

Section 1. Basic Principles of Pharmacology

- 1. Mechanisms of Drug Action***
- 2. Pharmacokinetics and Pharmacodynamics for Intravenous Anesthetics***
- 3. Pharmacokinetics and Pharmacodynamics of Inhaled Anesthetics***
- 4. Drug Metabolism and Pharmacogenetics***
- 5. Physiology and Pharmacology of Obesity, Prematurity, and Aging***
- 6. Pharmacodynamic Drug Interactions***
- 7. Adverse Drug Reactions***

Section 2. Nervous System

- 8. Central Nervous System Physiology: Neurophysiology***
- 9. Central Nervous System Physiology: Cerebrovascular***
- 10. Pharmacology of Intravenous Anesthetics***
- 11. Pharmacology of Inhaled Anesthetics***
- 12. Neuropharmacology***
- 13. Autonomic Nervous System: Physiology***
- 14. Autonomic Nervous System: Pharmacology***
- 15. Thermoregulation***
- 16. Physiology of Pain***
- 17. Intravenous Opioid Agonists and Antagonists***
- 18. Oral and Non-Intravenous Opioids***
- 19. Non-Opioid Analgesics and Anti-Inflammatory Drugs***
- 20. Local Anesthetics***
- 21. Neuromuscular Physiology and Pharmacology***
- 22. Neuromuscular Blockers and Reversal Drugs***

Section 3. Cardiovascular System

23. Cardiovascular Physiology: Cellular and Molecular Regulation

24. Cardiovascular Physiology: Integrative Function

25. Vasopressors and Inotropes

26. Antihypertensive Drugs and Vasodilators

27. Anti-arrhythmic Drugs

28. Cardiopulmonary Resuscitation

Section 4. Pulmonary System

29. Pulmonary Physiology

30. Pulmonary Pharmacology

Section 5. Gastrointestinal and Endocrine Systems

31. Liver and Gastrointestinal Physiology

32. Liver and Gastrointestinal Pharmacology

33. Nutritional and Metabolic Therapy

34. Pharmacology of Postoperative Nausea and Vomiting

35. Endocrine Physiology

36. Endocrine Pharmacology

37. Physiology and Pharmacology of Obstetric Anesthesia

Section 6. Immunity and Infection

38. Chemotherapy, Immunosuppression, and Anesthesia

39. Infection, Antimicrobial Drugs and Anesthesia

Section 7. Fluid, Electrolyte and Hematologic Homeostasis

40. Renal Physiology

41. Intravascular Volume: Regulation and Replacement Therapy

42. Electrolytes and Diuretics

Section 8. Blood and Hemostasis

43. Blood and Coagulation

44. Transfusion and Coagulation Therapy

45. Antiplatelet and Anticoagulant Therapy