CHAPTER 1
Introduction to the Science of Psychology
LEARNING OBJECTIVES

1. Define psychology. (p. 3)
2. Name the various subfields of psychology. Describe the activities and interests of psychologists in each subfield. (pp.3-6)
3. Explain how the subfields of psychology can overlap. Describe how the field of psychology is linked to other disciplines. (p.7)
4. Define empiricism. (p. 9)
5. Discuss the history of psychology. Compare the goals, methods, and beliefs associated with structuralism, Gestalt psychology, psychoanalysis, functionalism, and behaviorism. (pp.8-12)
6. Compare and contrast the basic assumptions of the following approaches to psychology: biological, evolutionary, psychodynamic, behavioral, cognitive, and humanistic. Define *eclectic*. (pp. 14–17)
7. Explain why psychologists are interested in the influence of culture on behavior and mental processes. Define and give examples of sociocultural variables. Compare and contrast individualist and collectivist cultures. (p. 19)
8. Define critical thinking. Be able to assess claims by using the five-step process presented in the text. (p. 21)
9. Define and give an example of a hypothesis, operational definition, and variable. (p. 25)
10. Discuss the importance of reliability and validity in evaluating the quality of evidence. (p. 25)
11. Describe the evolution of a theory. (p. 24)
12. List the four main goals of scientific research in psychology (p.25)
13. Describe the following research methods, and discuss the advantages and disadvantages of each: naturalistic observation, case studies, and surveys. (p. 25)
14. Define and give an example of an experiment. Explain why experiments can establish cause-and-effect relationships, but other research methods cannot. (pp. 28)
15. Define and explain the role of independent and dependent variables, and of experimental and control groups in an experiment (p. 28)
16. Define confounding variable. Discuss the problems associated with the following confounding variables: random variables, the placebo effect, and experimenter bias.(p. 30)
17. Define random assignment, placebo, and double-blind design. Explain the purpose of each in an experiment. (pp. 30-31)
18. Define sampling, random sample, and biased sample. Discuss the importance of sampling in data collection. (pp. 33)
19. Define data. Summarize the use of descriptive and inferential statistics in evaluating data. (p. 33)
20. Define correlation. Give an example of a positive correlation and a negative correlation. Explain how correlation coefficients are interpreted. (p. 34)
21. Explain why correlations do not imply causation. Explain the importance of statistically significant research results. (p. 35)
22. Describe the ethical guidelines that psychologists must follow. (pp. 35-36)