CHAPTER 1

CHAPTER OUTLINE

What Is Psychology?

General Introduction: The importance of evaluating the evidence for ANY claim.

Module 1.1: Psychologists’ Goals
1) For most of its history psychology has been defined as the study of mind. The physical (if intangible) concept of mind is easily confused with the metaphysical concept of “soul.” It may be more accurate and useful to say that psychology is the systematic study of behavior and experience. In order to get the most out of this course, it will be helpful for you to keep in mind the following ideas.
2) General Points about Psychology:
   a) “It Depends.” Few claims will apply to all people’s behavior at all times. Many factors can vary to influence the behavior and experience of any one individual.
   b) Research Progress Depends on Good Measurement: It is important to understand how phenomena are measured, and to be familiar with the latest methods used by psychological scientists.
   c) Some Conclusions Reflect Stronger Evidence Than Others: In order for you to make informed judgments about your learning, evaluate the claim along with the evidence presented for it. In psychology, the evidence for claims made varies in strength. Opinions are not evidence, no matter how strongly they are stated.
3) Major Philosophical Issues in Psychology:
   a) Free Will versus Determinism: Many scientists assume that there is a condition of determinism in the natural world...that everything that happens has a cause, or determinant. The opponents of determinists are those who believe in free will...that behavior is caused by a person’s independent decisions, not by external determinants.
   b) The Mind-Brain Problem: This philosophical question refers to the problem of how experience is related to or generated by the brain. Dualism proposes that the mind is separate from the brain but somehow controls it; monism proposes that mind and brain are inseparable. Research attempting to link brain activity with behavior/experience has demonstrated a very close relationship between brain activity and psychological events. Some may debate whether the brain activity caused associated thoughts, or vice versa, but many scientists consider thoughts and brain activity one and the same.
   c) The Nature-Nurture Issue: How do differences in behavior relate to differences in heredity and environment? It’s another example of a complex question related to psychology that often leads to the answer “it depends.” The issue of the relative weights of contributions from genetics and from environment to behavior, performance and experience is raised by researchers in virtually all areas of psychology.
4) What Psychologists Do: Psychology is a diverse discipline. Training in psychology can lead to employment in academic, clinical, industrial, and research settings. Requirements for using the title psychologist vary but most American states and other countries require at least a master’s degree. In most cases a doctorate is mandatory (PsyD or Ph.D.).

5) Service Providers to Individuals:
   a) Clinical Psychology: Clinical psychologists are trained providers of psychotherapy. They hold advanced degrees in psychology - usually PhDs. Clinical psychologists are different from psychiatrists.
   b) Psychiatry: Psychiatry is a branch of medicine that deals with mental disorders. Psychiatrists provide many of the same services as psychologists for most clients. Psychiatrists also have specialized medical training that allows them to prescribe medications for relief of psychological distress.
   c) Other Mental Health Professionals: Psychoanalysts are psychotherapists who base their approach to human behavior and experience primarily on the theories and methods of the early 20th-century Viennese physician Sigmund Freud. Counseling psychologists, clinical social workers, and psychiatric nurses are other mental health professionals who have specialized training and help people with psychological problems. Forensic psychologists provide advice and consultation to those who work in the criminal justice system.

6) Service Providers to Organizations:
   a) Industrial/Organizational Psychology: Industrial/organizational psychology is the study of people at work. Psychologists in this field utilize elements of cognitive psychology, social psychology, and standardized testing to optimize the functioning of people in the work place.
   b) Human Factors: An ergonomist, or human factors specialist, attempts to facilitate the operation of machinery and all other work equipment so that the average user can use it as efficiently and as safely as possible. Ergonomists emphasize the principle of compatibility. This principle states that people’s built-in or acquired expectations enable them to learn certain procedures more easily than others.
   c) School Psychology: School psychologists specialize in the psychological condition and educational needs of students. They work with students in kindergarten through high school. They devise and implement plans to meet the academic and psychosocial needs of these students.

7) Psychologists in Teaching and Research:
   a) Developmental Psychology: Developmental psychologists study the behavioral capacities and tendencies that are typical of different ages and also study how behavior changes over the lifespan. Developmental psychologists frequently address the nature-nurture issue.
   b) Learning and Motivation: The concern of psychologists working in this field is how behavior depends on the outcome of past behaviors, and how behavior is also influenced by current motivations. They study how an action’s consequences modify subsequent behavior.
c) Cognitive Psychology: *Cognition* involves thinking and acquiring knowledge; *cognitive psychologists* study these processes. They conduct experiments to examine what people know, how they came to know it, and how they express and apply their knowledge.

d) Biological Psychology: *Biopsychologists*, or *behavioral neuroscientists*, are psychologists who try to explain behavior in terms of biological factors such as electrical and chemical activities in the nervous system, the effects of drugs and hormones, and genetics.

e) Evolutionary Psychology: *Evolutionary psychologists* try to explain behavior in terms of the evolutionary history of the species, including reasons why evolution might have favored a tendency to behave in certain ways. More successful behavior patterns led to greater survival and reproduction (the Darwinian definition of *fitness*).

f) Social and Cross-Cultural Psychology: People’s behavior is influenced by the expectations and behaviors of those around them. *Social psychologists* study how an individual influences, and is influenced, by other people. *Cross-cultural psychologists* compare the behavior of people from different cultures.

8) Should You Major in Psychology? Psychology is one of the most popular majors in the U.S., Canada, and Europe. While there are few jobs that advertise specifically for a B.S./B.A. in psychology, there are many jobs for college graduates that involve knowledge of psychology, such as human resources and social services positions. *Foundation for other graduate study:* Psychology also provides a useful background for those entering professional schools (such as medical school, law, or divinity school). *Graduate study in psychology:* An advanced degree (M.S./Ph.D./PsyD) leads to greater career opportunities. Psychology is a diverse field. Once male-dominated, psychology has seen an increasing percentage of women achieving advanced degrees. The number of ethnic minority people in the profession, although small, is also steadily increasing.

**Module 1.2: Psychology Then and Now**

1) The Early Era: Philosophers since Aristotle have debated the nature of human behavior and thought. Modern-day psychology got its start in the 19th century, when scholars started to wonder whether a scientific approach might be applied to the age-old questions.

a) Wilhelm Wundt and the First Psychological Laboratory: Wundt is credited with establishing the first psychological laboratory and performing the first meaningful psychological experiments. The fundamental question he posed was *what are the components of experience, or mind?* Wundt tested his ideas about the structure of conscious experience by collecting data based on studies of subjects’ introspections in reaction to various stimuli.

b) Edward Titchener and Structuralism: Titchener was Wundt’s student and thought the most important psychological questions pertained to the nature of mental experience. He called his approach *structuralism*, because he was attempting to describe the structures that compose the mind. Titchener’s approach is no longer influential. There were serious limitations inherent in his methods; when observers described their own experiences, the accuracy of their description could
not be checked.

c) William James and Functionalism: James’ work was concerned with the actions that the mind performs. He asked, *how do people produce useful behaviors?* His approach is called *functionalism.* He did little research of his own but rather asked questions that formed the basis of future research.

d) Studying Sensation: Many early psychologists were interested in the relationship between physical stimuli and psychological sensations. Sensation appeared to be synonymous with mental experience. It seemed that it would be relatively easy to study sensation in an empirical manner. Among other things, early sensory psychologists studied *psychophysical functions* as they attempted to describe, in mathematical terms, the relationship between the physical properties of a stimulus and its psychological properties.

e) Darwin and the Study of Animal Intelligence: Darwin’s theory of natural selection had a tremendous impact on psychology. It implied that humans and other species had certain basic features in common. It paved the way for *comparative psychologists* who compare the behavior of different animal species. Comparative psychologists attempted to measure animal intelligence using a number of different tasks, including the *delayed response problem* and the *detour problem.* They found that the level of cognitive ability of different species depended on the specific task(s) being investigated, so the question of relative intelligence was essentially meaningless.

f) Measuring Human Intelligence: Francis Galton was interested in measurement of human characteristics, as well as the role of heredity in achievement. He believed that a tendency towards eminence (high levels of accomplishment) is partly due to intelligence, and is influenced by heredity.

2) The Rise of Behaviorism:

a) John B. Watson: Watson was the founder of *behaviorism.* Behaviorism concentrates on describing, predicting, and controlling observable, measurable behaviors, and not mental processes that can only be inferred.

b) Studies of Learning: Researchers inspired by Watson studied animal behavior, attempting to discover basic laws of behavior by focusing on a few convenient species (e.g., rats) and a few convenient examples of learning (e.g., mazes). Psychologists studying learning eventually discovered that even maze learning by rats was a complex behavior that was challenging to analyze and describe.

3) From Freud to Modern Clinical Psychology:

a) The Austrian psychiatrist Sigmund Freud revolutionized the treatment of psychological disorders. His theory is based upon the existence of a hidden unconscious that influences mental processes and behavior (in direct contrast with the foundations of behaviorism). Although his influence remained strong well into the 20th century, the evidence for the validity of most of his theories is very weak.

b) Freudian psychoanalysis is no longer very influential in the practice of psychotherapy. The need to treat stress and trauma in soldiers returning from service in World War II did much to increase the importance of clinical psychology. Humanistic, cognitive, and behaviorally based therapies are examples of currently prevalent techniques.

4) Recent Trends: Psychology today is a wide-ranging field. Research now is done in
both basic (theoretical) and applied (practical) areas. The cognitive, neuroscientific, and evolutionary areas are gaining prominence, along with the new field of positive psychology which studies the factors that make people happy and fulfilled. The science also has broadened in scope to include more of human diversity. Psychology has always been more open to contributions from women than other sciences have been, but at first opportunities were very limited. However, many women made significant contributions. For example, Mary Calkins served as president of the APA, and developed the paired-associates technique for studying human memory. Now, psychology in general looks at broad principles that apply to all people, and also studies and compares the differences that are due to cultural influences. The number of minority group members receiving advanced degrees is also increasing. The human lifespan and technology have changed dramatically in the past century, affecting both our experience and our environment. An understanding of psychology will be crucial in helping people to adjust to these changes.