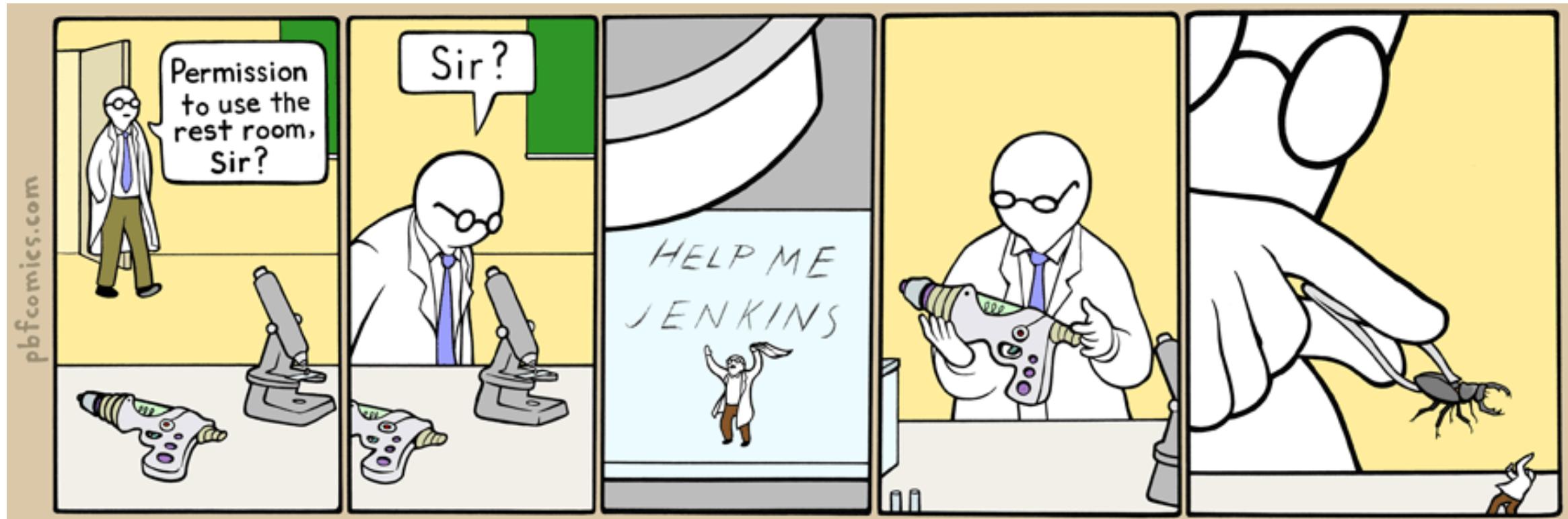


# PSYC301-001: Brain dysfunction and recovery!

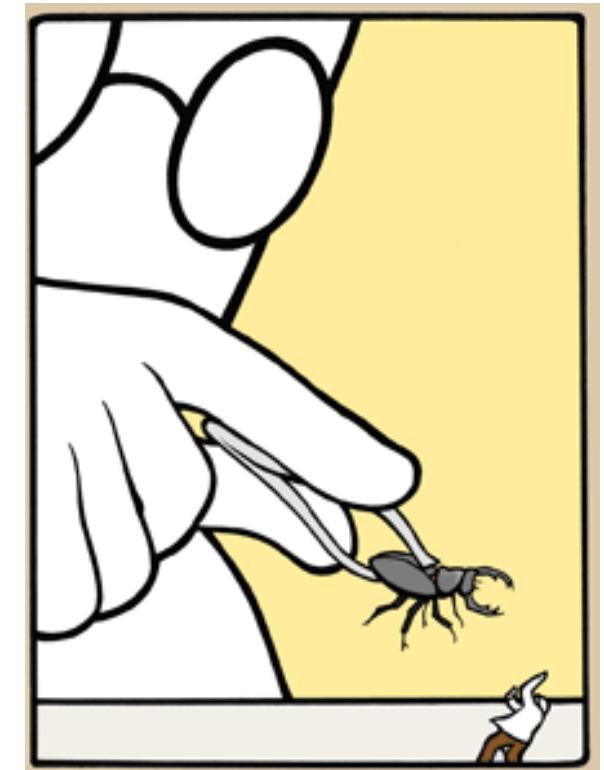
Jay Hosking, PhD

[jayhosking@psych.ubc.ca](mailto:jayhosking@psych.ubc.ca)



# Lecture overview

1. Who is your instructor?
2. How is this course designed?
3. What is PSYC301 about?
4. What are the evaluations and policies for the course?



# Jay who?

## 1. BSc Hons in Neuroscience, University of Toronto

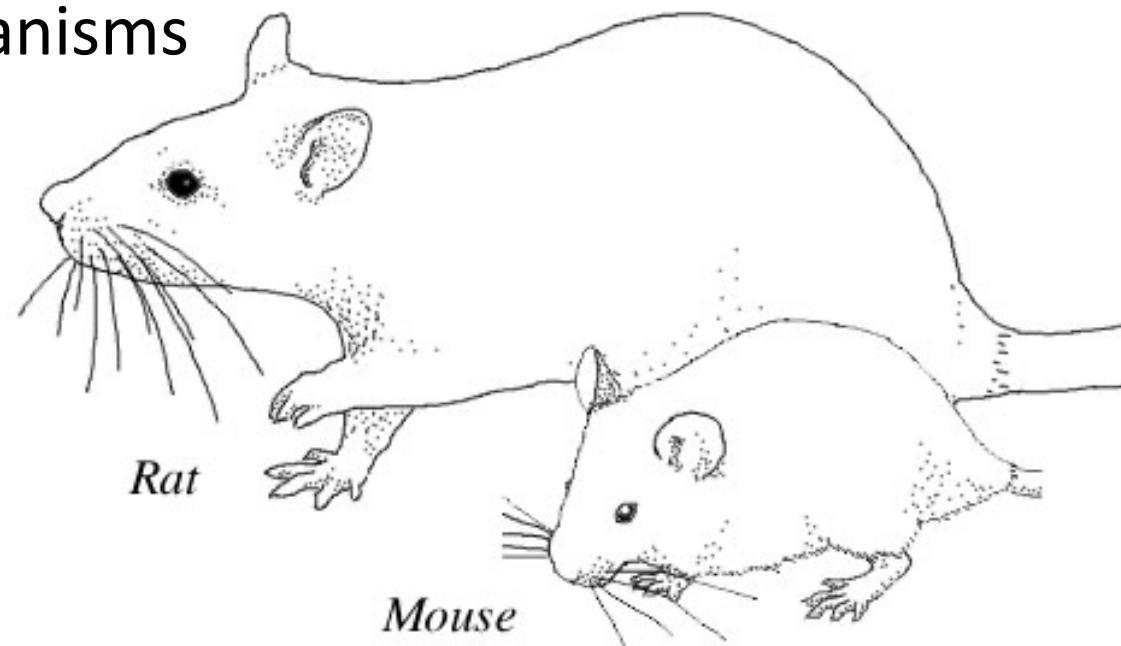
50:50 psychology:biology

Undergraduate research!

Sad music

Sleep mechanisms

Place cells



# Jay who?

## 2. PhD in Neuroscience, University of British Columbia

More research!

Individual differences in cost/benefit decision making

Esp. cognitive effort

Conferences, publications, etc.

PUZZLER: find the grad student!



Instructor

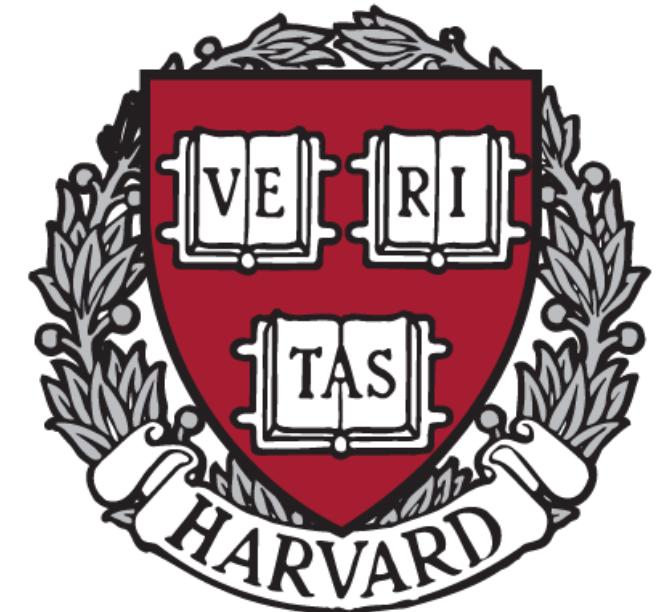
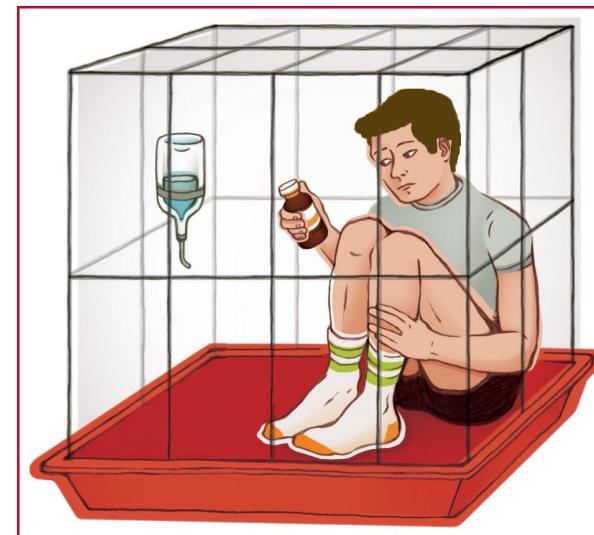
# Jay who?

## 3. Post-Doctoral Fellowship in Neuroscience, Harvard University

More research, conferences, publications, etc.

Individual differences in decision making

Psychopathy, impulsivity, special populations



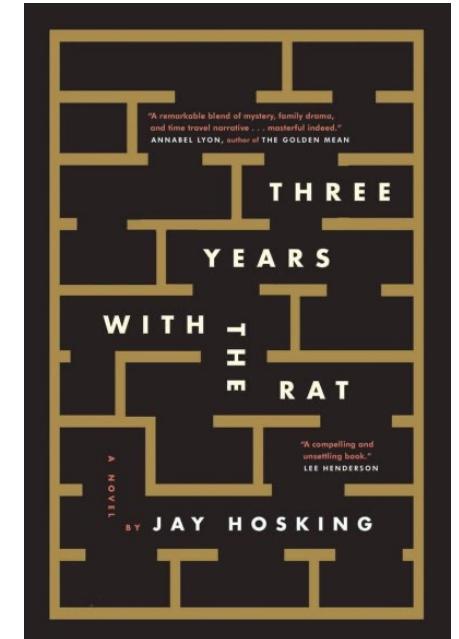
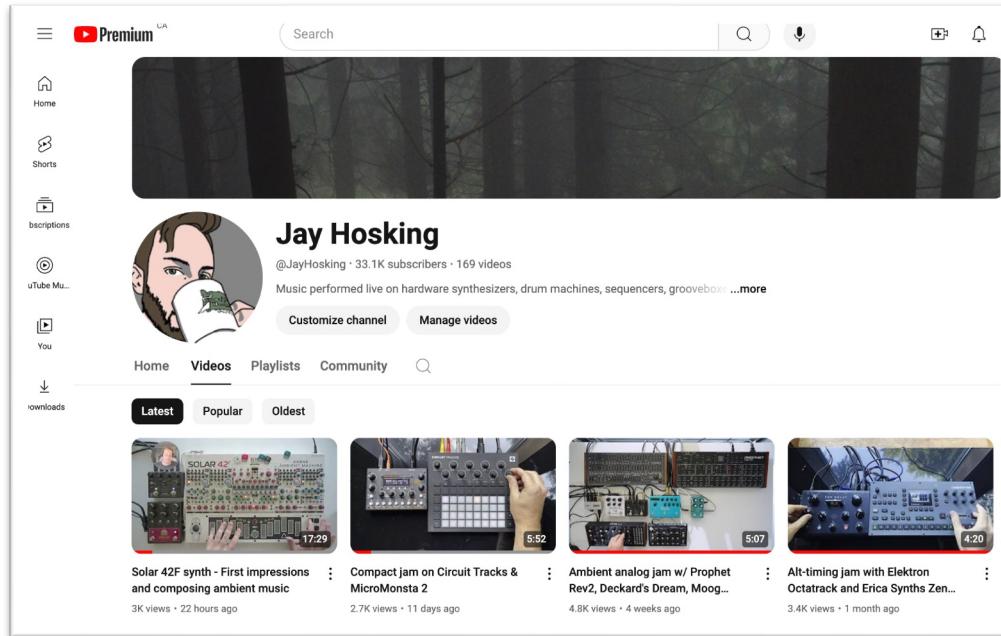
# Jay who?

## 4. Other weird, embarrassing stuff

Diploma in Music Industry Arts: Recorded Music Production,  
Fanshawe College

MFA in Creative Writing, University of British Columbia

YouTube? Pfft



Instructor

# Hosking's Law (previously Vervaeke's Law)



- [jayhosking@psych.ubc.ca](mailto:jayhosking@psych.ubc.ca)
- BUT please do not book office hours by email!

# How to book office hours:

Go to <https://jayhosking.youcanbook.me>



Note that all office hours  
are held online (Zoom).

Jay Hosking's Office Hours!

# Course format

- Weekly lectures in class
- Syllabus quiz
- Three exams on campus
- Optional project
- Optional bonus research participation



Course design

# Lectures

Tuesdays & Thursdays on-campus, in-class lectures, 12:30-1:50pm in LSK200.

There may be audio recordings, but they will be sub-optimal, and cannot be guaranteed (we have been given no additional resources for these).

I will also hold open-ended Q&A sessions prior to each exam, usually in class on the Tuesday before an exam.



Course design

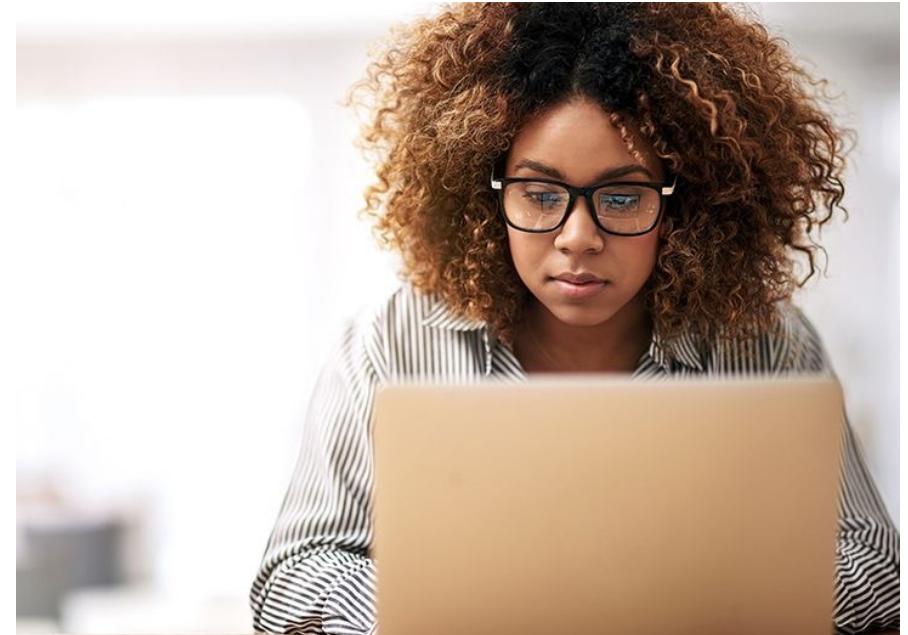
# On-campus class safety/health

- Please perform a daily health self-assessment before coming to campus
- If you are sick, please do not come to class (or to exams!)
- Please give your fellow students the benefit of the doubt (re: masks, symptoms, etc.)
- Arrange with your classmates to get notes
- If I am sick, I will stay home



# Discussion forum

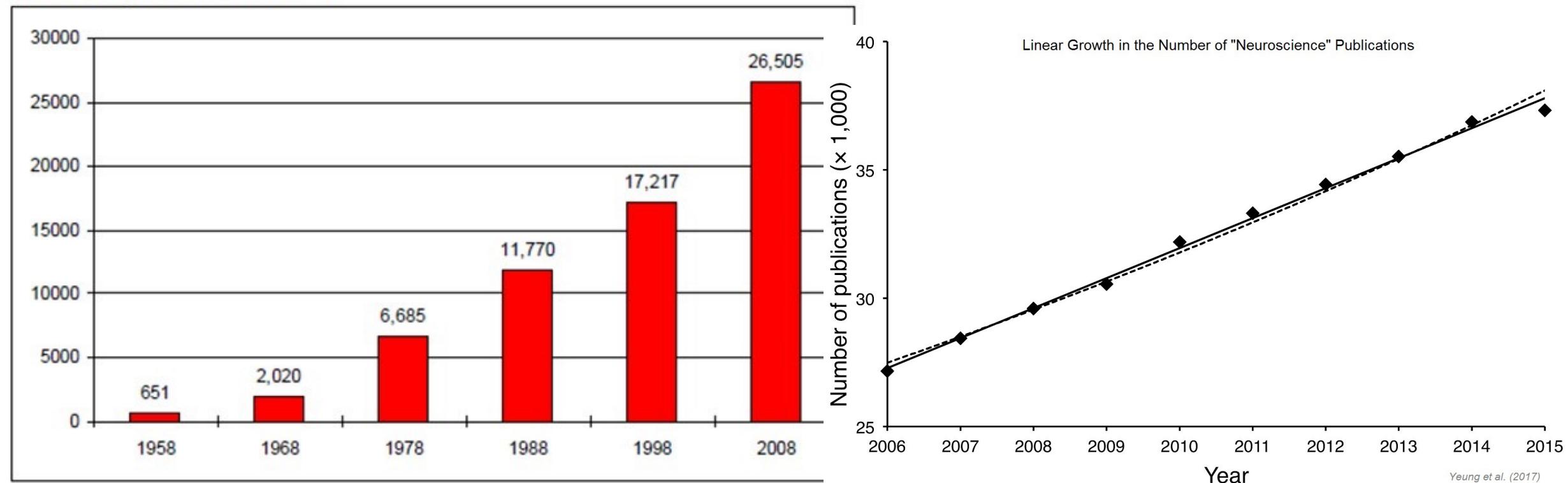
- We'll be using Piazza, on Canvas
- Will be a student-driven space
- Please answer questions! (Wrong answers OK)
- Also a great space to talk about interesting science/tangents, or to find fellow students to study with
- Be good to one another, please



# Neuroscience

Neuroscience is the scientific study of the nervous system.  
(cf. Psychology is the scientific study of behaviour and the mind.)

Figure 2. The growth of neuroscience

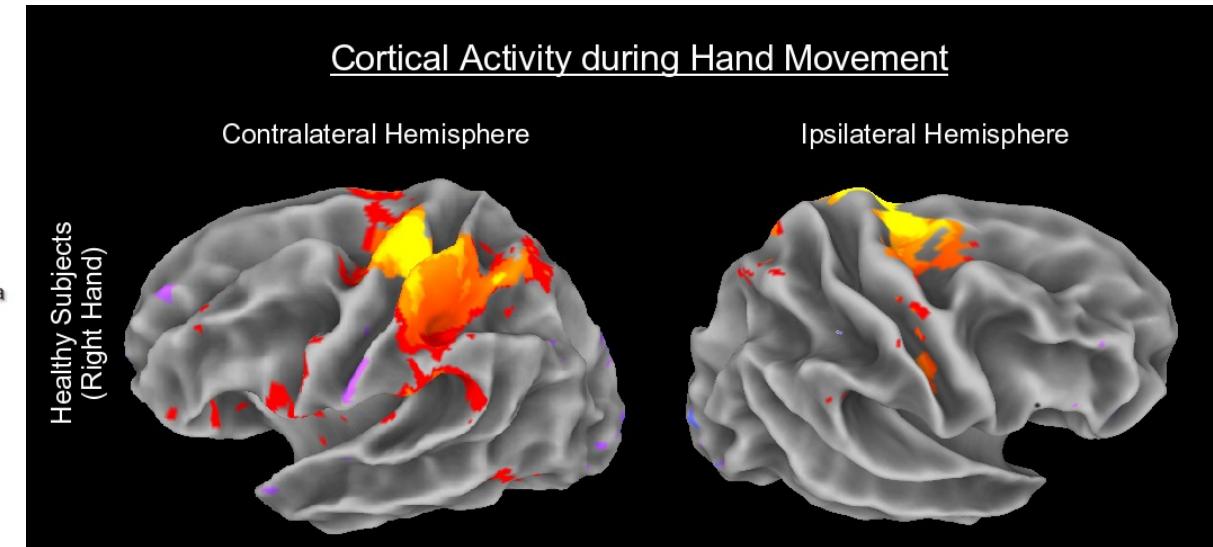
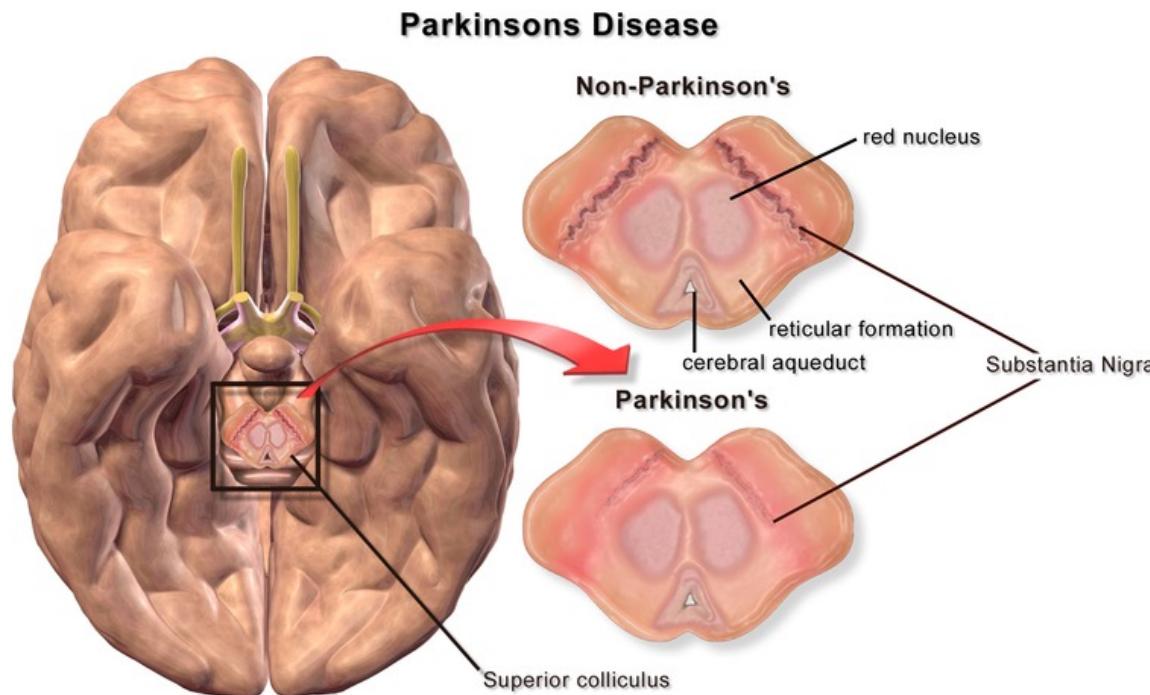


Numbers of papers published annually in the neurosciences 1958 – 2008 (source: Web of Science).  
from: <http://blogs.lse.ac.uk/impactofsocialsciences/2014/10/01/investments-in-science-lead-to-bubble-behaviour/>

# Neuroscience

Neuroscience has many subdisciplines, one of which is **behavioural neuroscience**.

And behavioural neuroscience has a number of subdisciplines. The two most relevant to this course are **neuropsychology** and **cognitive neuroscience**.



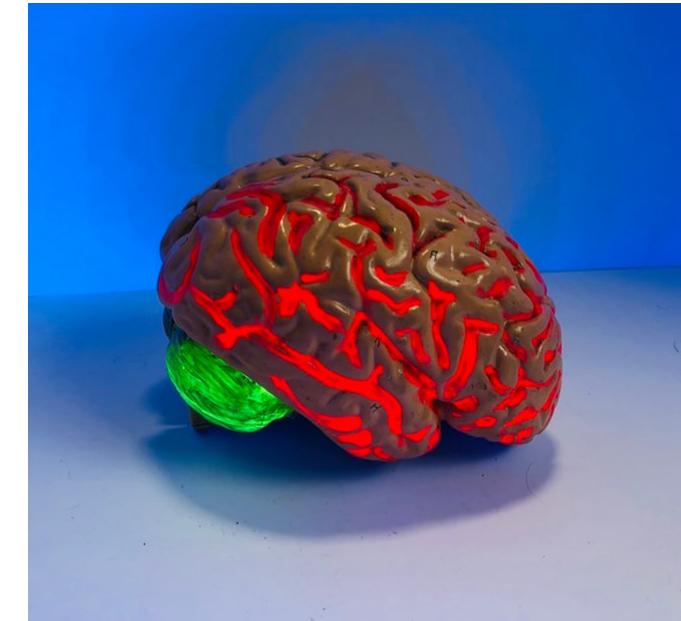
# PSYC301

This course is about what happens when our brain becomes dysfunctional, the various forms that brain dysfunction can take, and how the brain repairs itself (if and when it does) after it has been compromised.

Why study brain dysfunction and recovery?

1. Intrinsic interest
2. Dysfunction as a “window” into the healthy brain
3. Novel therapeutic targets

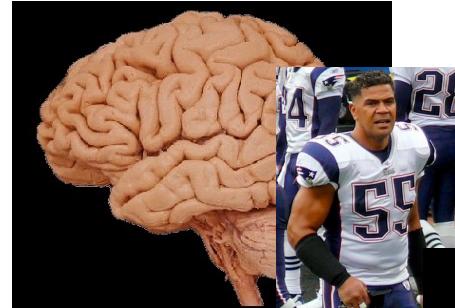
**Important note: this is an Arts course designed to teach you everything you need to know from first principles**



# The right tools for the job

To study brain dysfunction and recovery, we need to discuss everything

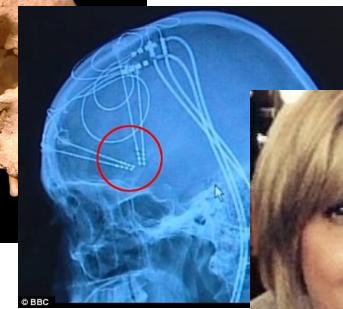
from fundamental neuroscience



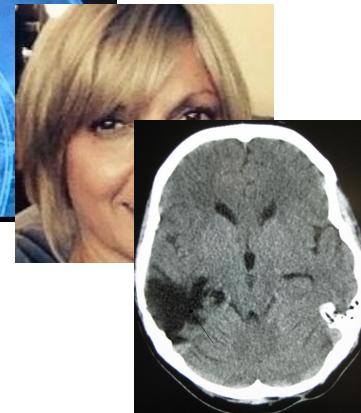
to neuropsychological case studies



from historical treatments



to modern therapies



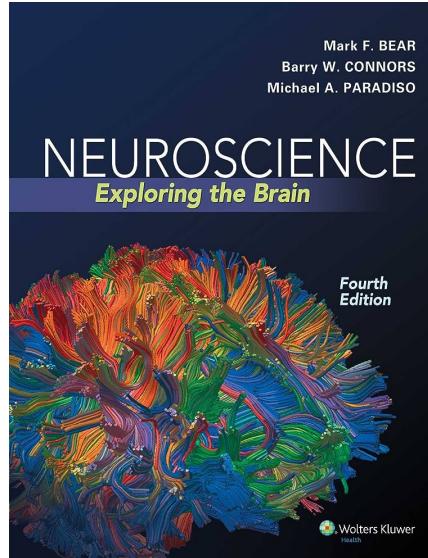
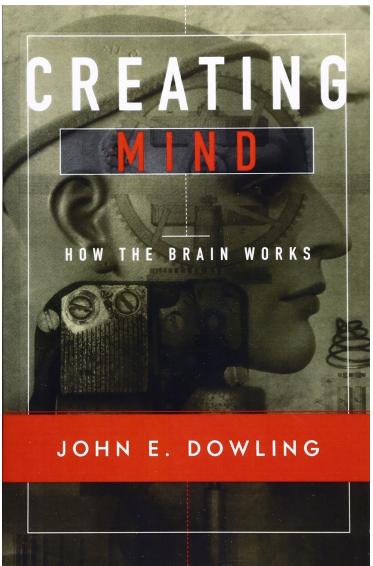
from those who assess and/or treat people with brain dysfunction

to those with lived experience of brain dysfunction

PSYC\_V 301 001 2024W1 Brain Dysfunction and Recovery

Instructor: Jay Hosking  
Email: jayhosking@psych.ubc.ca  
Office Hours: [Book here!](#)

TA: Cecilia Guo  
Email: cecilia.yu@ubc.ca  
Office Hours: Please email for availability!



# Resources

**Website:** [canvas.ubc.ca](https://canvas.ubc.ca)  
Slides, audio files (if possible), readings, grades, announcements

**Textbook:** none, but a few **required** readings on Canvas, and one or two textbook non-required readings offered as a courtesy

**Optional reading materials:**

1. Creating Mind by John E. Dowling
2. Any modern neuro textbook (I like Bear's Neuroscience)
3. **edX MOOC: AP Psychology – Course 2: How the Brain Works**  
Free to enrol, focus on first module  
<https://www.edx.org/course/apr-psychology-course-2-how-brain-works-ubcx-psyc-2x-0>

Admin & policies

# Evaluation

<b>Syllabus quiz:</b>	2%
<b>Exam 1:</b>	30%
<b>Exam 2:</b>	33%
<b>Exam 3:</b>	35%
<hr/>	
<b>Total:</b>	100%
<b>Bonus research participation:</b>	3%



# Evaluation (alternative)

<b>Optional project:</b>	20%
<b>Syllabus quiz:</b>	2%
<b>Exam 1:</b>	24%
<b>Exam 2:</b>	26%
<b>Exam 3:</b>	28%
<hr/>	
<b>Total:</b>	100%
<b>Bonus research participation:</b>	3%



# Exams

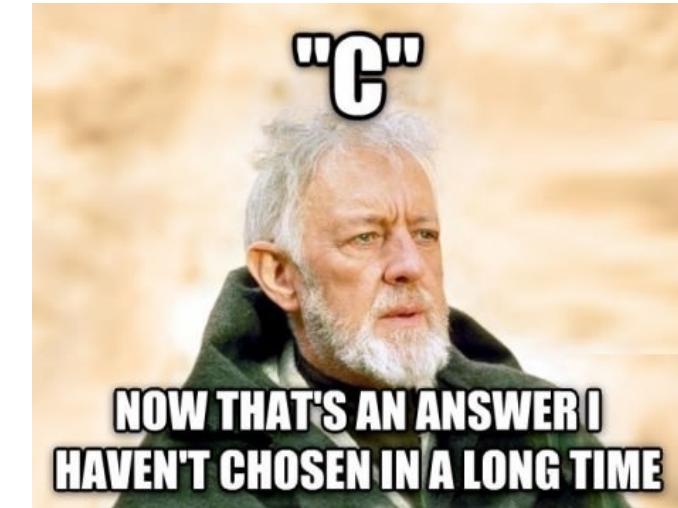
**Midterm Exam 1 (30%):** Thurs Oct 10<sup>th</sup> 12:30-1:45pm

**Midterm Exam 2 (33%):** Thurs Nov 7<sup>th</sup> 12:30-1:45pm

**Final Exam (35%):** Dec 10<sup>th</sup>-21<sup>st</sup> (date/time TBD)

You must be available to write at any time during this period.

- Exams must be written on campus (no online option)
- Exams are “closed book”
- You **MUST** bring the physical card of your student ID
- The second exam is **NOT** cumulative; the final exam is **MILDLY** cumulative
- Format: multiple-choice and short-answer questions
- All lecture materials are fair game
- Required reading material will also be tested (far less)
- Do not come to the exam if you are sick
- Accommodations are at my sole discretion, in rare cases require documentation, and are only for unavoidable hardship
- Please see syllabus for complete policies on accommodations
- Make-up exams must be completed within one week of the original date  
(please organize this with your amazing TA)



# Syllabus quiz

- Based on the syllabus!
- Worth 2% of your grade
- Designed to reduce student anxiety and confusion when encountering a complication within the course
- Due Tuesday, September 24<sup>th</sup> by 11:59pm
- There are no deadline extensions



# Optional projects

- Dive deep on a subject of your choice related to the course!
- See syllabus for full description
- **Due on the last day of class (Dec 5<sup>th</sup> 11:59pm)**
- Usually a **podcast**, and in rare instances something else
  - e.g. Video, website, pamphlets, video game, interview, creative non-fiction
- If you elect to do a project, the grade you receive on that project will be worth 20% of your final grade, and the grades you receive on the exams will be adjusted (see syllabus)
- **The deadline to propose an optional project is October 8<sup>th</sup>**



# Research Participation (up to 3% bonus)

- As noted, research is fundamental in psychology and neuroscience
- Much of the research we are studying is based on studies with undergraduates like you!
- See syllabus for more details
- Receive **up to 3%** bonus marks for your final grade by participating in the studies conducted by the Psychology Department
- Coordinated through the Human Subject Pool (HSP) system
  - <https://hsp.psych.ubc.ca>
- Each credit earned = 1% for the course
- Sign up immediately!



# Course schedule (tentative)

Week	Dates	Topic
1	Sept 3 <sup>rd</sup> -8 <sup>th</sup>	No class Sept 3 <sup>rd</sup> ; Course orientation Sept 5 <sup>th</sup>
2	Sept 9 <sup>th</sup> -15 <sup>th</sup>	Neuroanatomy
3	Sept 16 <sup>th</sup> -22 <sup>nd</sup>	Neural communication; drugs
4	Sept 23 <sup>rd</sup> -29 <sup>th</sup>	Drugs cont'd; Neuroimaging
5	Sept 30 <sup>th</sup> -Oct 6 <sup>th</sup>	Neuroimaging cont'd; Neurological exam and assessment
6	Oct 7 <sup>th</sup> -13 <sup>th</sup>	Optional attendance pre-exam Q&A (Oct 8 <sup>th</sup> ) <b>Exam 1 (Thurs Oct 10<sup>th</sup> 12:30-1:45pm)</b>
7	Oct 14 <sup>th</sup> -20 <sup>th</sup>	Causes of brain dysfunction
8	Oct 21 <sup>st</sup> -27 <sup>th</sup>	Factors influencing recovery; epilepsy
9	Oct 28 <sup>th</sup> -Nov 3 <sup>rd</sup>	Dysfunction affecting memory
10	Nov 4 <sup>th</sup> -10 <sup>th</sup>	Optional attendance pre-exam Q&A (Nov 5 <sup>th</sup> ) <b>Exam 2 (Thurs Nov 7<sup>th</sup> 12:30-1:45pm)</b>
11	Nov 11 <sup>th</sup> -17 <sup>th</sup>	No class Nov 12 <sup>th</sup> ; Dysfunction affecting emotion
12	Nov 18 <sup>th</sup> -24 <sup>th</sup>	Stress, executive function, and the prefrontal cortex
13	Nov 25 <sup>th</sup> -Dec 1 <sup>st</sup>	Dysfunction affecting the motor system
14	Dec 2 <sup>nd</sup> -6 <sup>th</sup>	Psychological disorders
Exams	Dec 10 <sup>th</sup> -21 <sup>st</sup>	<b>EXAM 3 (DATE/TIME TBD)</b>



# Attendance is great

- Come to class, and come on time
- Keep ahead of the readings (if there are any / if needed)
- Take detailed notes during lecture
  - Much of what I say is **NOT** on the slides
  - **i.e., The lecture slides are not sufficient for studying!**
- Absences are necessary sometimes; if you miss a class, it is your responsibility to catch up (e.g. via the audio recordings if available, and/or through classmates' notes)
- If you experience any persistent personal issues during the course (e.g. mental health issues, death or loss of someone close, other long-term stressors), please come speak with me right away
- Anything you tell me will be kept in strictest confidence, and I will help structure the remainder of your time in the course so as to accommodate your situation
- However, in order to help, I need to know. So if something is going on, please send me a quick note and we can set up a time to meet and chat



# Inclusivity is great

- We have diverse backgrounds and social identities
- This diversity must be supported
- I anticipate no issues with this



Learn more about UBC Psychology's initiatives for equity, diversity, and inclusion at  
<https://psych.ubc.ca/about/equity-inclusion/>

Admin & policies

# Academic integrity is great

**My expectation is that you'll be acting with the highest integrity in all our interactions.**

General principles:

- Do your own work
- Avoid collusion
- Do not share these materials with the outside world
- Acknowledge others' ideas and avoid unintentional plagiarism

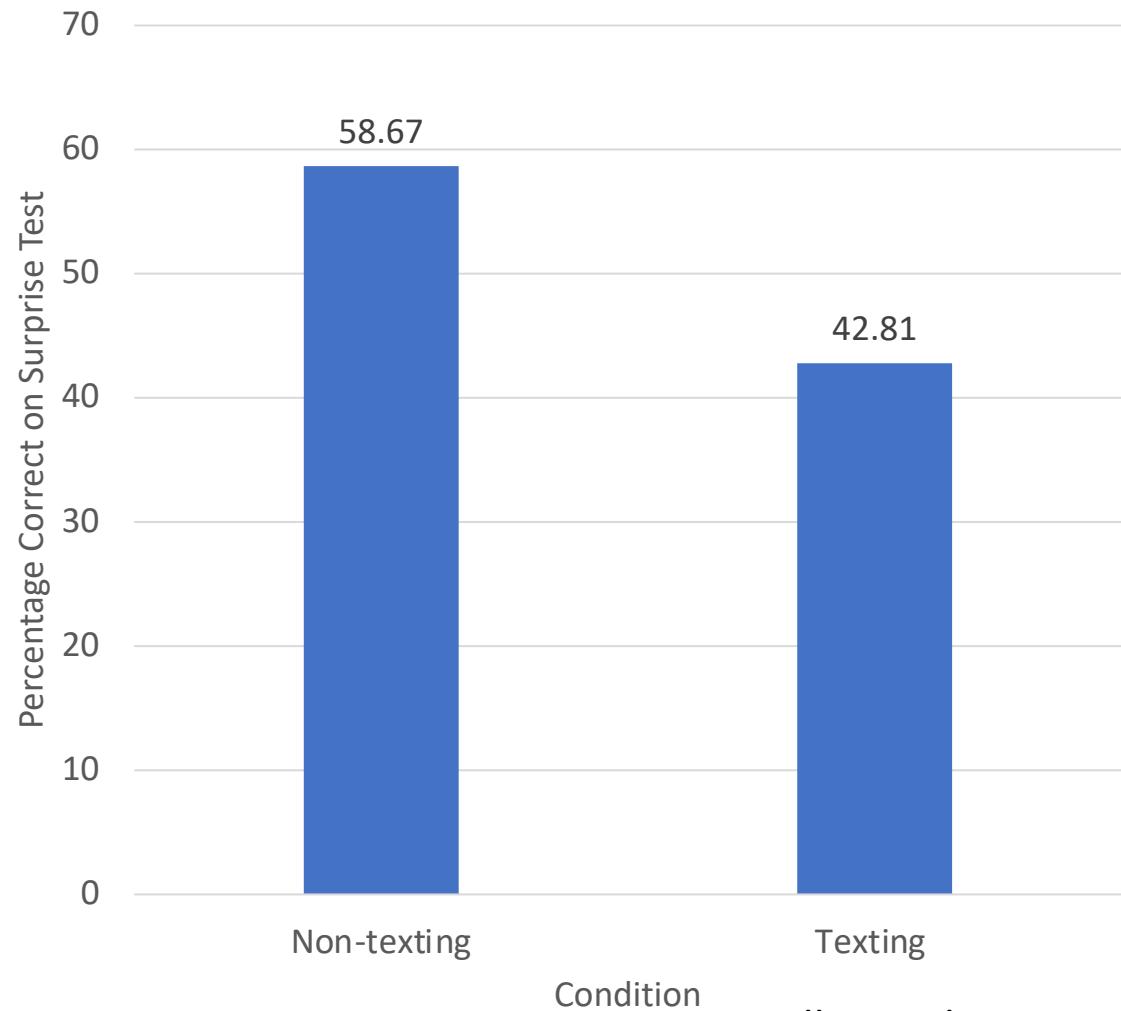
The logo for Umoines, featuring the word "umoines" in a bold, sans-serif font. The letters are primarily black, except for the "m" which is red. The "o" has a black circle in the center, and the "i" has a black vertical bar through the middle.

**Our thoughts, ideas, and words are the cultural currency of science. Do not borrow others' thoughts, ideas, and/or words without explicitly making their origin clear. I encourage you to read the syllabus and UBC policies thoroughly.**

If you are at all in doubt, please come to me first.

# In-class etiquette

- Be punctual
  - If unavoidably late, come in quickly and quietly
- **Phones on silent and put away**
- Please only talk in class if you are willing to share
- Please use email etiquette when contacting us





# E-mail Etiquette

To: jayhosking@psych.ubc.ca

Cc:

Bcc:

Subject: PSYC301-001: problem with course website

Dear Dr. Hosking,

How are you?

I know that I don't need to ask "will this be on the test" or "do I need to know this". I also know I don't need to ask "what did I miss in class" or "can I get the notes". So you know what? I won't!

I also know that I don't book office hours through email, but via <https://jayhosking.youcanbook.me>.

I've got questions about the last lecture, but I'll either show up for the exam Q&A session or post them on Piazza.

There's something wrong with the course website. Can you please fix it?

Thank you and kind regards,

Bob Loblaw

Please include course and section codes!

Be polite (please)

Please don't ask these or related questions

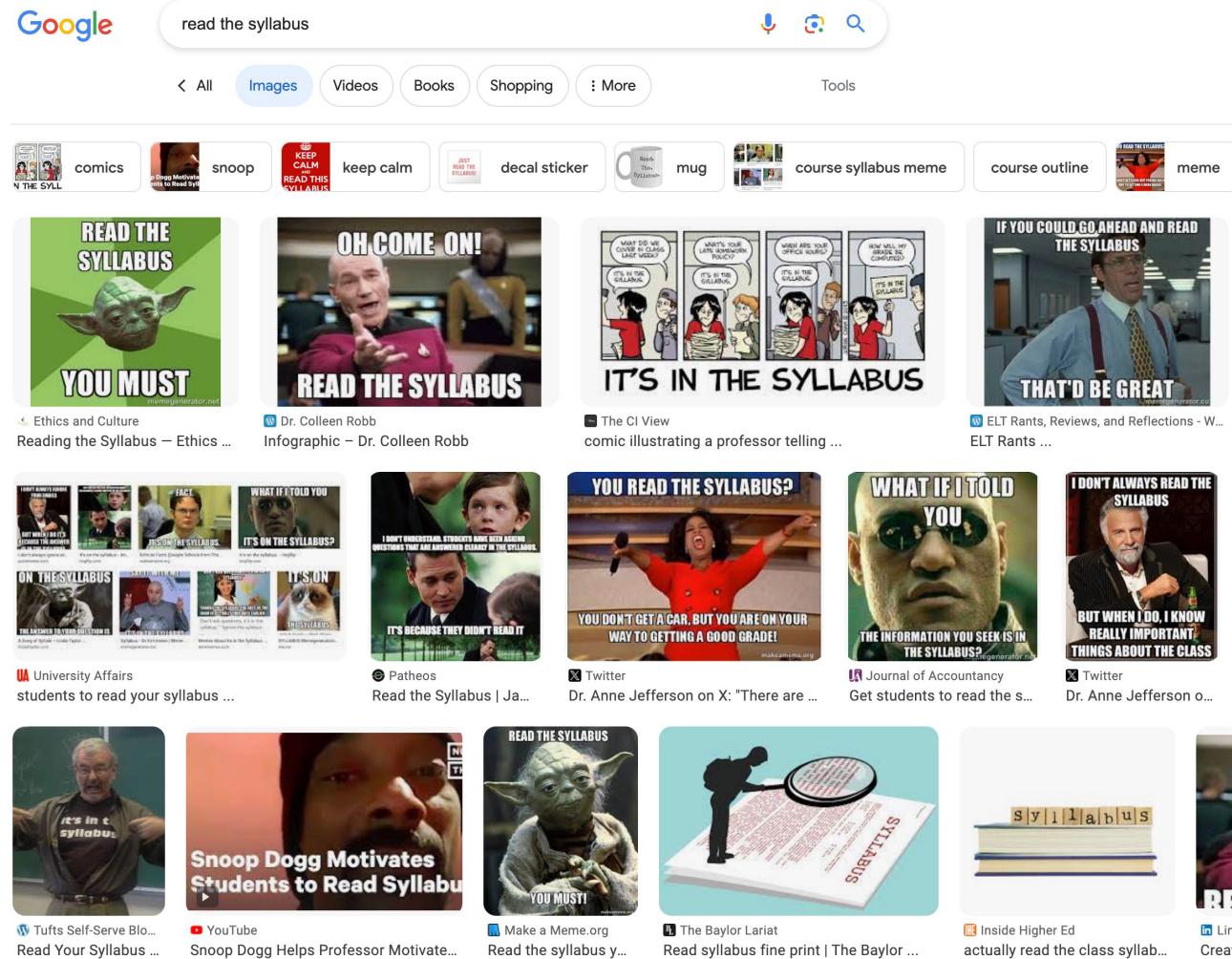
But please do ask these or related questions

# How to succeed in the course

1. Recognize that you're brilliant and you can succeed
2. Recognize that being brilliant isn't enough
3. Always attend, always read ahead
4. Make friends, make study groups
5. Take advantage of the audio recordings
6. Be prepared for review sessions
7. Ask questions—I love them!
8. Take advantage of office hours (though not for content)
9. Treat learning objectives as homework
10. Take care of each other, and care about each other's success!
11. Recognize that you may be at different points in your learning than others, and with differing expertise
12. Recognize that sometimes your goals and my goals align, and sometimes they don't



# Nobody wants memes



Please read the syllabus.