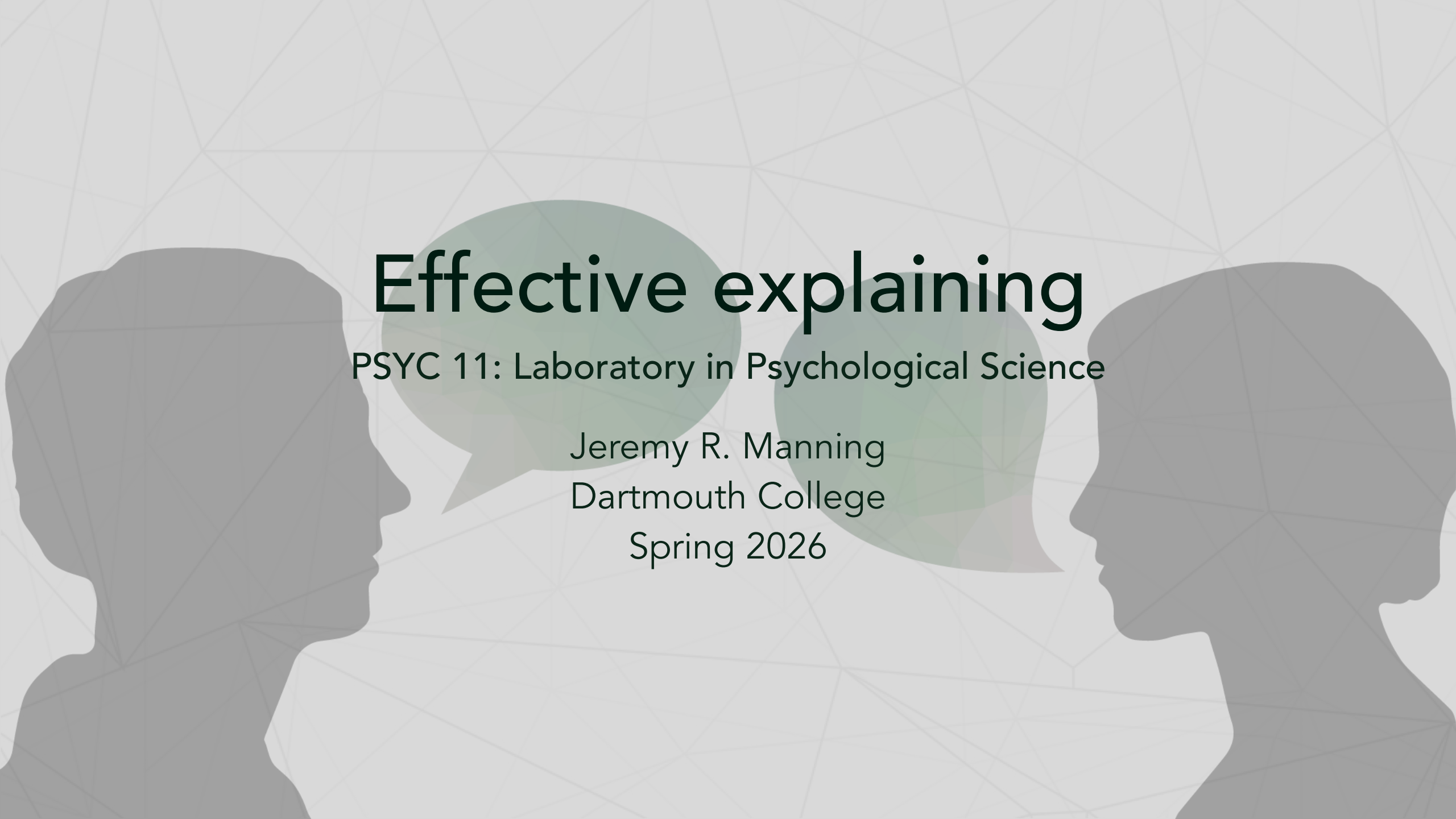

Effective explaining

PSYC 11: Laboratory in Psychological Science

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Why is explaining hard?

The curse of knowledge

Once you know something, it's surprisingly hard to imagine *not* knowing it. You unconsciously skip over assumptions, use jargon, and leave out steps that feel "obvious"— but only to you.

This matters for science

- Methods sections are instructions for reproducing your work
- If your explanation is unclear, no one can replicate (or trust) your findings
- The gap between what you *meant* and what someone *understood* is where science breaks down

What makes instructions fail?

Think-Pair-Share

Think of a time you followed instructions that didn't work— a recipe, assembly manual, directions, software tutorial, homework problem, etc.

- What went wrong?
- Was information **missing**, **ambiguous**, or **in the wrong order**?
- What would have fixed it?

Discuss with a partner, then we'll share a few examples.

Three principles of effective instructions

1. Establish a shared frame of reference

Before describing *what* to do, make sure your reader is oriented. Define your coordinate system, terminology, and conventions up front. In this lab: "Top of the page," "clockwise," "centered"— these only work if the reader and writer agree on what they mean.

2. Distinguish necessary from superfluous

Ask yourself: *if someone changed **this** detail, would the outcome change?* Include what matters. Cut what doesn't. Over-specifying can be just as confusing as under-specifying.

3. Order matters more than you think

Build instructions progressively— each step should make sense given the previous ones. If your reader needs to jump ahead to understand the current step, the order is wrong.

Drawing lab

Goal

Practice writing effective procedural instructions — and discover what makes them succeed or fail — by describing drawings that others will try to reproduce *from your text alone*.

Connection to GenAI

Think about instructing DALL-E or Midjourney to generate a *specific* image. The same principles apply— you need to establish a shared frame of reference, include necessary details, and order your instructions effectively.

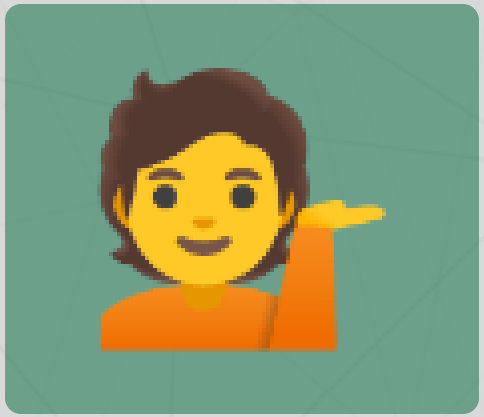
Drawing lab instructions

Lab instructions (also linked via QR code below)

Questions? Want to chat more?

Email me

Join our Slack



Come to office hours

Up next...

- **Rest of today**: create your drawings and write your instructions
- **Wednesday**: follow each others' instructions and evaluate
- **X-hour**: stats refresher
- **Friday**: analyze the data