your ideas for future research
- Knowledge translation strategies
- Implications of your research (e.g., clinical, policy)
- Your ability to address questions and comments

Feedback on research presentation (10%) - January 25-March 28

Each student in the class will be responsible for providing written feedback (both strengths and areas of growth) on at least one research presentation and summarizing the oral feedback from others. Feedback should pertain directly to the methodological issues we have discussed in class. This feedback should be typed and sent by e-mail to the course instructor, who will review it and disseminate it to the presenter. This feedback is due to the instructor one week after the oral presentation (R 10:50am MST). Late assignments will not be accepted without instructor approval.

University of Calgary Academic Integrity Policy

Academic integrity is the foundation of the development and acquisition of knowledge and is based on values of honesty, trust, responsibility, and respect. We expect members of our community to act with integrity.

Research integrity, ethics, and principles of conduct are key to academic integrity. Members of our campus community are required to abide by our institutional code of conduct and promote academic integrity in upholding the University of Calgary's reputation of excellence. It is your responsibility to ensure that you have read and are familiar with the student academic misconduct policy:

<https://www.ucalgary.ca/legal-services/sites/default/files/teams/1/Policies-Student-Academic-Misconduct-Policy.pdf>.

Faculty of Graduate Studies Grading System

A+ = Outstanding performance, A = Excellent performance, A- = Very good performance

B+ = Good performance, B = Satisfactory performance, B- = Minimum pass

C+: All grades of "C+" or lower are indicative of failure at the graduate level and cannot be counted toward Faculty of Graduate Studies course requirements. Individual programs may require a higher passing grade.

Grading Scale

A+	96-100%	B+	80-84%	C+	67-71%	D+	54-58%
A	90-95%	B	76-79%	C	63-66%	D	50-53%
A-	85-89%	B-	72-75%	C-	59-62%	F	0-49%

It is at the instructor's discretion to round off either upward or downward to determine a final grade when the average of term work and final examinations is between two letter grades. To determine final letter grades, final percentage grades will be rounded up or down to the nearest whole percentage (e.g., 89.5% will be rounded up to 90% = A but 89.4% will be rounded down to 89% = A-).

Tentative Lecture Schedule

Ideally in table format with date of class, topics to be covered, and chapters/readings to be read. Due dates for tests/exams and assignments should be included in this schedule as well.

Date	Topics	Readings
T Sep 5	Start of classes	
R Sep 7	Introduction: Are these results valid? Is science important? How do I find a research idea? The basics: Threats to validity	Kazdin Ch. 1 to 4 Lilienfeld, S. O., et al. (2014). Science Versus Pseudoscience. <i>The Encyclopedia of Clinical Psychology</i> , 1-7. PDF APA (2010). <i>Preparing manuscripts for publication in psychology journals</i> . Washington D.C.: American Psychological Association. PDF <u>Optional:</u> Barnett, A. (2017). Comment: Research needs more competence, less 'excellence'. <i>Nature</i> , 543(7646), S29-S29. PDF Chambers, C. T. (2000). "Where do I start!?: Getting going on your thesis. <i>Psynopsis</i> , 22(4), 24. PDF

		Chambers, C. T. (2002). How to succeed as a student in Psychology. <i>Psynopsis</i> , 24(3), 14. PDF
R Sep 14	Last day to drop a class without financial penalty	
F Sep 15	Last day to add or swap a course	
R Sep 21	<p>Conducting and evaluating research: Part I Experimental & observational designs Assessment/Measurement Reporting results</p> <p><u>In Class Group Exercise: Part I</u></p>	<p>Kazdin Ch. 5-8, 10-12</p> <p>Neighbours, C. & Lee, C. M. (2006). A brief guide to manuscript reviewing. <i>The Behavior Therapist</i>, 29 (4), 74-76. PDF</p> <p>Appelbaum, M. et al. (2018). Journal article reporting standards for quantitative research in Psychology: The APA Publications and Communications Board task force report. <i>American Psychologist</i>, 73, 3-25. PDF</p> <p>Montgomery, P. et al. (2018). Reporting randomized trials of social and psychological interventions: the CONSORT-SPI 2018 extension. <i>Trials</i>, 19, 407. PDF</p> <p><u>Optional:</u> See the following list of reporting guidelines for a variety of research designs: Equator Network</p> <p>Schulz, K. F. et al. (2010). CONSORT 2010 Statement: updated guidelines for reporting parallel group randomized trials. <i>BMJ</i>, 340, 698-702. PDF</p>
F Sep 22	Fee payment deadline for Fall Term full and half courses.	
S Sep 30	University Closed National Day for Truth and Reconciliation	
R Oct 5	<p>Conducting and evaluating research: Part II Data Evaluation Patient-Oriented Research Pragmatic Clinical Trials</p> <p><u>In Class Group Exercise: Part II</u></p>	<p>Kazdin Ch. 13-14</p> <p>Johnston, J. N., et al. (2021). Patient oriented research in mental health: matching laboratory to life and beyond in Canada. <i>Research Involvement and Engagement</i>, 7(1), 1-11. PDF</p> <p>Drazen, J. M. et al. (2016). The changing face of clinical trials: pragmatic trials. <i>New Engl J Med</i>, 375, 454-463. PDF</p>

		<p><u>Optional:</u> Sacristán, J.A. (2013). Patient-centered medicine and patient-oriented research: Improving health outcomes for individual patients. BMC Medical Informatics and Decision Making, 13(1):6. PDF</p> <p>Ghisoni, M. et al. (2017). Priority setting in research: User led mental health research. Research Involvement and Engagement. 3(1):4. PDF</p>
M Oct 9	Thanksgiving Day, University closed (except Taylor Family Digital Library, Law, Medical, Gallagher and Business Libraries). No lectures.	
R Oct 19	Data interpretation (effect sizes, negative/n.s. effects) Ethical issues and guidelines Scientific integrity	Kazdin Ch. 15-17 <u>Optional:</u> Lilienfeld, S. O., & Strother, A. N. (2020). Psychological measurement and the replication crisis: Four sacred cows. Canadian Psychology. PDF Wasserstein, R. L., Schirm, A. L., & Lazar, N. A. (2019). Moving to a world beyond “p< 0.05”. The American Statistician, 73, 1-9. PDF
R Nov 2	Knowledge translation: Science Communication Implementation Science <u>Article analysis</u>	Kazdin Ch. 18 and 19 Knowledge Translation at CIHR: Link Caulfield, T. (2021). Science and the Uncertainty Dance. Link Tumlin, T. R. (2006). Ten things psychologists should know when talking to the press. The Behavior Therapist, 29(4), 69-71, 74. PDF <u>Optional:</u> Best Practices in Science Communication: Link How to Work With the Media: APA Bauer, M.S., et al. (2015). An introduction to implementation science for the non-specialist. BMC Psychology, 3:32. PDF

		<p>Graham, I.D., et al. (2006). Lost in knowledge translation: Time for a map? The Journal of Continuing Education in the Health Professions, 26, 13-24. PDF</p> <p>Graham, I.D., et al. (2007). Some theoretical underpinnings of knowledge translation. Academic Emergency Medicine, 14, 936-941. PDF</p>
S Nov 11	Remembrance Day (Observed). University Closed (except Taylor Family Digital Library, Law, Medical, Gallagher and Business Libraries). No lectures.	
Nov 12-18	Term Break No Classes	
R Nov 30	<p>Open science: Can it help with the replicability crisis?</p> <ul style="list-style-type: none"> - Pre-registration - Open data, open code - Pre-print - Registered reports <p>Article analysis</p>	<p>Open Science Collaboration (2015). Estimating the reproducibility of psychological science. Science, 349 (6521). PDF</p> <p>Kathwalla, U-K et al., (2021). Easing into open science: A guide for graduate students and their advisors. Collabra: Psychology. PDF</p> <p>Cruwell, S et al., (2018). 7 easy steps to open science: An annotated reading list. PsyArXiv Preprints. PDF</p>
T Dec 5	Fall Term lectures end. Last day to withdraw with permission from Fall Term half courses.	
W Dec 6	Last day to withdraw with permission from Fall Term half courses	
Dec 9-20	Fall Final Exam Period.	
Dec 21-Jan 7	Intersemester break.	
M Jan 8	Start of classes.	
R Jan 11	Midterm: Article critique, in class.	
R Jan 25	Research presentations	
R Feb 8	Research presentations	
Feb 18-24	Term break, no classes.	
R Mar 7	Research presentations	
R Mar 21	Research presentations	
R Apr 4	Research presentations	
T Apr 9	End of classes	

Absence from a Test/Exam

Makeup tests/exams are **NOT** an option without the approval of the instructor. Students who miss a test/exam have up to 48 hours to contact the instructor to ask for a makeup test/exam. It's the instructor's discretion if they will allow a make-up exam. Students who do not schedule a makeup test/exam with the instructor within this 48-hour period forfeit the right to a makeup test/exam. At the instructor's discretion, a makeup test/exam may differ significantly (in form and/or content) from a regularly scheduled test/exam. Once approved by the instructor a makeup test/exam must be written

within 2 weeks of the missed test/exam on a day/time scheduled by the instructor. If a student cannot write their final exam on the date assigned by the Registrar's Office, they need to apply for a deferred exam <https://www.ucalgary.ca/registrar/exams/deferred-exams>.

Travel During Exams

Consistent with University regulations, students are expected to be available to write scheduled exams at any time during the official December and April examination periods. Requests to write a make-up exam because of conflicting travel plans (e.g., flight bookings) will NOT be considered by the department. Students are advised to wait until the final examination schedule is posted before making any travel arrangements. If a student cannot write their final exam on the date assigned by the Registrar's Office, they need to apply for a deferred exam <https://www.ucalgary.ca/registrar/exams/deferred-exams>. Students with an exceptional extenuating circumstance (e.g., a family emergency) should contact the Department of Psychology (psyugrd@ucalgary.ca).

Reappraisal of Graded Term Work <http://www.ucalgary.ca/pubs/calendar/current/i-2.html>

Reappraisal of Final Grade <http://www.ucalgary.ca/pubs/calendar/current/i-3.html>

Academic Accommodations

Students seeking an accommodation based on disability or medical concerns should contact Student Accessibility Services; SAS will process the request and issue letters of accommodation to instructors. For additional information on support services and accommodations for students with disabilities, visit www.ucalgary.ca/access/. Students who require an accommodation in relation to their coursework based on a protected ground other than disability should communicate this need in writing to their Instructor. The full policy on Student Accommodations is available at <http://www.ucalgary.ca/policies/files/policies/student-accommodation-policy.pdf>.

Academic Misconduct

For information on academic misconduct and its consequences, please see the University of Calgary Calendar at <http://www.ucalgary.ca/pubs/calendar/current/k.html>.

Instructor Intellectual Property

Course materials created by professor(s) (including course outlines, presentations and posted notes, labs, case studies, assignments and exams) remain the intellectual property of the professor(s). These materials may NOT be reproduced, redistributed or copied without the explicit consent of the professor. The posting of course materials to third party websites such as note-sharing sites without permission is prohibited. Sharing of extracts of these course materials with other students enrolled in the course at the same time may be allowed under fair dealing.

Copyright Legislation

All students are required to read the University of Calgary policy on Acceptable Use of Material Protected by Copyright (www.ucalgary.ca/policies/files/policies/acceptable-use-of-material-protected-by-copyright.pdf) and requirements of the copyright act (<https://laws-lois.justice.gc.ca/eng/acts/C-42/index.html>) to ensure they are aware of the consequences of unauthorized sharing of course materials (including instructor notes, electronic versions of textbooks etc.). Students who use material protected by copyright in violation of this policy may be disciplined under the Non-Academic Misconduct Policy.

Freedom of Information and Protection of Privacy

Student information will be collected in accordance with typical (or usual) classroom practice. Students' assignments will be accessible only by the authorized course faculty. Private information related to the individual student is treated with the utmost regard by the faculty at the University of Calgary.

Student Support and Resources

<https://www.ucalgary.ca/registrar/registration/course-outlines>

Important Dates

The last day to drop this course with no "W" notation and **still receive a tuition fee refund** is **Thursday, September 14th, 2023**. Last day add/swap a course is **Friday, September 15th, 2023**. The last day to withdraw from this course is **Wednesday, December 6th, 2023**.

<https://www.ucalgary.ca/pubs/calendar/current/academic-schedule.html>