

Introduction to Psychology

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Georgia Tech
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Today

- Introductions...
- Some business and organizational stuff
- Introductory remarks
- Some methods and vocabulary for psychological research

Administrivia

- **Instructor:** Bruce Walker
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- <http://sonify.psych.gatech.edu/~walkerb/classes/intro/>
 - Note: Print out the outlines before class!
- **Required Textbook:**
 - Gleitman, H., Fridlund, A.J., and Reisberg, D. (2004). *Psychology* (6th ed.). New York: W. W. Norton & Co. (ISBN: 0-393-97767-6)
- **Note:** Additional readings will be required. It is the student's responsibility to obtain and read all required readings before the class in which they are discussed.



Research Participation

- Research experience is important
Everything that we discuss is based on some form of scientific research
Psychological research can be a bit different from other forms of scientific research because of the nature of the phenomena.
- Earn extra credit for learning more about research
Experience comes in two forms, either direct participation or reading reports of experimental studies.
Credit for experiments, and/or from reading research papers

Electronic Resources

Handouts / outlines to help you in class will be available before class (often several days before)

Other handouts and other materials will also be available on the course web page.

<http://sonify.psych.gatech.edu/~walkerb/classes/intro/>

Common Sense Stuff

- Respect
- Cell phones, pagers, PDAs, etc. had better not make any noise during class
- I assume you know what constitutes academic misconduct and you will obviously refrain from it
 - BUT, since many of you are new to GT and to Psychology, see the file attached to the syllabus, and read the GT policies
- Be aware of the class policy regarding missed exams (no make-up exams).

Questions Before We Begin?...

Psychological Science

- The scientific study of behavior, thought, emotion, and social interaction
- Spans a huge range of phenomena
 - Neurophysiology, cellular neuroscience
 - Neural systems
 - Cognitive information processing
 - Emotions
 - Cognitive, social and emotional development
 - Social attitudes, interactions.
 - Psychopathology

Psychological Science

- Basic scientific methods apply here as anywhere else
 - Measurement
 - Hypothesis testing
 - Experimentation
 - Theoretical explanation

Psychological Science

- But... subject matter does pose some special challenges.
 - Measurement
 - Physical measurements are easy – mass, volume, etc.
 - Psychological measurement – attitude, intelligence, etc.

Psychological Science

- But... subject matter does pose some special challenges.
 - Measurement
 - Development of measurement tools
 - Evaluation of quality of measurements
 - Complex statistical methods
 - Complex nomothetic structure

Psychological Science

- We do have the tools to ask the questions in the right way and get answers!

What is memory and what does it mean to remember something?

How are children able to learn an average of 1 word per day from 1 year to 3 years of age?

What is a “personality” and why do people differ so much in this thing?

What are the root causes of mental illness and how can it be treated?

A person suffers from epilepsy. Doctors decide on a radical treatment and remove two small parts of patient’s brain. On a follow up, epilepsy is cleared up but patient seems completely incapable of forming new memories. Why?

Why does damage to the front of your brain cause you to lose the ability to plan ahead?

Why does bumping the back of your head cause you to see stars?

What are perceptual illusions and what do they tell us about the mind?

What causes schizophrenia?

Why does your dog wag his tail and act so friendly when you come home and why does he roll over on his back when yelled at?

Along the way... something useful

- Media is rife with reports of psychological research.
- Unfortunately, some really hokey studies reported with same credulity as well designed ones.
- Even if you don't go on to do psychology, you should have some idea of how to separate the good stuff from the crap.

History of Psychology

- These questions (and more like them) have been asked by humans for a long time
- We can look back at the development and evolution of theories mind, of thought, and see how the science of psychology came to be