Outline

**I.    Orientation to Pharmacy**

A.    History
B.    Standards

i.    Education Requirements
ii.   Professional Organizations
iii.  Code of Ethics

C.    References

i.    Text
ii.   Journals
iii.   Internet

D.    Community Pharmacy

i.    Processing and Dispensing Prescriptions
ii.    Labeling Requirements

E.    Required Equipment
F.    Counter and Consulting Areas
G.   Storage
H.   Controlled Substances
I.    Inventory

i.    Ordering
ii.    Restocking

J.    Ethics and Standards

i.    Privacy
ii.   Confidentiality

K.    Accountability
L.    Computer Applications

i.    Components
ii.    Order Entry
iii.   Systems
iv.   Confidentiality

M.    Institutional Pharmacy

i.    Pharmacy Organization
ii.    Medication Orders
iii.   Dispensing Systems
iv.   Sterile Products
v.    Inventory Control
vi.   Roles and Duties
vii.  Record Keeping
viii.  Policy and Procedure Manual
ix.   Regulatory Agencies
x.    OSHA
xi.   PPE
xii.   Antiseptic Technique
xiii.  Laminar Flow Hoods

**II.    Pharmacy Law and Ethics**

A.    Federal and State Laws

i.    Reference
ii.    Governing Bodies
iii.   Types of Law
iv.   Violations
v.    Federal Laws
vi.   State Laws—Links
vii.  Agencies
viii. Recalls
ix.   HIPAA

B.    Schedule of Drugs
C.    Ethics

i.    Pharmacist Code
ii.   Technician Code

**III.    Medical and Pharmaceutical Terminology**

A.    Introduction to Terminology

i.    Word Parts
ii.    Rules

B.    Abbreviations and Calculations
C.    Organs: Cardio, Endocrine, GI, Integumentary
D.    Organs: Lymphatic, Muscular, Nervous, Skeletal, Reproductive
E.    Organs: Respiratory, Urinary, Hearing, Sight

**IV.    Pharmaceutical Calculations**

A.    Basic Math Skills

i.    Fractions and Decimals
ii.    Ratio, Proportions, and Percents
iii.   Conversions

B.    Community Pharmacy Math

i.    Prescriptions
ii.    Billing and Inventory

C.    Institutional Pharmacy Math

i.   IV Room Calculations (Ration and Percentage)
ii.   Dosage Calculations
iii.  Dilutions and Alligations

**V.    Pharmacology**

A.    Unit 1: The Science of Pharmacology

i.    Evolution of Drugs
ii.    Pharmacology
iii.   Administration of Pharmacological Agents

B.    Unit 2: Anti-Infectives and Drugs for Colds

i.    Antibiotics
ii.   Antivirals, Antiretrovirals, and Antifungals
iii.  Antihistamines, Antitussives, Decongestants, and Expectorants

C.    Unit 3: Narcotic Pain Relievers and Nervous System Drugs

i.    Anesthetics, Analgesics, and Narcotics
ii.   Antidepressants, Antipsychotics, and Antianxiety Agents
iii.  Anticonvulsants, CNS Disorder Drugs

D.    Unit 4: Respiratory, GI, Renal, and Cardiac Drugs

i.    Respiratory Drugs
ii.   Gastrointestinal Drugs
iii.  Urinary System Drugs
iv.  Cardiovascular Drugs

E.    Unit 5: Nonnarcotic Analgesics, Muscle Relaxants, Hormones, and Topicals

i.    Muscle Relaxants, Nonnarcotic Analgesics, and Arthritis Drugs
ii.   Hormones
iii.   Topicals, Ophthalmics, and Otics

F.    Unit 6: Chemotherapy, Herbs, and Miscellaneous Drugs

i.    Recombinant Drugs and Chemotherapy
ii.   Vitamins, Nutritional Supplements and Natural Supplements, Antidotes, and CODE Emergency Agents

**VI.    Communication Skills**

A.    Process
B.    Verbal and Non-Verbal
C.    Methods

i.    Fax
ii.   Telephone
iii.  Internet
iv.  Pagers
v.   Written

D.    Barriers

i.    Conflict
ii.    HIPAA

**VII.    Insurance and Inventory Procedures**

A.    Cost Analysis
B.    Purchasing Procedures
C.    Receiving
D.    Record Keeping
E.    Inventory Control

i.    Computers
ii.    Perpetual Inventory
iii.   Expired
iv.   Formulary
v.   Storage

F.   Repackaging
G.   Types of Insurance
H.   Claim Forms
I.    Billing

**VIII.    Lab Module**

A.    Unit 1: Retail Lab

i.    Interpreting Prescriptions
ii.   Counting, Measuring and Filling Containers
iii.   Filling Prescriptions

B.    Unit 2: Hospital Lab

i.    Interpreting Physician Order Sheets
ii.    Aseptic Technique
iii.   Vials and Ampoules
iv.   IV Bags

**IX.    Clinical Rotations**

A.    Virtual Externship
B.    Hospital

i.    Research Paper
ii.   On-Site Rotation

C.    Retail

i.    Research Paper
ii.   On-Site Rotation (Walgreen's or CVS)

**X.    Final Comprehensive Exam**