

**Faculty of Health
Department of Psychology
PSYC 4180 6.0 Section E
CRITICAL THINKING IN
PSYCHOLOGY**

**Tuesdays/11:30 am – 2:30 pm/RS 205
Fall/Winter 2019-20**

Instructor and T.A. Information

Instructor: Julie Conder
Office: 209 BSB
Office Phone: ext. 33282
Office Hours: Thurs 3 pm or by appt
Email: conder@yorku.ca

T.A.	Chantelle Ivanski
Email	civanski@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:

- The Seven Deadly Sins of Psychology: A Manifesto for Reforming the Culture of Scientific Practice by Chris Chambers
- Weekly readings accessible from the course [Moodle](#)

Course Website: [Moodle](#)

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.

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.

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 22	20%
Myth Buster Assignment	November 19	10%
Pecha Kucha	January 14 through March 24	10%
#AcademicTwitter	March 24	10%
Total		100%

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

Attendance Policy

Attendance is not mandatory. However, this is a capstone seminar course. Participation is evaluated based on class attendance, participation during class, and completion of in-class reflections. These points cannot be made up if you miss class.

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 (35% off).

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) which can be found at: <http://myacademicrecord.students.yorku.ca/pdf/attending-physicians-statement.pdf> 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 (conder@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 following online form which will be received and reviewed in the Psychology undergraduate office.

[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 test/assignment.

Add/Drop Deadlines

For a list of all important dates please refer to: [Fall/Winter 2019-20 - Important Dates](#)

	FAL L (F)	YEA R (Y)	WINT R (W)
Last date to add a course without permission of instructor (also see Financial Deadlines)	Sept. 17	Sept. 17	Jan. 19
Last date to add a course with permission of instructor (also see Financial Deadlines)	Oct. 1	Oct. 22	Feb. 3
Drop deadline: Last date to drop a course without receiving a grade (also see Financial Deadlines)	Nov. 8	Feb. 3	Mar. 13
Course Withdrawal Period (withdraw from a course and receive a grade of “W” on transcript – see note below)	Nov. 19- Dec. 3	Feb. 4 - Apr. 5	Mar. 14- Apr. 5

**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 by completing the [Academic Integrity Tutorial](#) and [Academic Honesty Quiz](#).

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 Statement.

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 the York University Undergraduate Calendar - [Grading Scheme for 2017-18](#))

Fall 2019 Weekly Class Readings

Weekly class readings outside the required textbook can be found on the course [Moodle](#) site. Class meetings will begin with Group Discussion Facilitations, followed by assignment workshop time.

* **Rolling deadlines:** Meeting with Professor or T.A. the week before your scheduled Group Discussion Facilitation day and PechaKucha day. It is your responsibility to complete these meetings in class during workshop time. These meeting will constitute a portion of your assignment grade. This is your opportunity to get feedback to help you complete your assignment.

Week & Date	Topic	Readings	Due
Week 1: September 10	Heyyy	PSYC 4180 Syllabus	
		How to Meaningfully Participate in Class Discussions	
Week 2: September 17	Believe It, Or Not?	What is critical thinking? And do universities really teach it? by Martin Davies	Group Discussion Facilitation Sign-Up (in class)
		Educating for Democracy in a Partisan Age: Confronting the Challenges of Motivated Reasoning and Misinformation by Joseph Kahne and Benjamin Bowyer	
		Reflective Judgment: Is this a key moderator for Critical Thinking? by Christopher Dwyer	
		Of Miracles by David Hume	
		<u>Recommended Reading:</u> On Bullshit by Harry Frankfurt	
Week 3: September 24	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 1	Producing Scientific "Truth"	Race Psychology between "Guilty Science" and "Innocent Politics" by Vlad Glăveanu	Meet with Prof, T.A., or Peer Mentor re: Podcast Assignment (in class)
		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 8	"The Sin of Bias"	Text: The 7 Deadly Sins of Psychology by Chris Chambers – Chapter 1	Meet with Prof, T.A., or Peer Mentor re: Podcast Assignment (in class)
		Why Most Published Research Findings Are False by John P. A. Ioannidis	
Week 6: October 15		READING WEEK – NO CLASS	
Week 7: October 22	"The Sin of Hidden Flexibility"	Text: The 7 Deadly Sins of Psychology by Chris Chambers – Chapter 2	Podcast Assignment
		Estimating the reproducibility of psychological science by Open Science Collaboration	
Week 8: October 29	"The Sin of Unreliability"	Text: The 7 Deadly Sins of Psychology by Chris Chambers – Chapter 3	
		Podcast: Stereothreat by Dan Engber and Amanda Aronczyk	
Week 9: November 5	"The Sin of Data Hoarding"	Text: The 7 Deadly Sins of Psychology by Chris Chambers – Chapter 4	Meet with Prof, T.A., or Peer Mentor re: Myth Buster Assignment (in class)
		Podcast: When Great Minds Think Unalike: Inside Science's 'Replication Crisis' by Shankar Vedantam and Maggie Penman	
Week 10: November 12	"The Sin of Corruptibility"	Text: The 7 Deadly Sins of Psychology by Chris Chambers – Chapter 5	Meet with Prof, T.A., or Peer Mentor re: Myth Buster Assignment (in class)
		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 19		MENTAL HEALTH DAY – NO CLASS	Myth Buster Assignment
Week 12: November 26	"The Sin of Internment"	Text: The 7 Deadly Sins of Psychology by Chris Chambers – Chapter 6	Myth Buster Assignment In-Class Share PechaKucha Presentation Day Sign-Up (in class)
		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 3	"The Sin of Bean Counting"	Text: The 7 Deadly Sins of Psychology by Chris Chambers – Chapter 7	PechaKucha Topic Sign-Up (in class) * Book Jan. 7 Group Discussion Facilitation & Pecha Kucha check-in with Prof. if presenting on Jan. 14
		The Scientific Paper is Obsolete by James Somers	

Winter 2020 Weekly Class Readings

Weekly class “readings” can be found on the course [Moodle](#). Class meetings will begin with individual PechaKuchas, followed by Group Discussion Facilitations, and assignment workshop time.

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

Week & Date	Topic	Readings	Due
Week 1: January 7		MENTAL HEALTH DAY - NO CLASS	* Online Google Hangouts check-in for next week's Group Facilitation and Pecha Kucha presentation
Week 2: January 14	Positive Psychology I	Youtube: The Secret - First 20 mins published by aSecretAgent	
		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: January 21	Positive Psychology II	Complete the Grit Test	
		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: January 28	Let's Talk: Placebos	Ingesting Placebo by Elizabeth A. Wilson	
		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	
Week 5: February 4	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 11	Nudge Theory	Podcast: Big Returns From Thinking Small by Stephen J. Dubner	
		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 7: February 18		READING WEEK – NO CLASS	
Week 8: February 25	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	Meet with Prof, T.A., or Peer Mentor re: #AcademicTwitter Assignment (in class)
		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 3	Evaluating "Higher Ed"	Gender Bias in Student Evaluations by Kristina M. W. Mitchell and Jonathan Martin	Meet with Prof, T.A., or Peer Mentor re: #AcademicTwitter Assignment (in class)
		When Students are Consumers: Reflections on Teaching a First-Year Gender Course (That is Not a Gender Studies Course) by Julie E. Dowsett	
		Availability of cookies during an academic course session affects evaluation of teaching by Hessler et al.	
Week 10: March 10		FLEX DAY or NO CLASS (TBA)	
Week 11: March 17	Where is Psychology Going From Here?	Text: 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 24	This is the beginning		#AcademicTwitter Assignment
			In-class Course Evaluations
Week 13: Mar. 31		MENTAL HEALTH DAY – NO CLASS	

