Grab a card and write…

- your name, and what you like to be called
- your year
- which part of Psychology is interesting to you
- an interesting fact about yourself

Welcome!
Psych 241
Lab: LS
T, Th: 1:00-2:15

Meet Me

- Patrick Sadil
  - PhD Student in Cognitive Psychology
  - Interested in the overlapping neural substrates responsible for episodic memory and visual perception
    - computational modelling
    - fMRI
    - Behavioral experiments
  - Open Source Collaboration

Meet Me

- Contact:
  - psadil@psych.umass.edu
  - Office Location: Tobin 426
    - Office hour: M 10am, maybe by appt.
  - Slides: https://github.com/psadil/psych241

Meet Yourselves

- Card Info
- Exchange contact information with at least one other student
  - When you miss a lab, make sure to figure out what you've missed

Course Policies, Attendance

- Missing more than 4 labs will result in an ***F*** or withdrawal.
- In general, you are expected to attend all courses.
  - Really, the point of a lab is to get some hands on experience
- Leaving 15 minutes early/late will count as ¼ absence
- Also, ¼ absence for 'mental absence'

Course Policies, Attendance

- On those occasions in which you are absent, ***you are responsible*** for catching up.
  - You should get in touch with the person whose contact info you just received

Course Policies, Lab Reports

- Project 1: 50 point paper
  - Total: 50
- Project 2: 100 point paper, 10 points for rough draft
  - Total: 110
- Project 3: 100 point paper, 5 point proposal, and 10 point group presentation
  - Total 115
- Total: 275!
  - Also, periodic homework and quizzes (26 pts)

Course Policies, Late Reports

- FOUR points per day penalty for late reports
- Deadline extensions may be granted, but only if requested **<u>at least 24 hours</u>** before a due date
- All lab reports must be submitted to TURNITIN and in paper form stapled to a signed academic honesty sheet
  - Turn in paper copies to my office.

Course Policies, Academic Dishonesty

"Since students are expected to be familiar with the Academic Honesty Policy (CP 5-16) and the commonly accepted standards of academic integrity, ignorance of such standards by itself is not sufficient evidence of lack of intent"

Homework Assignments

- Course and Academic Honesty policies from Moodle
- There will be a Quiz on these next Tuesday
  - This material is also on pages 2-4 of the course packet
- Bring your Course Packet next Tuesday!

RESEARCH ARTICLE SUMMARY

PSYCHOLOGY

Estimating the reproducibility of psychological science

Open Science Collaboration*

INTRODUCTION: Reproducibility is a defining feature of science, but the extent to which it characterizes current research is unknown. Scientific claims should not gain credence because of the status or authority of their originator but by the replicability of their supporting evidence. Even research of exemplary quality may have irreproducible empirical findings because of random or systematic error.

RATIONALE: Reproducibility is not well understood because the incentives for individual scientists prioritize novelty over replication. Innovation is essential for progress, but replication is the means of establishing the reproducibility of a finding with new data. We conducted a large-scale, collaborative effort to obtain an initial estimate of the reproducibility of psychological science.

RESULTS: We conducted replications of 100 experimental and correlational studies published in three psychology journals using high-powered designs and original materials when available. There is no single standard for evaluating replication success. Here, we evaluated reproducibility using significance and *P* values, effect sizes, subjective assessments of replication teams, and meta-analysis of effect sizes. The mean effect size (*r*) of the replication effects (*M*r = 0.197, SD = 0.257) was half the magnitude of the mean effect size of the original effects (*M*r = 0.403, SD = 0.188), representing a substantial decline. Ninety-seven percent of original studies had significant results (*P* < .05). Thirty-six percent of replications had significant results; 47% of original effect sizes were in the 95% confidence interval of the replication effect size; 39% of effects were subjectively rated to have replicated the original result; and if no bias in original results is assumed, combining original and replication results left 68% with statistically significant effects. Correlational tests suggest that replication success was better predicted by the strength of original evidence than by characteristics of the original and replication teams.

ON OUR WEB SITE

Read the full article at http://dx.doi.org/10.1126/science.aac4716

CONCLUSION: No single indicator sufficiently describes replication success, and the five indicators examined here are not the only ways to evaluate reproducibility. Nonetheless, collectively these results offer a clear conclusion: A large portion of replications produced

Next Tuesday, January 26

- Show Up! We'll run the first experiment of the lab.
- Prepare for Quiz on the Course Policies.
- Bring your Course Packet!

Have a great semester!

- Hope that you've enjoyed your first week of classes.