
HMX Pro Pharmacology - Essentials

Understanding how drugs act in the body is vital for anyone whose work intersects with patient care. This foundational course offers a unique way for professionals to learn about key concepts in pharmacology and how these are used in the treatment and prevention of disease. Participants will:

- Learn about different drug modalities and routes of administration
- Understand key concepts including pharmacokinetics and pharmacodynamics
- See how the principles of pharmacology are applied in real-life scenarios and clinical settings

Topics Covered

Overview of Pharmacology

- Introduction to Pharmacology
- The Promise of Pharmacology in Human Health and Disease
- Dose-Response Curves
- Drug Responses
- Inhibitors
- Application: Opioid Potency

Pharmacology and Therapeutics

- Drug Modalities
- Therapeutic Approaches
- Small Molecule Drugs
- Biologics
- The Cardiovascular System
- Routes of Administration
- Improving Drug Delivery
- Application: Insulin Delivery

Wrap-up

- The Future of Pharmacology

Pharmacokinetics

- Overview of Pharmacokinetics
- Absorption and Bioavailability
- Distribution
- Volume of Distribution
- Drug Metabolism
- Clearance
- Drug Elimination
- Interactive: Visualizing Volume of Distribution
- Clinical Linkage: Anesthesia in the Operating Room

Pharmacodynamics

- Drug Targets and Action
- Drug Action at Receptors
- Pharmacodynamic Representations
- Drug-Receptor Binding

The HMX Pro Series offers a new online learning experience designed to get busy professionals up to speed on the latest advances in medicine. Concepts are taught using whiteboard-style videos and animations and reinforced by interactive elements, true-to-life scenarios, and real patient cases to enhance learning.