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**