Section 1: Applied Anatomy.

- *Peripheral Nerve Block Anesthesia.*
- *Central Neuraxial Anatomy and Anesthetic Application (Central Neuraxial Blockade).*
- *Anatomy of the Brain and the Spinal Cord.*
- *Anatomy of the Airway/Airway Management.*

- Section 2: Pharmacology.

- *Pharmacology – General Concepts.*
- *Pharmacology of Non-Opioid Intravenous Anesthetics.*
- *Pharmacology of Opioids.*
- *Clinical Pharmacology of Drugs Acting at the Neuromuscular Junction.*
- *Pharmacology of Local and Neuraxial Anesthetics.*
- *Pharmacology of Inhaled Anesthetics.*
- *Cardiovascular Anatomy and Pharmacology.*
- *Respiratory Pharmacology.*
- *Renal Pharmacology.*
- *Pharmacology of Anticoagulants, Antithrombotics, and Antiplatelet Drugs.*
- *Perioperative Intravenous Fluid Therapy.*

- Section 3: Physiology.

- *Central and Peripheral Nervous Systems.*
- *Cardiovascular Physiology.*
- *Respiratory System Physiology.*
- *Physiology of the Autonomic Nervous System.*
- *Physiology of Temperature Control.*
- *Gastrointestinal/Hepatic Physiology.*

- Renal Physiology.

- Physiology of the Endocrine System and Metabolic Complications in Anesthesia.

- Section 4: Anesthetic Management Topics.

- Preoperative Evaluation of Patients Undergoing Non-Cardiac Surgery.

- Premedication.

- Monitored Anesthesia Care.

- Blood Products Transfusion.

- Complications in Anesthesia.

- The Postoperative Period.

- Perioperative Pain Management.

- Special Problems in Anesthesiology.

- Section 5: Physics in Anesthesia.

- The Anesthesia Machine.

- Physical Measurements in Anesthesia.

- Breathing Systems.

- Physics of Instrumentation.

- Electrical Safety in the Operating Room.

- Mechanical Ventilation.

- Statistics Made Simple: Introduction to Biostatistics and Research Design for the Anesthesiologist.