

Contents

Section I Building Baseline Knowledge

- Chapter 1** *Orthotics and Prosthetics in Rehabilitation: Multidisciplinary Approach*
- Chapter 2** *Aging and Activity Tolerance: Implications for Orthotic and Prosthetic Rehabilitation*
- Chapter 3** *Motor Control, Motor Learning, and Neural Plasticity in Orthotic and Prosthetic Rehabilitation*
- Chapter 4** *An Evidence-Based Approach to Orthotic and Prosthetic Rehabilitation*
- Chapter 5** *Clinical Assessment of Gait*
- Chapter 6** *Materials and Technology*
- Chapter 7** *Footwear: Foundation for Lower Extremity Orthoses*

Section II Orthoses in Rehabilitation

- Chapter 8** *Foot Orthoses*
- Chapter 9** *Principles of Lower Extremity Orthoses*
- Chapter 10** *Orthotic Decision Making in Neurological and Neuromuscular Disease*
- Chapter 11** *Orthoses for Knee Dysfunction*
- Chapter 12** *Orthoses in Orthopedic Care and Trauma*
- Chapter 13** *Orthoses for Spinal Dysfunction*
- Chapter 14** *Orthoses in the Management of Hand Dysfunction*
- Chapter 15** *Splinting, Orthoses, and Prostheses in the Management of Burns*
- Chapter 16** *Adaptive Seating in the Management of Neuromuscular and Musculoskeletal Impairment*

Section III Prostheses in Rehabilitation

- Chapter 17** *Etiology of Amputation*
- Chapter 18** *Wound Care for Vulnerable Feet*
- Chapter 19** *Amputation Surgeries for the Lower Limb*
- Chapter 20** *Postoperative and Preprosthetic Care*
- Chapter 21** *Understanding Prosthetic Feet*
- Chapter 22** *Postsurgical Management of Partial Foot and the Syme Amputation*
- Chapter 23** *Transtibial Prosthetics*
- Chapter 24** *Transfemoral Prostheses*
- Chapter 25** *Prosthetic Options for Persons with High-Level and Bilateral Lower-Limb Amputation*
- Chapter 26** *Early Rehabilitation in Lower-Extremity Dysvascular Amputation*
- Chapter 27** *Advanced Rehabilitation for People with Microprocessor Knee Prostheses*

- Chapter 28** *Athletic Options for Persons with Amputation*
- Chapter 29** *Rehabilitation for Children with Limb Deficiencies*
- Chapter 30** *Prosthetic Options for Persons with Upper-Extremity Amputation*
- Chapter 31** *Rehabilitation for Persons with Upper-Extremity Amputation*