CONTENTS

Letter to Instructors xv PART Motor Behavior: Theory and Foundational Concepts One Perspectives in Motor Behavior 3 Defining Terms in Motor Behavior 4 The Evolution of Motor Development 10 Theoretical Constructs in Motor Behavior 13 Summary 23 Supplemental Activities 24 **TWO** Classifying Motor Skills 25 Skills Classification 26 Distinction Between Skill and Ability 36 Games Classification 39 Summary 44 Supplemental Activities 45 THREE Stages of Skill Acquisition 47 Mountain of Motor Development 48 Motor Learning Stages 50 Summary 64 Supplemental Activities 65 **FOUR** 67 Methodological Considerations Indicators of Motor Skill Learning 68 Performance and Learning Tests 77 Summary 86 Supplemental Activities 87 PART II Motor Development: Childhood and Adolescence **FIVE Fundamental Skills in Childhood** 91 Fundamental Movement Skills 92 Fundamental Locomotor and Manipulative Skills 99 Summary 119 Supplemental Activities 119 SIX Structural Constraints in Childhood and Adolescence 121 Nature and Nurture 122 Physical Growth and Maturation 126 Body System Constraints 132 Summary 142 Supplemental Activities 142

Preface xi

PART III

SEVEN	Functional Constraints of Thinking, Knowing, and Processing Cognitive Development 144 Types of Knowledge 147 Attention 151 Memory 155 Sport Expertise 160 Summary 162 Supplemental Activities 162	143	
EIGHT	Functional Constraints of Psychosocial-Affective Development Psychosocial Constraints 164 Social-Affective Constraints 174 Self-Regulation 178 Summary 183 Supplemental Activities 184	163	
Motor Development: Adulthood and Aging			
NINE	Movement in Adulthood Aging 188 Physical Activity 190 Peak Athletic Performance 192 Movement Patterns 196 Summary 203 Supplemental Activities 203	187	
TEN	Structural Constraints in Adulthood Skeletal System 206 Muscular System 209 Aerobic Capacity 211 Cardiovascular System 212 Nervous System 215 Endocrine System 217 Body Composition 217 Sensory Systems 218 Summary 221 Supplemental Activities 222	205	
ELEVEN	Functional Constraints in Adulthood Psychosocial Constraints 226 Cognitive Function 238 Summary 244 Supplemental Activities 244	225	

PART IV Motor Learning: Designing Appropriate Programs

	riogianis	
TWELVE	Physical, Affective, and Instructional Factors Gold Standards Versus Variability 250 Physical Factors 253 Affective Factors 257 Instructional Factors 259 Summary 275 Supplemental Activities 276	249
THIRTEEN	Prepractice Considerations Goal Setting 278 Demonstrations 280 Verbal Instruction 292 Directing Attention and Providing Guidance 296 Summary 298 Supplemental Activities 298	277
FOURTEEN	Practice Amount of Practice 300 Variable Practice 301 Contextual Interference Effect 308 Practice Specificity 313 Part and Whole Practice 315 Mental Practice and Imagery 319 Distribution of Practice 321 Summary 322 Supplemental Activities 323	299
FIFTFFN	Detecting and Correcting Errors	325

Detecting and Correcting Errors

Feedback 326 Providing Effective Feedback 337 Summary 345 Supplemental Activities 345

Conclusion: Devising a Plan 349

Glossary 357 References 371 Index 393

About the Authors 403