In addition to the information in the textbook on the history of psychology, contemporary perspectives, and the types of work psychologists do, after reviewing this slide show you should be able to answer the following questions.

- What is psychology? How is it defined?
- What are the course themes?
- What type of science is psychology?
- What is Critical Thinking?
What is psychology?

- Psychology is the scientific study of behavior and cognitive processes and how they are affected by an organism’s physical state, mental state, and external environment.

What does this definition mean?

- Let’s break it down.
Psychology is the *scientific study* of behavior and cognitive processes and how they are affected by an organism’s physical state, mental state, and external environment.

- Psychologists use scientific methods to determine the conditions under which certain behaviors occur.

- They do experiments, observations, verify and publish results.

- Psychological findings give us more information than “common sense”.

- For example, common sense might lead a person to think that college students have more brain cells than a baby. However, babies actually have many more, but the cells are not “hooked up” as well as they are in a college student.

- Chapter 2 will go over psychology as a science.
Psychology is the scientific study of *behavior and cognitive processes* and how they are affected by an organism’s physical state, mental state, and external environment.

- **Behavior** is what people do. You are behaving right now as you read these lecture notes.

- **Cognitive Processes** are how people think and feel. Hopefully you are actively using your cognitive processes to attend to these power point slides, and encode them in your memory, so that you will be able to do well on the chapter 1 test.

- Originally psychology was defined as the scientific study of the mind.
- But in the 1920’s psychologist, John Watson, argued that to be a true science psychology should study only observable behavior.
- By 1960 however, psychologists thought it made sense to also study people's feelings and thoughts.
Psychology is the scientific study of behavior and cognitive processes and how they are affected by an organism’s physical state, mental state, and external environment.

- The word organism is sometimes used to define psychology because in addition to human behavior, psychologists also study animal behavior.
Psychology is the scientific study of behavior and cognitive processes and how they are affected by an organism’s **physical state**, mental state, and external environment.

- Psychologists study how our physical state influences our behavior and thinking.

- In other words, they examine the biological basis of our behavior and mental processes.

- For example, a psychologist might study how chemical imbalances in the brain affect our mood and may be related to depression.

- Chapter 3 Biopsychological Bases of Behavior covers such things as genetics, the nervous system, and the brain.
Psychology is the scientific study of behavior and cognitive processes and how they are affected by an organism’s physical state, mental state, and external environment.

- Psychologists study how our mental state influences our behavior and thinking, how our feelings and thoughts influence what we do.
- For example, a psychologist might design a study to find out if marathon runners who believe that they are going to win a race actually run a better race than runners who aren't as confident in their ability to win?
- In fact, such studies have shown that runners with high self efficacy (they believe they can run well) do run faster. (Gayton, W.F., Skelton, K., Waichunus, M., & Hearns, J.F. (1989). Validities of the physical estimation scale in predicting running times. Perceptual and Motor Skills, 68, 252-254.)
- And college students with high self efficacy (they believe that they can study, learn, and do well) also tend to be more successful in their classes.
Psychology is the scientific study of behavior and cognitive processes and how they are affected by an organism’s physical state, mental state, and *external environment*.

- Psychologists study how our external environment influences our behavior and thinking.
- They examine how things outside of us, such as other people and our physical surroundings affect what we do and think.
- A research study looking at the home court advantage that occurs in competitive sports would be an example.
- Recently some psychologists have focused on sociocultural context, examining how behavior differs across cultures, genders, ethnicity.
- For example, Chapter 6 will explore gender and ethnic differences in some aspects of the sleep cycle.
There are 5 themes embedded in the definition of psychology and in the textbook.

1. Psychology is a Science
2. Psychology is more than Common Sense
3. Psychology is Relevant to Everyday Life
4. Psychology Improves Critical Thinking
5. Psychology Has a Variety of Contexts (sociocultural factors such as ethnicity, gender, and culture are important).
What type of science is psychology?

- Consider what other sciences are similar to psychology?
Psychology is a Social Science

- It is related to other disciplines in which human social and behavioral phenomena are studied in rigorous and reliable ways.

- **Sociology** – the study of groups and institutions of society
- **Anthropology** – the study of physical and cultural origins and development of the human race
- **Political science** – the study of political behavior and the establishment and conduct of government
- **Economics** – the study of how people produce, distribute, and consume goods and services
- **Biology** – study of the structure and functioning of all living things

What distinguishes psychology from these other Social Sciences?
What distinguishes Psychology from other Social Sciences?

- Psychologists are more focused on the individual, and they also focus more in personality.

- In the next slide you will read five possible studies of a newly discovered tribe that has had no previous contact with the outside world.

- See if you can identify which type of social scientist would be most likely to propose each one.
Studies of a Newly Discovered Tribe. Identify what type of Social Scientist would do each one.

Pick from: Sociologist, Anthropologist, Political Scientist, Economist, Psychologist

1. A descriptive study of family life detailing roles, norms, and important social determinants.

2. A comparative study of the significant social practices in the tribe with those found in the nearest neighboring tribe.

3. A study examining emotional development in individuals not exposed to television.

4. An examination of how objects come to be valued and exchanged within the tribe.

5. An observational study of how the tribal leader gains and exerts power over individuals within the tribe.
Answers
1. Sociologist
2. Anthropologist
3. Psychologist
4. Economist
5. Political Scientist
What is Critical Thinking

- **Critical Thinking** is the ability and willingness to assess claims and make objective judgments on the basis of well-supported reasons.
- It is the ability to look for flaws in arguments and to resist claims that have no supporting evidence.
- It is also the ability to generate alternative explanations, and apply new knowledge to a broad range of social and personal problems.

- It is a set of skills that can be learned and will be valuable in this class for 2 reasons.

1. Psychology research generates many competing and contradictory findings. It is important to know how to evaluate findings and using good critical thinking decide which one makes the most sense.

2. Psychological findings are often printed in the media and sometimes these findings are based more on pop psychology than true scientific research. It is important to learn how to evaluate these media stories.
All evidence is not equal in quality.

- It is important to look at how evidence is gathered and who is gathering it.

- Just because someone is considered to be an authority or to have a lot of expertise does not mean that everything that person claims is automatically true.

- Critical thinking requires an open mind, but not so open that information “falls out”. There should be a balance between skepticism and being gullible.
1. **Ask questions** - People tend to become forgetful when they get older; it is a natural consequence.

2. **Define the problem** - In a research proposal, a student said he was going to do research on meditation and mental illness.

3. **Examine the evidence** - You can tell that Alice is a lot smarter than her brother. She wears those thick glasses and has a high forehead.

4. **Analyze assumptions and bias** - Tony bought a bottle of pain reliever because a T. V. commercial claimed that most hospitals prescribe it.
5. **Avoid emotional reasoning** - People of different ethnic backgrounds just can't live harmoniously in the same neighborhood. This is a gut feeling, and I'm not wrong.

6. **Don't oversimplify** - Your either for us or against us.

7. **Consider other interpretations** - Child abuse and neglect have increased as more mothers have gotten jobs outside the home. These problems will probably be with us until society recognizes the truth of the old saying that a woman's place is in the home.

8. **Tolerate uncertainty** - I get disgusted with my science classes. We study the principle of this and the theory of that. Aren't there any laws. Why can't scientists make up their minds and stop acting like they don't know anything for sure.
Critical Thinking Techniques

Explanations for why the statement violates the technique.

1. **Ask questions** - People tend to become forgetful when they get older; it is a natural consequence. Statement shows lack of willingness to search for causes and cures. No questions are asked.

2. **Define the problem** - In a research proposal, a student said he was going to do research on meditation and mental illness. The statement is vague. What type of meditation? What kind of mental illness?

3. **Examine the evidence** - You can tell that Alice is a lot smarter than her brother. She wears those thick glasses and has a high forehead. Statement expressed stereotypes for which there is little or no support.

4. **Analyse assumptions and bias** - Tony bought a bottle of pain reliever because a T. V. commercial claimed that most hospitals prescribe it. Tony assumed the hospital selected the pain reliever; the pharmaceutical company may have provided it to hospitals for free.
5. **Avoid emotional reasoning** - People of different ethnic backgrounds just can't live harmoniously in the same neighborhood. This is a gut feeling, and I'm not wrong. Gut feelings can be wrong, more than we would like to admit!

6. **Don't oversimplify** - You're either for us or against us. Statement is an example of either/or thinking. It could be you are neutral.

7. **Consider other interpretations** - Child abuse and neglect have increased as more mothers have gotten jobs outside the home. These problems will probably be with us until society recognizes the truth of the old saying that a woman's place is in the home. The statement ignores other casual factors in child abuse. It also includes the assumption that a woman's place in the home is true.

8. **Tolerate uncertainty** - I get disgusted with my science classes. We study the principle of this and the theory of that. Aren't there any laws. Why can't scientists make up their minds and stop acting like they don't know anything for sure. The student seems more interested in answers than in "truth."
You have read the chapter and learned about the history of psychology, contemporary perspectives, and the types of work psychologists do.

And after reviewing this slide show you should now be able to answer the following questions.
1. What is psychology? How is it defined?
2. What are the course themes
3. What type of science is psychology?
4. What is Critical Thinking?

Please also complete the Application Assignment for this week, and lastly take the Chapter 1 Test.

Additional reference: