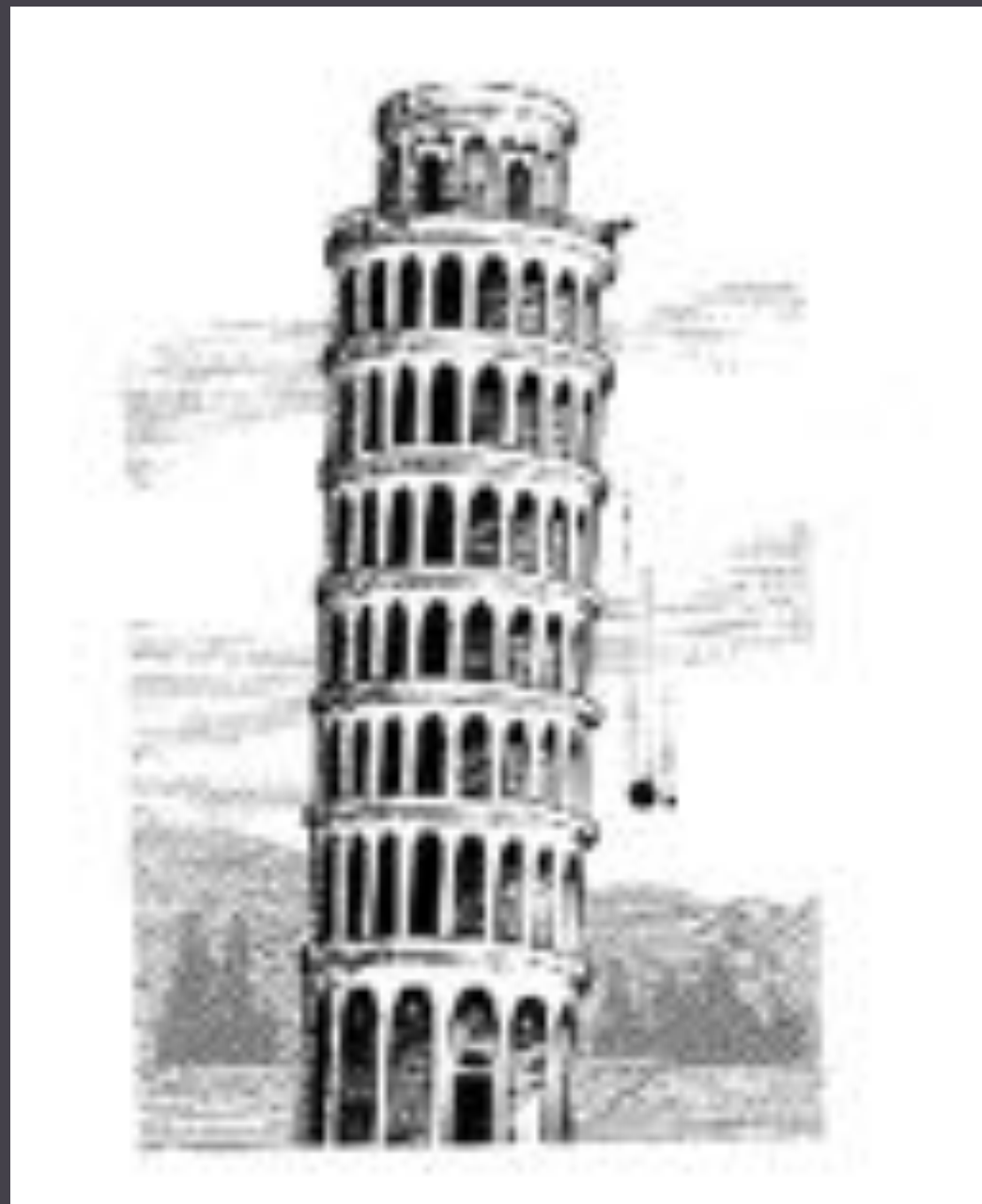


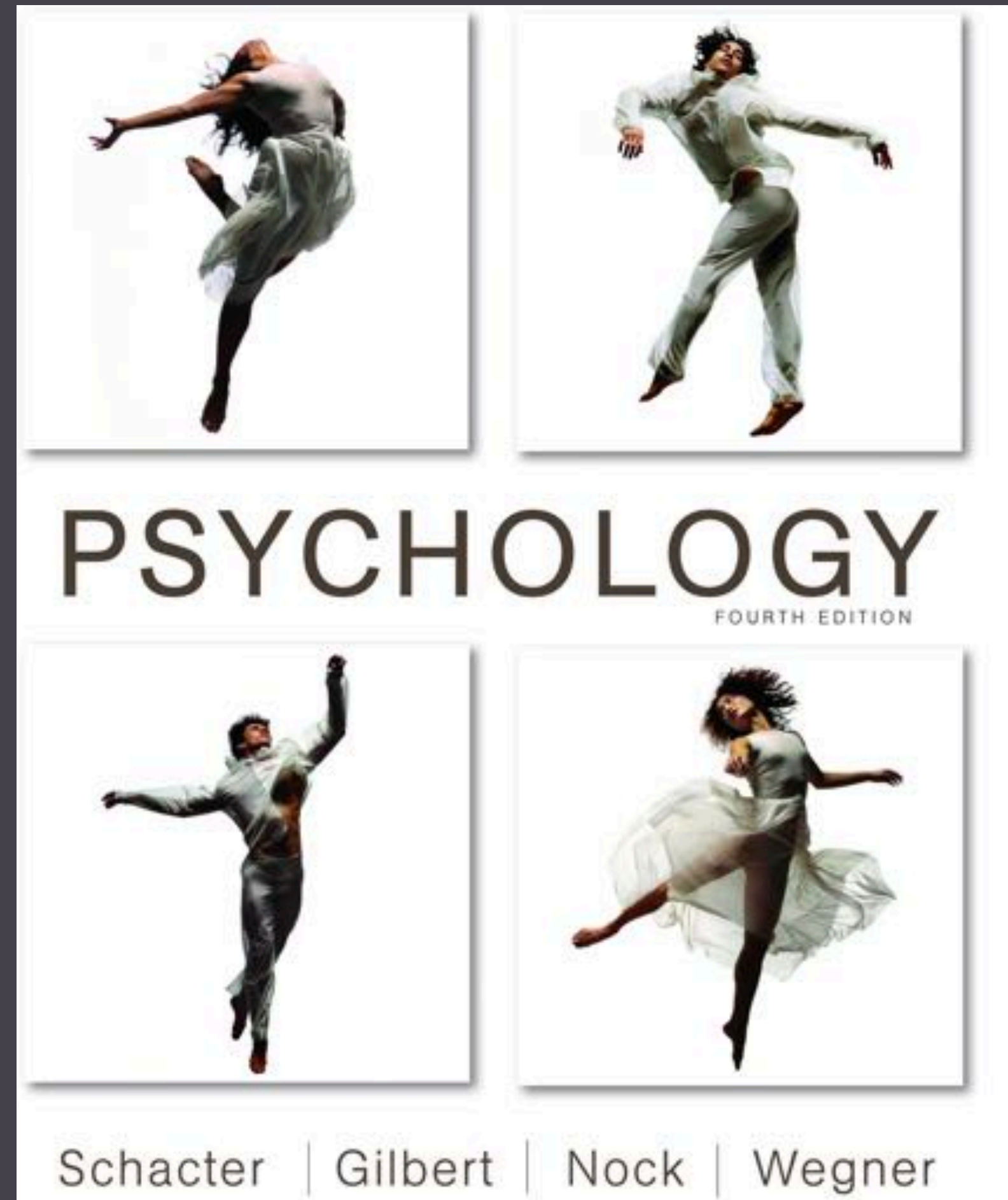
Psychology: The Hardest Science (Methods Pt. 1)



PSYCH 1101
PROF. DAVID PIZARRO
DAY 2

course website:
www.cornellpsych.net

Textbook



SCHACHTER, D.L., GILBERT, D.T, WEGNER, D.M., & NOCK,
M.K. (2016) PSYCHOLOGY (4TH EDITION).

Format

- **3 lectures/week**
- **Recipe for success:** attend lectures, do the readings, ask questions
 - Lectures will be available for download (but they are a poor substitute for attendance)
- **3 exams, multiple-choice, questions take (2 non-cumulative prelims and a final exam with some cumulative questions)**
 - **Exam 1:** Friday, September 22
 - **Exam 2:** Friday, October 27
 - **Final exam:** TBA on course registrar's website (usually by the end of September)
- **The prelim exams are worth 30% of your grade each, the final exam is worth 40%**

The Most Common Grade In This Course Is An "A"

- This is not because I try to make the course easier than it ought to be.
- It is because the biggest challenge is to stay on top of the readings and prepare well (and in time) for the exams.
- Err on the side of prepping a little more and a little earlier than you might think you need to (also see "study tips" section on course website).

Extra Credit

- You can earn extra credit by participating in up to 7 psychology experiments for **up to 5% added to your final grade**
- Sign up at: <https://cornellpsych.sona-systems.com>
- It can take a couple of weeks for experiments to be made available, so be patient if you log on right away and do not see any available studies for participation.

Psych 1101 Tutors

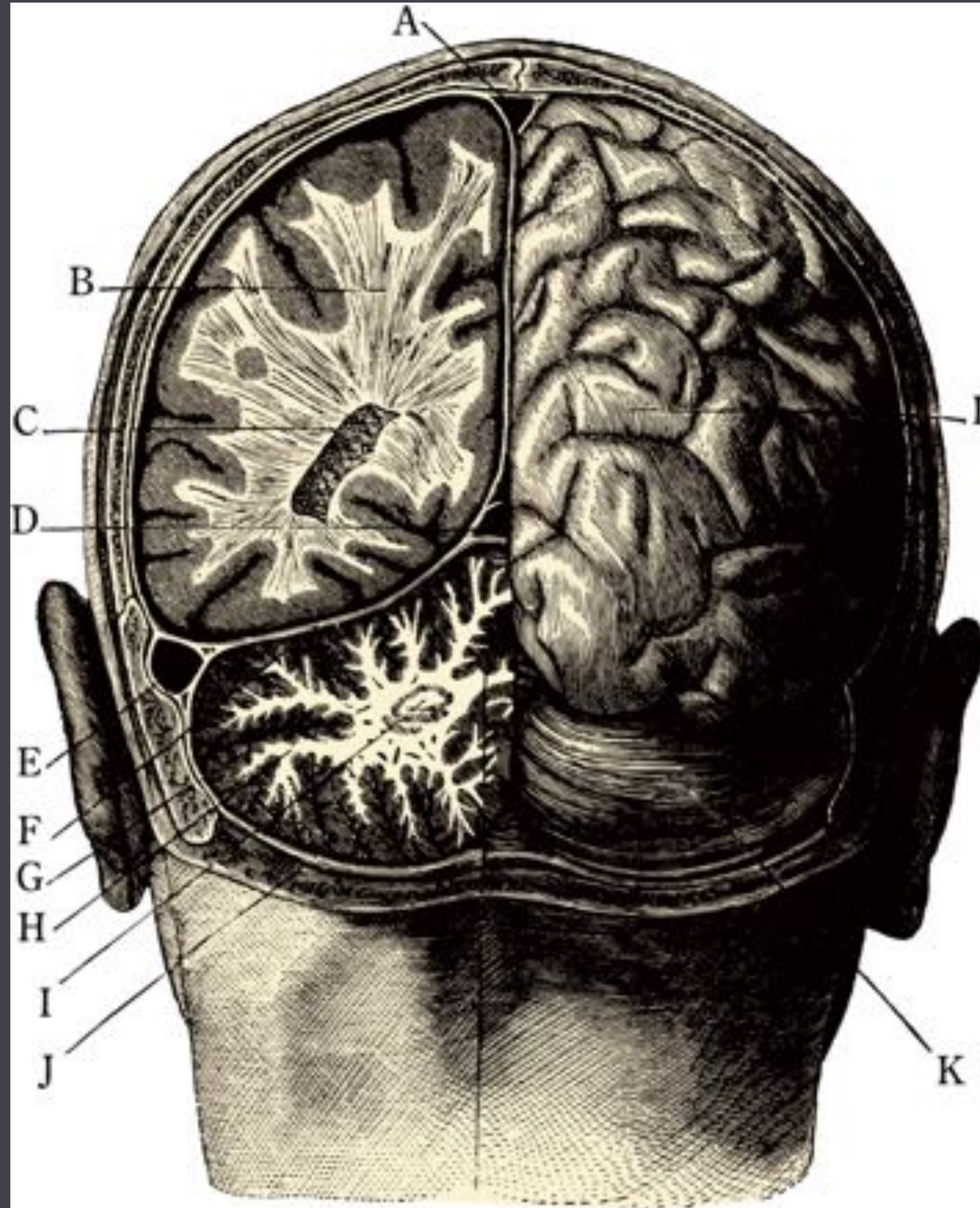
- Advanced undergraduates who have taken the course already (and who did well)
- One of these tutors is assigned as your primary contact, and will be emailing you
- They should be your **first contact** for questions regarding the course

Other Things

- **Students with disabilities**
 - Please turn in your accommodation letter to a Psych 1101 tutor or to the front office of the psych department (2nd floor of Uris Hall) as soon as possible.
- **Prof. Pizarro office hours starting next week**
 - Thursday afternoons 2-4
 - Sign up on the web is required
- **Tutor Office Hours** to be posted by beginning of next week
- Interested in **1103 Sections**? You must register for Psych 1103 as a separate course. Next week I will post a description of the available sections (visit course website for more info).

Psychology And The Scientific Method

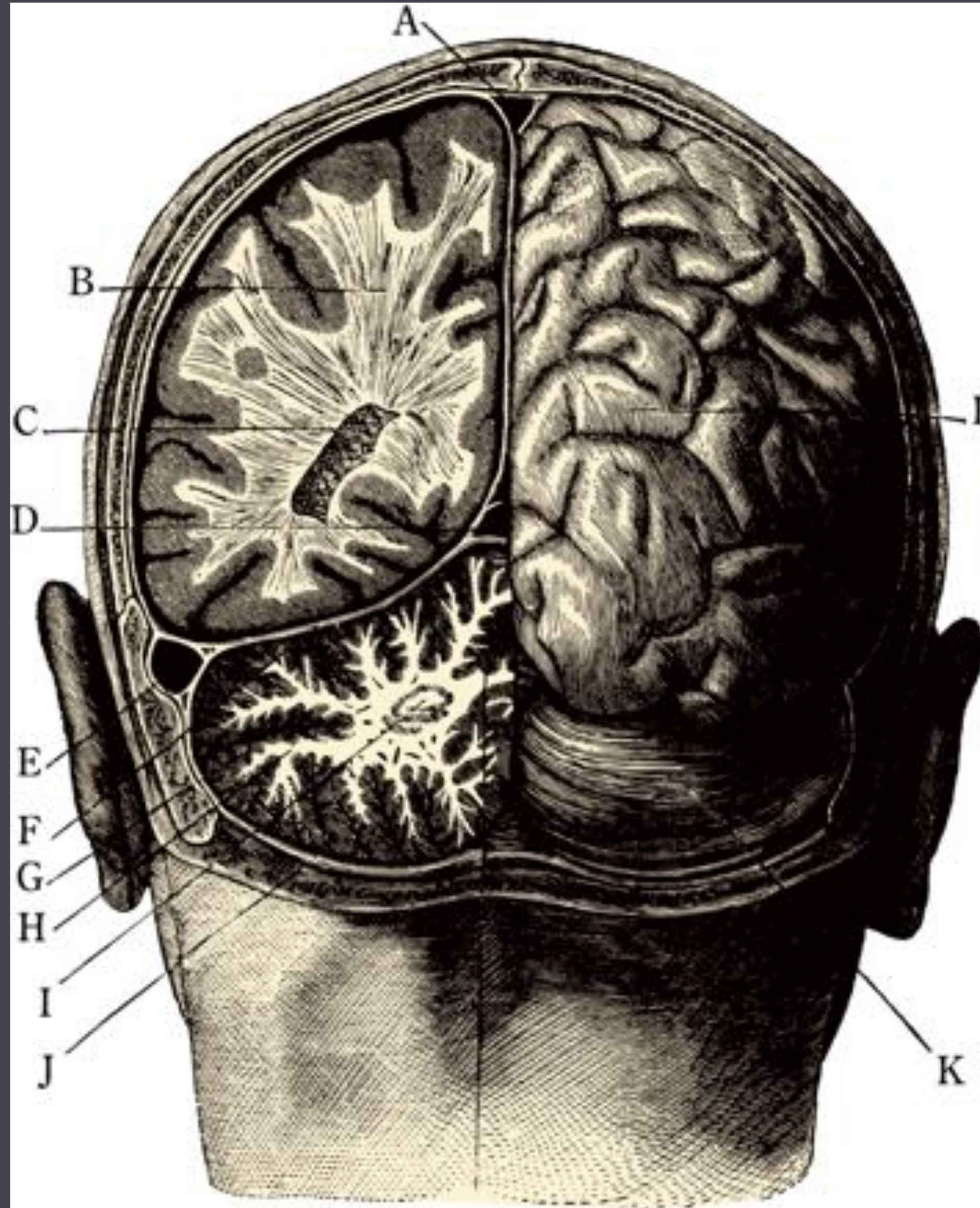
Memory
Emotion
Attention
Mental Illness
Development



Judgment
Learning
Intelligence
Motivation
Creativity



Memory
Emotion
Attention
Mental Illness
Development



Judgment
Learning
Intelligence
Motivation
Creativity

Science

A method for arriving at knowledge about the natural world, *describing* it accurately, and *explaining* why things are the way that they are.

Scientific Explanation



STEVEN PINKER

"A satisfying explanation invokes principles that are fewer in number, more general, earlier in the causal chain, and closer to irreducible physical and mathematical laws than the ones that immediately fit the data in question."

Richard Feynman On The Scientific Method (Cornell Lectures, 1964)



you can see all of the Feynman Cornell lectures here: <http://research.microsoft.com/apps/tools/tuva/>

Recipe For Science

1. Take your best *guess* at an answer
2. *Compare* this prediction to what you see in nature (experiment, experience, observation)
3. Does it match your prediction? If not, reject theory
4. Repeat, Share, Refine

Can Be Problematic In Practice

- Dumb guesses
- Vague, imprecise, or unfalsifiable theories
- Sloppy method of observation/measurement/experimentation
- Data analysis done incorrectly
- Broad conclusions from limited results
- Scientists ignoring inconsistent data/publishing only results that agree
- Fraud

...But It Works Better Than Anything Else



Recipe For A Science Of Psychology

1. Take your best *guess* at an answer
2. ***Compare*** this prediction to what you see in nature (experiment, experience, observation)
3. Does it match your prediction? If not, reject theory
4. Repeat, Share, Refine

Get Data

How Do Psychologists Get Their Data?

- There are likely just as many methods as there are topics
- Most methods can be grouped into one of three very broad categories (although in practice they are often combined):
 1. Unobtrusive Observation
 2. Self-Report
 3. Experimentation