Section 1

- 1. The Rise of Modern Surgery: An Overview
- 2. Ethics and Professionalism in Surgery
- 3. The Inflammatory Response
- 4. Shock, Electrolytes and Fluid
- 5. Metabolism in Surgical Patients
- 6. Wound Healing
- 7. Regenerative Medicine
- 8. Critical Assessment of Surgical Outcomes and Health Services
- 9. Safety in the Surgical Environment

Section 2

- 10. Principles of Preoperative and Operative Surgery
- 11. Surgical Infections and Antibiotic Use
- 12. Surgical Complications
- 13. Surgery in the Geriatric Patient
- 14. Anesthesiology Principles, Pain Management, and Conscious Sedation
- 15. Emerging Technology in Surgery: Informatics, Electronics
- 16. Robotic Surgery

Section 3

- 17. Management of Acute Trauma
- 18. The Difficult Abdominal Wall
- 19. Emergency Care of Musculoskeletal Injuries
- 20. Burns
- 21. Bites and Stings
- 22. Surgical Critical Care
- 23. Bedside Surgical Procedures
- 24. The Surgeon's Role in Mass Casualty Incidents

Section 4

- 25. Transplantation Immunobiology and Immunosuppression
- 26. Liver Transplantation
- 27. Kidney and Pancreas Transplantation
- 28. Small Bowel Transplantation

Section 5

- 29. Tumor Biology and Tumor Markers
- 30. Tumor Immunology and Immunotherapy
- 31. Melanoma and Cutaneous Malignancies
- 32. Soft Tissue Sarcomas
- 33. Bone Tumors
- Section 6
- 34. Head and Neck

Section 7

- 35. Diseases of the Breast
- 36. Breast Reconstruction
- Section 8
- 37. Thyroid
- 38. The Parathyroid Glands
- 39. Endocrine Pancreas
- 40. The Adrenal Glands
- 41. The Multiple Endocrine Neoplasia Syndromes

Section 9

- 42. Esophagus
- 43. Gastroesophageal Reflux Disease and Hiatal Hernia

Section 10

- 44. Abdominal Wall, Umbilicus, Peritoneum, Mesenteries, Omentum and
- Retroperitoneum
- 45. Hernias
- 46. Acute Abdomen
- 47. Acute Gastrointestinal Hemorrhage
- 48. Morbid Obesity
- 49. Stomach
- 50. Small Intestine
- 51. The Appendix
- 52. Colon and Rectum
- 53. Anus

- 54. The Liver
- 55. Biliary System
- 56. Exocrine Pancreas
- 57. The Spleen
- Section 11
- 58. Lung, Chest Wall, Pleura and Mediastinum
- 59. Congenital Heart Disease
- 60. Acquired Heart Disease: Coronary Insufficiency
- 61. Acquired Heart Disease: Valvular

Section 12

- 62. The Aorta
- 63. Peripheral Arterial Disease
- 64. Vascular Trauma
- 65. Venous Disease
- 66. The Lymphatics
- Section 13
- 67. Pediatric Surgery
- 68. Neurosurgery
- 69. Plastic Surgery
- 70. Hand Surgery
- 71. Gynecologic Surgery
- 72. Surgery in the Pregnant Patient
- 73. Fetal Surgery
- 74. Urologic Surgery