# Table of Contents

## Section 1: Basic Topics
- Chapter 1 History and Development of Contact Lenses
  - Joseph T. Barr
- Chapter 2 Anatomy, Morphology and Electron Microscopy of the Cornea and Conjunctiva
  - Jan P.G. Bergmanson and Michael J. Doughty
- Chapter 3 Corneal Oxygen Consumption and Hypoxia
  - Noel A. Brennan and Nathan Efron
- Chapter 4 Immunology and Inflammation
  - Carolyn G. Begley and Michael J. Giese
- Chapter 5 Microbiology of Contact Lenses
  - Mark D.P. Willcox, Najat Harmis, Hua Zhu, Brigitte Cowell, and Fiona Stapleton
- Chapter 6 Contact Lens Design
  - Barry A. Weissman, Edward S. Bennett, and Ronald G. Seger
- Chapter 7A Optical Phenomena of Contact Lenses
  - William J. Benjamin
- Chapter 7B Practical Optics of Contact Lens Prescription
  - William J. Benjamin

## Section 2: Preliminaries
- Chapter 8 Initial Evaluation
  - Timothy B. Edrington and Julie A. Schornack
- Chapter 9 Corneal Topography: corneal curvature and optics, clinical applications and wave front analysis
  - Yaron S. Rabinowitz

## Section 3: Rigid CL Application, Care, and Evaluation
- Chapter 10 Polymer Chemistry
  - Alex Cannella
- Chapter 11 Material Selection
  - Edward S. Bennett and Jeffrey D. Johnson
- Chapter 12 Basic Fitting
  - Edward S. Bennett
- Chapter 13 Rigid Lens Care and Patient Education
  - Edward S. Bennett and Heidi Wagner
- Chapter 14 Inspection and Verification of Gas Permeable Contact Lenses
  - Vinita A. Henry and Edward S. Bennett
- Chapter 15 Modification
  - Bruce W. Morgan and Edward S. Bennett
- Chapter 16A Progress Evaluation Procedures
  - Desmond Fonn and Luigina Sorbara
- Chapter 16B RGP Problem Solving
  - Desmond Fonn and Luigina Sorbara

## Section 4: Hydrogel CL Application, Care, and Evaluation
- Chapter 17 Polymer Chemistry
  - Lynn Winterton and Kai C. Su
- Chapter 18 Soft Contact Lens Application
  - Karen K. Yeung and Barry A. Weissman
- Chapter 19 Hydrogel Lens Care Regimens and Patient Education
  - Richard E. Weisbarth and Beth Henderson
- Chapter 20 Hydrogel Lens Solution Chemistry
  - Leo G. Carney, Joseph T. Barr, and Richard M. Hill
- Chapter 21 Disposable and Frequent Replacement Hydrogel Contact Lenses
  - Melissa W. Chun, Lisa Barnhart Fox, and Alana J. Zhou
- Chapter 22 Hydrogel Contact Lens Follow-up Care and Problem Solving
  - Jennifer Smythe, Peter Bergenske, and Patrick Caroline

## Section 5: Advanced CL Application
- Chapter 23 Tears, Dry Eye, and Management
  - Barbara Caffery and Jerry R. Paugh
Chapter 24 Hybrid Materials and Designs
Michael D. Depaolis, Joseph P. Shovlin, Dwight H. Akerman, and Gary L. Edwards
Chapter 25 Rigid Contact Lenses and Astigmatism
Joel A. Silbert
Chapter 26 Hydrogel CL Astigmatism Correction
Arthur B. Epstein and Mel J. Remba
Chapter 27 Presbyopic CL Application
Edward S. Bennett, David W. Hansen, and Janice M. Jurkus
Chapter 28 Contact Lens Applications for Ocular Trauma, Disease, and Surgery
Timothy T. McMahon and Loretta B. Szcztolka
Chapter 29 Contact Lens Corneal Reshaping
Marjorie J. Rah and John Mark Jackson