# Faculty of Health

## **Department of Psychology**

# PSYC 4180 6.0 Section E: CRITICAL THINKING IN PSYCHOLOGY Tuesdays 11:30 am - 2:30 pm/Online via Zoom

Fall/Winter 2020-21

Land Acknowledgement: We recognize that many Indigenous nations have longstanding relationships with the territories upon which York University campuses are located that precede the establishment of York University. York University acknowledges its presence on the traditional territory of many Indigenous Nations. The area known as Tkaronto has been care taken by the Anishinabek Nation, the Haudenosaunee Confederacy, the Wendat, and the Métis. It is now home to many Indigenous Peoples. We acknowledge the current treaty holders and the Mississaugas of the Credit First Nation. This territory is subject of the Dish With One Spoon Wampum Belt Covenant, an agreement to peaceably share and care for the Great Lakes region.

**Course format:** Please note that this course will be delivered remotely via Zoom. You will need a stable internet connection and a device with which you are able to access the course for synchronous meetings which will take place each Wednesday from 11:30 to 2:30. **You are required to attend synchronous meetings each Wednesday.** During these meetings, you will be required to interact with your peers during group discussions for participation.

#### **Instructor and T.A. Information**

Instructor: Julie Conder

Office Hours: Mondays 11:30 am -12:30 pm or by appointment

Email: conder@yorku.ca

T.A.: Chantelle Ivanski Office Hours: TBA

Email: civanski@vorku.ca

## 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

#### **Course Credit Exclusions**

Please refer to **York Courses Website** for a listing of any course credit exclusions.

Course website: Moodle

All course materials will be available on the course moodle site, unless otherwise indicated by the instructor. The site will be your central access point for course materials.

## **Course Description**

In this course, students will develop and practice critical thinking skills required to become responsible and analytical consumers of concepts and research in psychology. This course will include weekly synchronous zoom sessions.

## **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.

## **Specific Learning Objectives**

Demonstrate the ability to collect, describe, understand, and think critically about research 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.

## **Required Texts**

- 1. 7 Deadly Sins of Psychology by Chris Chambers
- 2. Additional weekly research articles, media readings and/or podcasts provided on Moodle

## **Course Requirements and Assessment**

Assessment	Date of Evaluation (if known)	Weighting
Participation	Throughout the terms	30%
Group Discussion Facilitation	Throughout the terms	20%
Podcast	October 27	20%
Myth Buster Assignment	November 24	10%
PechaKucha	Throughout the terms	10%
#AcademicTwitter	March 30	10%
Total		100%

## \* Assignments are due at the start of class.

## **Description of Assignments**

All assignment descriptions are posted on Moodle.

## **Class Format and Attendance Policy**

This is a synchronous course. Students are expected to attend through zoom and participate in synchronous and online discussions. Participation grades will be equally based on synchronous class attendance, participation (during class or on flip card in leui) and weekly reflections.

## **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 - <u>Grading Scheme for 2020-21</u>

## Missed Tests/Midterm Exams/Late Assignment:

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 (25% off).

For any missed quiz or late assignment, students MUST complete the following online form which will be received and reviewed in the Psychology undergraduate office. At this time, due to COVID-19 an Attending Physician's Statement (APS) is not required, however, a reason for missing an evaluated component in the course must be provided. HH PSYC: Missed Tests/Exams Form.

Failure to complete the form within 48 hours of the original deadline will result in a grade of zero for the missed quiz or late assignment.

#### Add/Drop Deadlines

For a list of all important dates please refer to: Fall/Winter 2020-21 Important Dates

	FALL (F)	YEAR (Y)	WINTER (W)
Last date to add a course <b>without permission</b> of	Sept. 22	Sept. 22	Jan. 25
instructor (also see Financial Deadlines)			
Last date to add a course <b>with permission</b> 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
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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	
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## **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 <u>Refund Tables</u>.

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 may <u>withdraw from a course</u> 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.

## **Electronic Device Policy**

This course will be delivered in an online format and therefore electronic devices (e.g., tablets, laptops) are 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 unauthorised source during an examination unless the tests/exams are open-book.

## **Academic Integrity for Students**

York University takes academic integrity very seriously; please familiarize yourself with <u>Information about the Senate Policy on Academic Honesty.</u>

It is recommended that you review Academic Integrity by completing the <u>Academic Integrity Tutorial</u> and <u>Academic Honesty Quiz</u>

#### **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.

## 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/

# 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: <a href="York University Academic Accommodation for Students with Disabilities Policy">York University Academic Accommodation for Students with Disabilities Policy</a>.

## **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. <u>Intellectual Property Rights Statement</u>.

## **Course Schedule/Format**

Weekly class "readings" can be found on the course <u>Moodle</u>. Class meetings will begin with Group Discussion Facilitations, followed by PechaKuchas.

\* Rolling deadlines: Meeting with your Professor and/or T.A. the week before your scheduled Group Discussion Facilitation day. It is your responsibility to complete this meeting in class for marks counted towards your assignments. This is your opportunity to get feedback to help you complete your assignments.

# Fall 2020 Weekly Schedule

Week & Date	Topic	Readings	Due
Week 1: September 15	Неууу	PSYC 4180 Syllabus	Group Discussion
		How to Meaningfully Participate in Class Discussions	Facilitation & Pecha Kucha Sign-Up (Google docs)
Week 2: September 22	Believe It, Or Not?	What is critical thinking? And do universities really teach it? by Martin Davies	Group Discussion Facilitation & Pecha Kucha Sign-Up (Google
		Educating for Democracy in a Partisan Age: Confronting the Challenges of Motivated Reasoning and Misinformation by Joseph Kahne and Benjamin Bowyer	docs)
		Reflective Judgment: Is this a key moderator for Critical Thinking? by Christopher Dwyer	
		Of Miracles by David Hume	
		No, you're not entitled to your opinion by Patrick Stokes	
		Recommended Reading: On Bullshit by Harry Frankfurt	1
Week 3: September 29	Bubbles	12 Common Biases that Affect How We Make Everyday Decisions: Make sure that your decisions that matter are not made based on bias by Christopher Dwyer	
		Drake's List of The Most Common Logical Fallacies	
		How to Escape Your Political Bubble for a Clearer View by Amanda Hess	
Week 4: October 6	Producing Scientific	Race Psychology between "Guilty Science" and "Innocent Politics" by Vlad Glăveanu	
	"Truth"	Psychology Is WEIRD: Western college students are not the best representatives of human emotion, behavior, and sexuality by Bethany Brookshire	
		YouTube Stats Review: How p-values help us test hypotheses: Crash Course Statistics #21	
		YouTube Research Methods Review: Psychological Research Crash Course Psychology #2	
		Science communication: could you explain it to your granny? by Russell Grossman	

Week 5: October 13		READING WEEK - NO CLASS	
Week 6: October 20	"The Sin of Bias"	Book: The 7 Deadly Sins of Psychology by Chris Chambers – Chapter 1	
		Why Most Published Research Findings Are False by John P. A. Ioannidis	
Week 7: October 27	"The Sin of Hidden	Book: The 7 Deadly Sins of Psychology by Chris Chambers – Chapter 2	Podcast Assignment
	Flexibility"	Estimating the reproducibility of psychological science by Open Science Collaboration	
Week 8: November 3	"The Sin of Unreliability"	Book: The 7 Deadly Sins of Psychology by Chris Chambers – Chapter 3	Podcast Peer Evaluations
		Podcast: Stereothreat by Dan Engber and Amanda Aronczyk	
Week 9: November 10	"The Sin of Data Hoarding"	Book: The 7 Deadly Sins of Psychology by Chris Chambers – Chapter 4	
		Podcast: When Great Minds Think Unalike: Inside Science's 'Replication Crisis' by Shankar Vedantam and Maggie Penman	
Week 10: November 17	"The Sin of Corruptibility"	Book: The 7 Deadly Sins of Psychology by Chris Chambers – Chapter 5	
		Statcheck in Canada: What Proportion of CPA Journal Articles Contain Errors in the Reporting of p-Values? by Christopher Green et al.	
Week 11: November 24		MENTAL HEALTH DAY - NO CLASS	Myth Buster Assignment
Week 12: December 1	"The Sin of Internment"	Book: The 7 Deadly Sins of Psychology by Chris Chambers – Chapter 6	
		University of California boycotts publishing giant Elsevier over journal costs and open access by Alex Fox and Jeffrey Brainard	
		Meta-analyses are no substitute for registered replications: a skeptical perspective on religious priming by Michiel van Elk	
Week 13: December 8	"The Sin of Bean Counting"	Book: The 7 Deadly Sins of Psychology by Chris Chambers – Chapter 7	
		The Scientific Paper is Obsolete by James Somers	]

# Winter 2021 Weekly Schedule

Week & Date	Topic	Readings	Due
Week 1: January 12		MENTAL HEALTH DAY - NO CLASS	* Zoom check-in for next week's Group Facilitation
Week 2: January 19	Positive Psychology	Podcast: 'Bright-Sided': When Happiness Doesn't Help with Barbara Ehrenreich	
		Happier? The history of a cultural movement that aspired to transform America by Daniel Horowitz	
		Positive Psychology and Bullshit: Is positive psychology indifferent to the truth? by Christopher Peterson	
Week 3:	Developmental	Complete the Grit Test	
January 26	Psychology	TED Talk: Grit – The power of passion and perseverance by Angela Lee Duckworth	
		What Shall We Do About Grit? A Critical Review of What We Know and What We Don't Know by Marcus Credé	
		The "marshmallow test" said patience was a key to success. A new replication tells us s'more by Brian Resnick	
Week 4:	Let's Talk	Ingesting Placebo by Elizabeth A. Wilson	
February 2		Lies, Damned Lies, and Medical Science by John Ioannidis	
		Statistically Controlling for Confounding Constructs Is Harder than You Think by Jacob Westfall and Tal Yarkoni	
		Recommended Readings:  1. Bell Let's Talk is more about marketing than mental health, Canadian researcher says by Bobby Hristova 2. Arbitrary Metrics: Implications for Identifying Evidence-Based Treatments by Alan E. Kazdin	
Week 5: February 9	Neuroscience, The New Phrenology?	There's a lot of junk fMRI research out there. Here's what top neuroscientists want you to know by Brian Resnick	
		Neural Correlates of Interspecies Perspective Taking in the Post- Mortem Atlantic Salmon: An Argument For Proper Multiple Comparisons Correction by Craig M. Bennett et al.	
		This Is Your Brain on Politics by Iacoboni et al.	
		Politics and the Brain – NYT Opinion Letter	

		This is Your Brain on Politics by Martha Farah – Neuroethics & Law Blog	
Week 6: February 16		READING WEEK - NO CLASS	
Week 7:	Nudge Theory	Podcast: Big Returns From Thinking Small by Stephen J. Dubner	
February 23		Bottomless Bowls: Why Visual Cues of Portion Size May Influence Intake by Brian Wansink, James E. Painter, and Jill North	
		A top Cornell food researcher has had 15 studies retracted. That's a lot by Brian Resnick and Julia Belluz	
		Wikipedia: Nudge Theory	
		Do people really want to be nudged towards healthy lifestyles? by Robert Sugden	
Week 8: March 2	What's identity got to do with it?	The Science Identity of College Students: Exploring the Intersection of Gender, Race, and Ethnicity by Zahra Hazari, Philip M. Sadler and Gerhard Sonnert	
		The world is relying on a flawed psychological test to fight racism by Olivia Goldhill	
		Perish not publish? New study quantifies the lack of female authors in scientific journals by Ione Fine and Alicia Shen	
		Feeling like a fraud: Helping students renegotiate their academic identities by Elizabeth Ramsey & Deana Brown	
Week 9: March 9	Evaluating "Higher Ed"	Gender Bias in Student Evaluations by Kristina M. W. Mitchell and Jonathan Martin	
		When Students are Consumers: Reflections on Teaching a First- Year Gender Course (That is Not a Gender Studies Course) by Julie E. Dowsett	
		The impact of grades on student motivation by Chamberlin et al.	
		Availability of cookies during an academic course session affects evaluation of teaching by Hessler et al.	
Week 10: March 16		FLEX DAY or NO CLASS (TBA)	

Week 11: March 23 Where is Psychology Going From Here?	Book: The 7 Deadly Sins of Psychology by Chris Chambers – Chapter 8		
	Quantification in Psychology: Critical Analysis of an Unreflective Practice by Tafreshi, Slaney and Neufeld		
Week 12: March 30	This is the beginning		#AcademicTwitter Assignment
			In-class Course Evaluations
Week 13: April 6		MENTAL HEALTH DAY – NO CLASS	