

Brief Contents

This book has a strong narrative flow and each of the chapters is designed to teach in a one-semester survey course.

With every revised edition including this one, we have had to do some pruning and considerable updating to stay current with all of the developments in the field of cognitive neuroscience. We thought it essential to include new methods and, correspondingly, new insights that these tools have provided into the function of the brain, while being selective in the description of specific experimental results. The following table lists the major changes for each chapter.

PART I Background and Methods

CHAPTER 1 A Brief History of Cognitive Neuroscience 2

CHAPTER 2 Structure and Function of the Nervous System 22

CHAPTER 3 Methods of Cognitive Neuroscience 72

PART II Core Processes

CHAPTER 4 Hemispheric Specialization 124

CHAPTER 5 Sensation and Perception 168

CHAPTER 6 Object Recognition 222

CHAPTER 7 Attention 274

CHAPTER 8 Action 324

CHAPTER 9 Memory 378

CHAPTER 10 Emotion 426

CHAPTER 11 Language 474

PART III Control Processes

CHAPTER 12 Cognitive Control 514

CHAPTER 13 Social Cognition 566

CHAPTER 14 The Consciousness Problem 618