

**Faculty of Health Department
of Psychology PSYC 4180 6.0
Section F
CRITICAL THINKING IN
PSYCHOLOGY
Wednesdays/ 8:30 am – 11:30 am
ONLINE ONLY
Fall/Winter 2020-21**

Instructor and T.A. Information

Instructor: Michaela Hynie
Office: 849 Kaneff Tower
Office Phone: ext. 22996
Office Hours: Mondays 11am to 1 pm or by appt
Email: mhynie@yorku.ca

T.A.: Michael Ruderman
Email: ruderman@yorku.ca
Office hours: In class

Course Prerequisite(s): Course prerequisites are strictly enforced

- HH/PSYC 1010 6.00 (Introduction to Psychology), with a minimum grade of C.
- HH/PSYC 2020 6.00 (Statistical Methods I and II) or substitutes
- HH/PSYC 2030 3.00 (Introduction to Research Methods) or substitutes
- Students must be in an Honours program in Psychology and have completed at least 84 credits (excluding (EDUC) education courses)

Course Credit Exclusions

Please refer to [York Courses Website](#) for a listing of any course credit exclusions.

Required Texts:

- Weekly readings accessible from the course [eClass](#)

Course Website: [eClass](#)

Course Description

In this course, students will develop and practice critical thinking skills required to become responsible and analytical consumers of research in psychology. This course will include lectures, discussion, in-class workshops, peer review sessions, and student presentations. This course will be offered entirely on-line for the full academic year, using a combination of synchronous (live and simultaneous) and asynchronous (recorded and/or accessed at different times) activities.

Program Learning Outcomes

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

1. Demonstrate ability to think critically about applications of psychological findings reported in the media.

2. Demonstrate knowledge of variety of ways to express psychological findings in everyday life.
3. Critically identify myths or stereotypes in common discourse.
4. Recognize limits of conclusions based on inferential statistics
5. Demonstrate an ability to determine which discourses, questions and voices are missing from research

Specific Learning Objectives

Demonstrate the ability to collect, describe, understand, and think critically about research questions, results and inference, and how they are communicated in both scientific journals and in the media.

Demonstrate ability to gather, interpret, evaluate and integrate research from distinct (and sometimes conflicting) sources to arrive at an informed opinion.

Effectively communicate scientific research and informed conclusions on research in a range of communication media for a general public audience understanding level.

Demonstrate understanding of the strengths and limitations of different communication media and use this understanding to communicate science within them.

Demonstrate the ability to evaluate credibility of evidence using reason and logic.

Course Requirements and Assessment:

Details of assignments are available on the class website

Assessment	Date of Evaluation	Weighting
Assignment 1: Myth presentation	September 30	10%
Assignment 2: Who gets left out?	November 4	10%
Assignment 3: Statistics gone wrong	December 2	10%
Assignment 4: Qualitative bias assignment	January 27	10%
Assignment 5: Clear writing summary	February 24	10%
Assignment 6: Infographic presentations	March 24	5%
Assignment 7: Explain the debate	April 7	25%
Group Discussion Facilitation	Throughout the course	10%
Participation	Throughout the course	10%
Total		100%

*** Assignments are due at the beginning of class.**

Attendance Policy

Attendance is not mandatory but participation is. This is a capstone seminar course. Participation is evaluated based on participation in class activities, completion of in-class reflections and your contributions to class/discussion group discussions.

Late Work/Missed Tests or Exams

Late assignments will be accepted up to one week after the deadline including weekend days. If your assignment is late, you will be deducted a late penalty of 5% per day, including weekend days. Late assignments will not be accepted after one week of the missed deadline.

Missed in-class participation points and group discussion facilitations cannot be made up.

Students with a documented reason for missing a deadline, such as illness, compassionate grounds,

etc., which is confirmed by supporting documentation ([Attending Physician Statement](#)), may request accommodation from the Course Instructor. Further extensions or accommodation will require students to submit a formal petition to the Faculty.

If you are missing a deadline due to illness, compassionate grounds, etc., you must contact me (mhynie@yorku.ca) within 48 hours of missing the deadline.

Important New Information Regarding Missed Tests

For any missed tests or late assignments, students MUST complete the on-line form: <http://psychology.apps01.yorku.ca/machform/view.php?id=16179>, which will be received and reviewed in the Psychology undergraduate office.

Failure to complete the form within 48 hours of the original deadline will result in a grade of zero for the test/assignment.

Add/Drop Deadlines

For a list of all important dates please refer to: [Fall/Winter 2020-2021 - Important Dates](#)

	F A L L (F)	Y E A R (Y)	W I N T E R (W)
Last date to add a course without permission of instructor (also see Financial Deadlines)	Sept. 22	Sept. 22	Jan. 25
Last date to add a course with permission of instructor (also see Financial Deadlines)	Oct. 6	Oct. 27	Feb. 8
Drop deadline: Last date to drop a course without receiving a grade (also see Financial Deadlines)	Nov. 6	Feb. 5	Mar. 12
Course Withdrawal Period (withdraw from a course and receive a grade of “W” on transcript – see note below)	Nov. 7- Dec. 8	Feb. 6 - Apr. 12	Mar. 13- Apr. 12

***Note:** *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 [Information about the Senate Policy on Academic Honesty](#).

It is recommended that you review Academic Integrity using the [Academic Integrity toolkit at SPARK](#)

Test Banks

The offering for sale of, buying of, and attempting to sell or buy test banks (banks of test questions and/or answers), or any course specific test questions/answers is not permitted in the Faculty of Health. Any student found to be doing this may be considered to have breached the Senate Policy on Academic Honesty. In particular, buying and attempting to sell banks of test questions and/or answers may be considered as “Cheating in an attempt to gain an improper advantage in an academic evaluation” (article 2.1.1 from the Senate Policy) and/or “encouraging, enabling or causing others” (article 2.1.10 from the Senate Policy) to cheat.

Electronic Devices During a Test/Examination

Electronic mobile devices of any kind are not allowed during a test or examination. Students are required to turn off and secure any electronic mobile device in their bag which is to be placed under the chair while a test/exam is in progress. Any student observed with an electronic device during a test/exam may be reported to the Undergraduate Office for a potential breach of 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 [York University Accessibility Hub](#) is your online stop for accessibility on campus. The Accessibility Hub provides tools, assistance and resources.

Policy: York University shall make reasonable and appropriate accommodations and adaptations in order to promote the ability of students with disabilities to fulfill the academic requirements of their programs.

The nature and extent of accommodations shall be consistent with and supportive of the integrity of the curriculum and of the academic standards of programs or courses. Provided that students have given sufficient notice about their accommodation needs, instructors shall take reasonable steps to accommodate these needs in a manner consistent with the guidelines established hereunder.

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 4180 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.

Copying this material for distribution (e.g. uploading material to a commercial third-party website) may lead to a violation of Copyright law. [Intellectual Property Rights Statement](#).

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 90, B+ = 75 to 79, etc.)

(For a full description of York grading system see [York Academic Information—Grades and Grading Schemes](#))

Fall 2019 Weekly Class Readings

Weekly class readings outside the required textbook can be found on the course [eClass](#) site. Class meetings will include recorded and live lectures and guest lectures, Group Discussion Facilitations, and assignment workshop time. Office hours will also be held during class time

Week & Date	Topic	Readings	Due
Week 1: September 9	Scholar Strike:	Teach-ins at scholarstrike.ca Holder, J. & Harris, K. (2020). Where calling the police isn't the only option. Bloomberg CityLab Ontario Human Rights Commission (2018). A collective impact: Interim report on the inquiry into racial profiling and racial discrimination of Black persons by the Toronto Police Service	
Week 2: September 16	What do we mean by critical thinking?	Introduction to the syllabus and the technology Using technology and participating in class Levy, N. (2017). Nudges in a post-truth world. <i>The Journal of Medical Ethics</i> , 43, 495-500. Dwyer, C. (2017). What is critical thinking? Definitions and conceptualizations. In <i>Critical thinking: Conceptual perspectives and practical guidelines</i> (pp. 57-83). Cambridge: Cambridge University Press.	Discussion topic 1: What is critical thinking?
Week 3: September 23	Confirmatory bias inside psychology and out	The 7 Deadly Sins of Psychology by Chris Chambers—Chapter 1: The sin of bias Hughes, S., Lyddy, F., & Lambe, S. (2013). Misconceptions about psychological science: A review. <i>Psychology Learning & Teaching</i> , 12(1), 20-31. Skitka, L. J. (2020). An optimistic take on avoiding liberal (and other sources of) bias. <i>Psychological Inquiry</i> , 31, 88-89.	Discussion 2: What motivates myths and beliefs?
Week 4: September 30	Describe some common myths!	5 minutes, 5 slides: Describe common myths in psychology	Assignment 1: Myths and how they are supported
Week 5: October 7	Who gets left out?	Guest Lecture, Dr. Darius Gishoma Henrich, J., Heine, S., J., & Norenzayan, A. (2010). The weirdest people in the world? <i>Behavioral and Brain Sciences</i> , 33(2/3), 1-75 Roberts, S. O., Bareket-Shavit, C., Dollins, F. A., Goldie, P. D., & Mortenson, E. (2020). Racial inequality in psychological research: Trends of the past and recommendations for the future. <i>Perspectives on Psychological Science</i> , 1-15. Nielsen, M., Haun, D., Kärtner, J., & Legare, C. H. (2017). The persistent sampling bias in developmental psychology: A call to action. <i>Journal of Experimental Child Psychology</i> , 162, 31-38.	Discussion topic 3: Who is missing and why does that matter?
February 17	READING WEEK		

Week 6: February 24	Visualize this...	Art Based Research, Guest lecture: Mike Ruderman Designing infographics, Guest lecture: Jenna-Louise Palmer-Dyer Leavy, P. (2010). A/r/t: A poetic montage. <i>Qualitative Inquiry</i> , 16(4), 240-243.	Assignment 5: Clear writing summary
Week 7 March 3	The Sin of Bean Counting	The 7 Deadly Sins of Psychology by Chris Chambers – Chapter 7 Tafreshi, D., Slaney, K., L., & Neufeld, S. D. (2016). Quantification in psychology: Critical analysis of an unreflective practice. <i>Journal of Theoretical and Philosophical Psychology</i> , 36(4), 233-249	Discussion topic 10: When quantitative, when qualitative?
Week 8: March 10	Working together	Community Based Research, Guest Lecture Collins, S. E., Clifasefi, S. L., Stanton, J., The LEAP Advisory Board, Straits, K. J. E., Gil-Kashiwabara, E., Rodriguez Espinosa, P., Nicasio, A. V., Andrasik, M. P., Hawes, S. M., Miller, K. A., Nelson, L. A., Orfaly, V. E., Duran, B. M., & Wallerstein, N. (2018). Community-based participatory research (CBPR): Towards equitable involvement of community in psychology research. <i>American Psychologist</i> , 73(7), 884–898.	Discussion topic 11: Collaborative science, why not?
Week 9 March 17	Flex week	Office hours and in-class meetings	
Week 10: March 24		Assignment 6: Presenting and evaluating infographics	
Week 11: November 25	Stats support	In class statistics support	
Week 12: December 2	Bias in neuroscience	Resnick, B. (September 9, 2016). There’s a lot of junk fMRI research out there. Here’s what top neuroscientists want you to know. <i>Vox</i> Bennet, C. M., Baird, A., A., Miller, M. B., & Wolford, G., L. (2009). Neural Correlates of Interspecies Perspective Taking in the Post- Mortem Atlantic Salmon: An Argument For Proper Multiple Comparisons Correction Vul, E., Harris, C., Winkielman, P., & Pashler, H. (2009). Puzzlingly high correlations in fMRI studies of emotion, personality, and social cognition. <i>Perspectives on Psychological Science</i> , 4(3), 274-290.	Discussion topic 6: Why do we trust neuroscience? Assignment 3: Statistics gone wrong...
WINTER BREAK			
Week 1: January 13	Bias in Qualitative Research	Roulston, K. & Shelton, S. A. (2015). Reconceptualizing bias in teaching qualitative research methods. <i>Qualitative Inquiry</i> , 21(4), 332-342. Pratt, M. G., Kaplan, S., & Wittington, R. (2020). The tumult of transparency: Decoupling transparency from replication in establishing trustworthy qualitative research. <i>Administrative Science Quarterly</i> , 65(1), 1-19.	Discussion topic 7: Reflexivity and identity in psychological research
Week 2: January 20	The Sin of Corruptability	The 7 Deadly Sins of Psychology by Chris Chambers—Chapter 5 Why do scientists commit misconduct? Interview with Cristy McGoff, Director of Research Integrity at UNC Greensboro	Discussion topic 8: Why and how does fraud happen?

		Green, C. D., Abbas, S., Belliveau, A., Beribisky, N., Davidson, I. J., DiGiovanni, J., Heidari, C., Martin, S. M., Oosenbrug, E., & Wainwright, L. M. (2018). Statcheck in Canada: What proportion of CPA journal articles contain errors in the reporting of p-values? <i>Canadian Psychology/Psychologie canadienne</i> , 59(3), 203–210.	
Week 3: January 27	The Sins of Hoarding and Internment	The 7 Deadly Sins of Psychology by Chris Chambers—Chapter 4 The 7 Deadly Sins of Psychology by Chris Chambers – Chapter 6 Fox, A. & Brainard, J. (2019). University of California boycotts publishing giant Elsevier over journal costs and open access. <i>Science</i> , February 28, 2019.	Assignment 4: Qualitative bias Discussion topic 9: Who uses research?
Week 4: September 30	Describe some common myths!	5 minutes, 5 slides: Describe common myths in psychology	Assignment 1: Myths and how they are supported
Week 5: October 7	Who gets left out?	Guest Lecture, Dr. Darius Gishoma Henrich, J., Heine, S., J., & Norenzayan, A. (2010). The weirdest people in the world? <i>Behavioral and Brain Sciences</i> , 33(2/3), 1-75 Roberts, S. O., Bareket-Shavit, C., Dollins, F. A., Goldie, P. D., & Mortenson, E. (2020). Racial inequality in psychological research: Trends of the past and recommendations for the future. <i>Perspectives on Psychological Science</i> , 1-15. Nielsen, M., Haun, D., Kärtner, J., & Legare, C. H. (2017). The persistent sampling bias in developmental psychology: A call to action. <i>Journal of Experimental Child Psychology</i> , 162, 31-38.	Discussion topic 3: Who is missing and why does that matter?
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Week 9 March	Flex week	Office hours and in-class meetings	

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Week 10: March 24		Assignment 6: Presenting and evaluating infographics	
Week 11: March 31	Evaluating “Higher Ed”	<p>Page, D. (2020). The academic as consumed and consumer. <i>Journal of Education Policy</i>, 35(5), 585-601.</p> <p>Lian Niu, L., Behar-Horenstein, L.S., & Garvan, C. W. (2013). Do instructional interventions influence college students’ critical thinking skills? A meta-analysis. <i>Educational Research Review</i>, 9, 114-128.</p>	Discussion topic 12: Thinking about what the university is teaching us (and how do we assess it?)
Week 12: April 7	Redemption	<p>The 7 Deadly Sins of Psychology by Chris Chambers – Chapter 8</p> <p>Fine, M. (2006). Bearing witness: Methods for researching oppression and resistance---a textbook for critical research. <i>Social Justice Research</i>, 19(1), 84-108.</p> <p>Martin, D. H. (2012). Two-eyed seeing: A framework for understanding indigenous and non-indigenous approaches to indigenous health research. <i>CJNR</i>, 44(2), 20-42.</p>	Assignment 7: Explain the debate