I. INTRODUCTION

A. Exercises

1. Write a brief characterization of each of the following professionals:
   1. Psychologist
   2. Astrologist
   3. Scientist

2. List the most interesting psychologist or idea in psychology. Think of ideas from your Introductory Psychology classes that you found exciting, surprising, or important.

B. Image of Psychology

- With regard to your image of Psychologists…
- What kind of training/degree do they have?
- Where do psychologists work and have they always worked there? (Settings)
- What image do Psychologists have in our society?
  - How do most know about psychology?
  - What skills would folks say psychologists have?
  - Which Psychologists would be best known?
  - How valued is the job?
I. INTRODUCTION

B. Images of Psychology

- Psychology is the scientific study of the mind and behavior.
- To study people, psychologists, like other scientists, predict and explain behavior.
  - Is your image of psychologists and scientists different or the same?
- Astrologists predict and explain behavior but not scientifically.
  - Psychologists say that astrology is a pseudoscience
  
- Is your image of psychologists and astrologists the same or different?

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C. Diversity of Psychology

- With regard to interesting ideas in psychology
  - What do you think it means that we can not agree about what is interesting, exciting or important?
  - Does it mean that psychology is in trouble because of the diversity of ideas?
  - Guess how many divisions that there are in American Psychological Association? (Divisions)
  - Guess how many journals American PA publishes? (APA Journals)
  - Do psychologists hold anything in common?
I. INTRODUCTION

C. Diversity of Psychology

- Science is the tie that binds all psychologists:
  - The application of science to answer questions about the mind and behavior and to improve the human condition.
  - This course is also designed in part to help you fully understand psychology as a science.
  - There are a number of concepts, skills, and abilities necessary for students to fully appreciate the science of psychology.
- Statistics, Design, Ethics, etc. are topics we will discuss in the class.
I. INTRODUCTION
D. What is Science?

- What is the essential characteristics of science?
- Science is a way of thinking about and observing the universe that leads to a deeper understanding of its workings (Stanovich, p. 8).
- Stanovich discusses three characteristics of science
  - Systematic Empiricism
  - Publicly verifiable knowledge
  - Addresses solvable problems

1. Systematic Empiricism
- Empiricism refers to finding evidence in the world.
  - Science involves answering questions empirically, by "taking a look!"
- Systematic Empiricism means that there are better and worse ways to "take a look".
  - Not all evidence is created equal.
    - Evidence is stronger when it is collected in a systematic way and weaker when it is collected in an unsystematic way.
    - But as everything else in Psychology, things get complicated in the details, which we will consider.

2. Publicly verifiable knowledge.
- Knowledge created in science is social knowledge in three ways:
  - Open to scrutiny. Scrutinizing one’s own or others’ knowledge claims is a critical component
  - Replication: Try the same conditions as someone else and see if you see the same things,
  - Peer Review: All interpretations are open to review.
- We will consider publicly verifiable knowledge when discussing the importance of critically evaluating scientific research and theory in psychology.

3. Solvable problems
- Questions that can’t be answered by using the scientific method are rejected as unscientific.
- Science can deal only with ideas that can be tested.
  - But what is "scientific" changes as new technologies are used to measure phenomena and test ideas.
  - PET and fMRI techniques in brain research has lead to theories of the neurological basis of consciousness.
- We will consider solvable problems when discussing the difference between scientific and nonscientific ideas in psychology.
I. INTRODUCTION
   E. Psychology as an Undergraduate Major or Minor

- This course is also designed to help students negotiate their undergraduate major or minor in psychology and to prepare for a career in psychology or other helping professions.
- Getting into a graduate program in psychology or any helping profession can be as competitive as getting into medical school.
- You will need to know early what courses to take, extra-curricular activities in which to engage, and how to apply to graduate school or a job.