

Pharmacy Technician Training Program Syllabus

February 2023



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Instructor

Judith M. Riffée, B. Pharm., R.Ph.

Office Hours

Office hour sessions will be arranged on an individual basis and conducted via online collaborative tools, phone and email. Instructions on how to use the collaborative tools are posted on the LMS. Students are advised to schedule office hours in advance with their professor via email.

Contact Hours

Approximately 170 hours

Textbooks

The Pharmacy Technician, Foundations and Practices

- Mike Johnston, Third Edition, 2020
- Pearson Education, Inc.
- ISBN: 9780135204177 or ISBN: 0135204178

The Pharmacy Technician, Foundations and Practices, Lab Manual and Workbook

- Mike Johnston, Third Edition, 2020
- Pearson Education, Inc.
- ISBN 13: 978-0-13-520428-3 or ISBN 10: 0-13-520428-3

Complete Math Review for the Pharmacy Technician

- William A. Hopkins, Jr., Fifth Edition, 2019
- American Pharmacists Association
- ISBN: 9781582123141

Method of Evaluation

Students are evaluated based on their assessment scores and class participation. Passing the didactic portion of this course requires a cumulative score of 70% or greater which includes course assessments (80%) and class participation/homework submissions (20%).

Course assessments include an assessment quiz covering the content of each unit and as well as a Top Prescribed Drugs assessments associated with specific units. Students will have three opportunities to reach a 70% score on these two types of assessments. If a score is 70% or greater on any one assessment, the student may automatically advance in the course.

Homework assignments are tools to enable students to gauge their understanding of the material. As such, students are highly encouraged to complete all assignments. There are selected homework assignments which are required to be submitted to the homework section of the course LMS (Learning Management System). All required postings are evaluated by the course instructor in terms of class participation and feedback is given to the student via the homework section of the LMS. Completion of the course assessments and the class participation/homework together will determine if a student will be admitted to an externship site. If students feel they need additional assistance in understanding the material, they should contact their instructor. Failure to successfully complete both the didactic portion of the course and the externship will result in the student's inability to receive the certificate of completion.

Method of Instruction

- Video Lectures
- Reading and Homework Assignments
- Handouts
- Slides
- Assessments

Didactic Portion of Course Assignments

Module 1: Foundations for the Pharmacy Technician

Unit 1 – History of Pharmacy

Video Lecture

- Watch “History and Origins of Pharmacy”

Homework

Foundations Textbook

- Read Chapter 1, History of Pharmacy Practice
- Complete Chapter Review Questions, Page 13
- Define the Key Terms on Page 2 and make note of these for further study

Lab Manual and Workbook

- Complete Review Questions, Pages 2-3
- Complete PTCB Exam Practice Questions, Page 4
- Complete Activity 1-1, History of Medicine Timeline (online posting not required)
- Other Chapter activities are not required but are optional additional learning opportunities for the student

Assessment

- Complete Module 1 – Unit 1 Assessment

Module 1: Foundations for the Pharmacy Technician

Unit 2 – The Profession of Pharmacy

Video Lecture

- Watch “The Profession of Pharmacy”

Homework

Foundations Textbook

- Read Chapter 2, The Professional Pharmacy Technician
- Define Key Terms on page 15 of the text and make note of these for further study
- Complete Chapter Review Questions, Page 26
- Critical Thinking: Review and consider questions, page 27

Lab Manual and Workbook

- Complete Review Questions, Pages 9-11
- Complete PTCB Exam Practice Questions, Page 12
- Complete Activities:
 - Case Study 2-1 – Who is responsible? Page 12
 - Case Study 2-2 – Appropriate Behavior, Page 13
- Submit responses to questions 1 and 2 of both case studies by clicking the submit homework button below
- Other chapter activities are not required but are optional additional learning opportunities for the student

Assessment

- Complete Module 1 – Unit 2 Assessment

Module 1: Foundations for the Pharmacy Technician

Unit 3 – Pharmacy Law

Video Lecture

- Watch “Pharmacy Law and Ethics I”
- Watch “Pharmacy Law and Ethics II”
- Watch “Pharmacy Law and Ethics III”

Homework

Foundations Textbook

- Read Chapter 4, Pharmacy Law and Ethics
- Complete Chapter Review Questions, Page 56-57
- Define Key Terms on page 40 of the text and make note of these for further study
- Critical Thinking: Page 57
- Read and consider posted Sulfanilamide Disaster Article, <https://www.fda.gov/files/about%20fda/published/The-Sulfanilamide-Disaster.pdf>
- Review NDA Process Chart, Figure 38-2, Page 650

Lab Manual and Workbook

- Complete Review Questions, Pages 35-38
- Complete PTCB Exam Practice Questions, Page 39
- Complete Activities:
 - 4-1: Case Study - Legal Matters and Patient Confidentiality, Pages 39-40
 - 4-3: Case Study - Ethical Considerations, Pages 41-42
- Submit responses to questions 1 and 2 of both activities by clicking the submit homework button below.
- Complete Lab 4-1: Create a Pharmacy Timeline, Pages 43-44 (online posting not required)
- Complete Lab 4-2: Interpreting a Drug Monograph, Pages 45-47, [click here](#) for posted monograph for Keppra
Submit responses to Lab 4-2 by clicking the submit homework button below
- Other Chapter activities are not required but are optional additional learning opportunities for the student

Required Outside Reading

- Concept: FDA product tracking and tracing requirements (i.e. Drug Supply Chain Security Act (DSCSA))
 - Read, <https://www.fda.gov/drugs/drug-supply-chain-integrity/drug-supply-chain-security-act-dscsa>
 - Read, <https://www.fda.gov/drugs/drug-supply-chain-security-act-dscsa/pharmacists-utilize-dscsa-requirements-protect-your-patients>
 - Required response, describe the required product tracing documentation needed by the pharmacy in order to comply with this law which tracks drugs as they move through the supply chain
 - Required response, for what period of time and in what form is the pharmacy required to store the tracing documentation?
 - Submit responses to above required outside reading by clicking the submit homework button below

- Concept: U.S. Public Health Service Recommendations for Postexposure Prophylaxis following needle stick or percutaneous injuries
 - Read <https://www.cdc.gov/mmwr/preview/mmwrhtml/rr5011a1.htm> (Summary Only)
 - Required response, name three born borne pathogen diseases which a person experiencing a needle stick or percutaneous injury is at highest risk for contracting
 - Submit responses to above required outside reading by clicking the submit homework button below

Assessment

- Complete Module 1 – Unit 3 Assessment

Module 1: Foundations for the Pharmacy Technician

Unit 4 – Communications

Video Lecture

- Watch “Communications”

Homework

Foundations Textbook

- Read Chapter 3, Communication and Customer Care
- Define Key Terms on page 28 of the text and make note of these for further study
- Complete Chapter Review Questions, Pages 38-39
- Critical Thinking: Review and consider questions on page 39

Lab Manual and Workbook

- Complete Review Questions, Pages 20-22
- Complete PTCB Exam Practice Questions, Page 23
- Complete Activities:
 - 3-1: Case Study - Overcoming Communication Barriers, Pages 23-24
 - 3-2: Case Study - Patient Care, Pages 25-26
- Submit responses to questions 1 and 2 of these case studies by clicking the submit homework button below
- Review Lab 3-1, Leaving and Receiving Voicemail Messages (Part One) Page 27-28 (online posting not required)
- Other Chapter activities are not required but are optional additional learning opportunities for the student

Assessment

- Complete Module 1 – Unit 4 Assessment

Module 2: Functional aspects of pharmacy practice

Unit 1 – Terminology and Pharmacy Abbreviations

Video Lecture

- Watch “Terminology and Abbreviations I”
- Watch “Terminology and Abbreviations II”
- Watch “Terminology and Abbreviations III”
- Watch “Terminology and Abbreviations IV”

Homework

Foundations Textbook

- Read Chapter 5, Terminology and Abbreviations
- Define Key Terms on page 58 of the text and make note of these for further study
- Complete Chapter Review Questions, Pages 90-91
- Critical Thinking: Review and consider questions on page 91

Lab Manual and Workbook

- Complete Review Questions, Pages 52-53
- Complete PTCB Exam Practice Questions, Page 54
- Complete Activity 5-1: Case Study - Lost in Translation
 - Submit responses to questions 1 through 4 of this case study by clicking the submit homework button below
- Complete Activities 5-2 and 5-3, Pages 56-57 (Posting not required)
- Complete Lab 5-1: Translating a Medical Record, Pages 59-61
 - Submit responses to all questions for this lab exercise by clicking the submit homework button below
- Other Chapter activities are not required but are optional additional learning opportunities for the student

Assessment

- Complete Module 2 – Unit 1 Assessment

Module 2: Functional aspects of pharmacy practice

Unit 2 – Basic Biopharmaceutics

Video Lecture

- Watch “Basic Biopharmaceutics”

Homework

Foundations Textbook

- Read Chapter 23, The Body and Drugs
- Define Key Terms on page 346 of the text and make note of these for further study
- Complete Chapter review questions, Pages 361
- Critical Thinking: Review and consider questions #1 and #2 on page 361

Lab Manual and Workbook

- Complete Review Questions, Pages 351-353
- Complete PTCB Exam Practice Questions, Pages 353-354
- Complete Activities:
 - Case Study 23-2: Case Study - Identifying Drug Interactions Page 357 (online posting not required)
 - Case Study 23-4: Case Study - Fastest Response, Page 359, Submit responses to questions 2 and 4 of this case study by clicking the submit homework button below
- Other Chapter activities are not required but are optional additional learning opportunities for the student

Assessment

- Complete Module 2 – Unit 2 Assessment

Module 2: Functional aspects of pharmacy practice

Unit 3 – Drug Classifications

Video Lecture

- Watch “Drug Classifications I”
- Watch “Drug Classifications II”
- Watch “Drug Classifications III”

Homework

There is no reading assignment for Module 2-Unit 3 in the Foundations Textbook. Material for this unit is contained only in the three video lectures on the subject of “Drug Classifications.”

There is no reading assignment in the Lab Manual and Workbook for Module 2 -Unit 3. The entire “lab assignment” is printed in this syllabus.

Define the following terms (Glossary of text) and make note of these for further study:

- Anxiety
- Depression
- Edema
- Hypertension
- Pharmacology
- Psychotic
- Seizure
- Teratogenic
- Type 1 diabetes mellitus
- Type 2 diabetes mellitus

Review questions: Print or save these questions to your computer and choose the best answer:

1. An example of a beta blocker medication is?

- a. felodipine
- b. gemfibrozil
- c. labetolol
- d. hydralazine

2. Loop diuretics are indicated for:

- a. Osteoporosis
- b. Gout
- c. Infection
- d. Edema

3. Antiemetics are indicated for:

- a. Diarrhea
- b. Nausea and vomiting
- c. Constipation
- d. Acid reflux

4. A hemostatic drug is used to:

- a. Increase blood plasma
- b. Stop bleeding
- c. Prevent blood clots
- d. Break down blood clots

5. An example of a C-III drug is?

- a. codeine with acetaminophen tablets
- b. fentanyl
- c. phenobarbital
- d. meperidine

6. According to the DEA, the class of drugs which has the highest potential for addiction and abuse is?

- a. C-IV
- b. C-III
- c. C-II
- d. C-I

7. Which of the following is an OTC antipyretic?

- a. Benadryl
- b. Pepcid
- c. Dramamine
- d. Tylenol

8. NSAIDs are used to treat:

- a. Inflammation and pain
- b. Fever
- c. None of the above
- d. Both a and b

Print or save the table below to your computer. Review the drug classifications on the right that are used to treat specific disease states/symptoms. Write the letter of the drug classification on the line next to the corresponding disease state/symptom it is most often used to treat.

Match the Disease State/Symptom to the Drug Classification

Directions: Write in the letter of the Drug Classification that matches the Disease State/Symptom	Disease State/Symptom	Drug Classification
1	Allergic reaction -exposure to ragweed pollen	a. Proton pump inhibitors
2	Chronic gastric reflux	b. Macrolides
3	Exercise-induced asthma	c. Antihistamines
4	Athlete's foot	d. Antihyperlipidemics
5	Herpes simplex II	e. Antifungals
6	Strep throat infection	f. Antiemetics
7	High blood pressure	g. Antivirals
8	Nausea	h. Muscle relaxants
9	Depression	i. NSAIDs
10	Back spasms due to recent injury	j. ACE inhibitors
11	High Cholesterol	k. Anticonvulsants
12	Mild sprained ankle	l. Bronchodilators
13	Seizure disorder	m. Antipsychotics
14	Schizophrenia	n. Diuretics
15	Edema and hypertension	o. SSRIs

Assessment

- Complete Module 2 – Unit 3 Assessment

Module 2: Functional aspects of pharmacy practice

Unit 4 – Calculations I

Video Lecture

- Watch “Calculations I (Basic Math and Measurement)”

Homework

Foundations Textbook

- Read Chapter 17, Measurement Systems
 - Define Key terms on page 276 in the text and make note of these for further study
 - Complete all practice problem sets in Chapter 17
 - Complete Chapter Review Questions, Page 285

Lab Manual and Workbook

- Chapter 17

- Complete Review Questions, Pharmacy Calculations Problems, and PTCB Practice, Pages 291-292
- Complete Activities:
 - 17-1: Case Study - Kilograms, Pages 293-294
 - 17-2: Case Study - Milliliters, Page 294
 - Submit responses to all questions for these activities by clicking the submit homework button below.
- Review and consider Activity 17-3 and Lab-1 (online posting not required)
- Other Chapter activities are not required but are optional additional learning opportunities for the student

Math Textbook: Complete Math Review for the Pharmacy Technician

- Read Chapter 1 Back to Basics, Pages 1-22
- Read Chapter 2 Systems of Measurement, Pages 23-36
- Complete all Practice Problems and all Advanced Problems in both chapters - Answer Keys by Chapter – back of text
- Study the information in shaded areas of both chapters. Make note of this important information for further study.

Math Text Homework

Calculations Corner

Solve calculations problems here and submit responses by clicking the submit homework button below

1. Convert Arabic to Roman 84
2. Convert Roman to Arabic MCMXCVI
3. Multiplication of Fractions $5/6 \times 3/8$
4. Division of Fractions 8 Divided by $2/3$
5. Division of Decimals 17 Divided by 2.46
6. Which is larger? $24/100$ or 0.1987

Assessment

- Complete Module 2 – Unit 4 Assessment

Module 2: Functional aspects of pharmacy practice

Unit 5 – Routes of Administration, Dosage Forms, and Pharmaceutical Formulations

Video Lecture

- Watch "Routes of Administration, Dosage Forms, Pharmaceutical Formulations I"
- Watch "Routes of Administration, Dosage Forms, Pharmaceutical Formulations II"
- Watch "Routes of Administration, Dosage Forms, Pharmaceutical Formulations III"

Homework

Foundations Textbook

- Read Chapter 6, Dosage Formulations and Routes of Administration
- Define Key terms on page 92 in the text and make note of these for further study
- Complete Chapter Review Questions, Page 108
- Critical Thinking: Review and consider Questions, Page 108

Lab Manual and Workbook

- Complete Review Questions, Pages 73-74
- Complete PTCB Exam Practice Questions, Page 75
- Complete Activities:
 - 6-1: Case Study - Pain and Therapy, Page 75-76
 - 6-2: Case Study - The Elderly and Medicine, Page 76-77
 - 6-3: Case Study - Long-Acting Action, Page 77
- Submit responses to questions 1, 2, and 3 of EACH of the case studies by clicking the submit homework button below
- Review and consider Lab 6-1, Pages 81-83, Lab 6-2, Pages 85-86, Lab 6-3, Page 87 (online posting not required)
- Other Chapter activities are not required but are optional additional learning opportunities for the student

Assessment

- Complete Module 2 – Unit 5 Assessment

Module 2: Functional aspects of pharmacy practice

Unit 6 – Referencing and Medication Errors

Video Lecture

- Watch "Referencing"

Homework

Foundations Textbook

- Read Chapter 7, Referencing and Drug Information Resources
- Define Key terms on page 110 in the text and make note of these for further study
- Complete Chapter Review Questions, Page 119
- Critical Thinking: Write a short paragraph in response to the following and submit by clicking the submit homework button below. Having become acquainted with the various pharmacy references, in order for you to solidify your knowledge as a pharmacy technician, consider and explain a circumstance when you might benefit from the use of each of the following pharmacy reference books:
 - *Handbook of Nonprescription Drugs*
 - *"Drug Facts and Comparisons"*
- Read Chapter 35, Medication Errors
- Define Key terms on page 614 in the text and make note of these for further study
- Complete Chapter Review Questions, Page 621

Lab Manual and Workbook

Chapter 7

- Complete Review Questions, Pharmacy Calculations Problems and PTCB Exam Practice Questions, Pages 89-92
- Other chapter 7 activities are not required but are optional additional learning opportunities for the student

Chapter 35

- Complete Review Questions, Pharmacy Calculations Problems and PTCB Exam Practice Questions, Pages 524-526

- Complete Activities:
 - Activity 35-4 Case Study - Dispensing an Antibiotic Suspension Page 529-530
 - Submit responses to questions 1, 2, and 3 of this case by clicking the submit homework button below.
 - Other chapter 35 activities are not required but are optional additional learning opportunities for the student

Math Textbook: Complete Math Review for the Pharmacy Technician

- Read Chapter 13 Medication Errors and Clinical Challenges Page 179-181
 - Read through some of the problems at the end of this math chapter to appreciate the possibilities for medication errors resulting from calculations mistakes. However, the actual calculations of most of these problems will be done later in the course
- Math Text Homework, Calculations Corner
- Solve calculations problems here and submit responses by clicking the submit homework button below
 1. How many milliliters of a drug would need to be dispensed in order to provide the patient a dose of 1.5 tablespoonfuls dose of the drug twice daily for 5 days?
 2. A medication order for Cephalexin 500 mg. instructs the patient to take 2 capsules bid x 4 days, then 1 capsule tid x 12 more days. How many capsules are required to properly fill this prescription?

Assessment

- Complete Module 2 – Unit 6 Assessment

Module 2: Functional aspects of pharmacy practice

Unit 7 – Calculations II

Video Lecture

- Watch "Calculations II (Temperature conversion, Basics of fractions, Decimals, Intro to Percentages and Ratio/Proportion)"

Homework

Foundations Textbook

- Read Chapter 16, Basic Math Skills
- Define Key terms on page 262 in the text and make note of these for further study
- Complete all practice problem sets in the chapter
- Complete Chapter Review Questions, Pages 273-274

Lab Manual and Workbook

- Complete Review Questions, Pharmacy Calculations Problems, and PTCB Exam Practice Questions, Pages 284-286
- Complete Activities:
 - 16-1 Case Study - How Much? Page 287. Submit responses to question #2 by clicking the submit homework button below
 - 16-2 Case Study - A Tapering Dose, Pages 287-288. Submit responses to all three questions by clicking the submit homework button below
 - 16-3 Case Study - Cream Compound, Pages 288-289. Submit responses to questions 1 & 2 by clicking the submit homework button below
 - 16-4 Math Definitions, Page 291 (online posting not required)

Math Textbook: Complete Math Review for the Pharmacy Technician

- Read Chapter 11, Temperature Conversions Page 163
- Read Chapter 3, Ratios and Proportions Page 37
- Complete all Practice Problems and Advanced Problems in both chapters
- Answer Keys by chapter- back of text
- Study the information in shaded areas of the margins of all chapters. Make note of these for further study
- Math Text Homework, Calculations Corner
- Solve calculations problems here and submit responses by clicking the submit homework button below
 1. The pharmacy has an order for a single dose of 170 mg of gentamicin. The concentration of the gentamicin product is 40 mg/ ml. What volume will be needed for this single dose?
 2. Codeine phosphate 40 mg injection is ordered. The stock vial is labeled at a concentration of 60 mg/2 ml. How many milliliters will be needed for the dose?
 3. Ferrous sulfate oral liquid is stocked in the pharmacy in a concentration of 220 mg/5 ml. How many milligrams are in a 7.5 ml dose?

Assessment

- Complete Module 2 – Unit 7 Assessment

Module 3: Community and outpatient clinic pharmacy

Unit 1 – Community Pharmacy Practice

Video Lecture

- Watch "Community Pharmacy Practice"

Homework

Foundations Textbook

- Read Chapter 8, Retail Pharmacy
 - Define Key terms on page 122 in the text and make note of these for further study
 - Complete Chapter Review Questions, Pages 149
 - Critical Thinking: Review and consider questions on page 149
- Read Chapter 13: Over-the-Counter Products.
 - Define Key terms on page 205 in the text and make note of these for further study
 - Complete Chapter Review Questions Pages 228-229
 - Critical Thinking: Review and Consider questions on Page 229

Heath Insurance Portability and Accountability Act (HIPAA) Training

- Refer to the LMS for instructions on how to complete HIPAA training.
- Completion of this specific HIPAA training is mandatory, and proof is required for the successful completion of this program.

Lab Manual and Workbook

Chapter 8

- Complete Review Questions, Pharmacy Calculations Problems, and PTCB Exam Practice Questions, Pages 102-105

- Complete Activities:
 - 8-1 Prescription Translation Worksheet, Pages 106-110. Post responses to 7 questions for Rx #1 and Rx #2 on the Homework Submission page. Complete questions for remaining prescriptions (online posting not required)
 - 8-3: Case Study - Privacy/HIPAA, Page 113
 - 8-4: Case Study - Biases, Page 114
- Submit responses to all three questions following Case Studies 8-3 and 8-4 by clicking the submit homework button below
- Complete Lab 8-1: Checking a Prescription for Completeness, Pages 118-121. Submit responses to questions following each prescription by clicking the submit homework button below
- Read and consider remaining lab activities in this chapter (online posting not required)

Chapter 13

- Complete Review Questions, Pharmacy Calculations Problems, and PTCB Exam Practice Questions, Pages 210-211
- Complete Activity 13-1: Classifying OTC Products, Page 212
- Submit responses Set 1 and Set 2 by clicking the submit homework button below
- Complete Activity 13-2: Case Study – Cold Season, Page 212
- Submit responses to all 3 questions by clicking the submit homework button below
- Read and consider remaining lab activities in this chapter (online posting not required)

Video Lecture

- Watch "Community Pharmacy Ambulatory Care Video "Ambulatory Care Patient Needs"

Assessment

- Complete Module 3 – Unit 1 Assessment

Module 3: Community and outpatient clinic pharmacy

Unit 2 – Calculations III

Video Lecture

- Watch " Calculations III (Ratio and Proportion, Dosage Calculations)"

Homework

Foundations Textbook

- Read Chapter 18, Dosage Calculations
- Define Key terms on Page 287 in the text and make note of these for further study
- Complete all Practice Problems in the Chapter
- Complete Chapter Review Questions Page 300
- Critical Thinking: Review and consider questions 1 & 2, Page 300

Lab Manual and Workbook

- Complete Review Questions, Pharmacy Calculations problems, PTCB Exam Practice Questions, Pages 302-304
- Complete Activities:
 - 18-1: Case Study - pediatric dosing, page 304-305. Submit responses to questions 1 & 3 by clicking the submit homework button below

- 18-2: Case Study - tablets, page 305. Submit responses to questions 1 & 2 by clicking the submit homework button below
- 18-3: Case Study - cream, page 306. Submit responses to questions 1 & 2 by clicking the submit homework button below

Math Textbook: Complete Math Review for the Pharmacy Technician

- Read Chapter 4 Interpreting Drug Orders and Calculating Doses Page 51-54
 - Stop at Body Surface Area page 54
 - Skip practice problems #26 and #33
 - Complete all remaining Practice Problems and Advanced Problems in chapter-Answer Keys by chapter- back of text
 - Study the information in shaded areas of the margins of chapter. Make note of these for further study

- Math Text Homework, Calculations Corner

Solve calculations problems here and submit responses by clicking the submit homework button below

1. Regular U-100 Insulin contains 100 units of insulin per milliliter. If the patient administers 1.5 units of insulin qid, how many days will a 10 ml vial last?
2. How many milligrams of phenytoin per dose would a 40-pound child receive if the physician wants the child to receive
3. 3 mg of phenytoin per kilogram of body weight?
4. In the above problem, how many milliliters of a phenytoin suspension containing 30 mg/ 5 ml should the child receive per dose?

Assessment

- Complete Module 3 – Unit 2 Assessment

Module 3: Community and outpatient clinic pharmacy

Unit 3 – Inventory Management, Insurance, and Third-Party Billing

Video Lecture

- Watch "Inventory Management I & Third-Party Billing"
- Watch "Inventory Management II"

Homework

Foundations Textbook

- Read Chapter 11, Inventory Management
- Read Chapter 12, Insurance and Third-Party Billing
- Define Key terms on page 187 and page 197 in the text and make note of these for further study
- Complete Chapter Review Questions, page 195 and page 204

Lab Manual and Workbook

Chapter 11

- Complete Review Questions, Pharmacy Calculations Problems, & PTCB Exam Practice Questions, Pages 187-189
- Complete Activities:
 - 11-1: Case Study - DEA Forms and Shipment Do Not Match, Page 187

- 11-2: Case Study - Out of Stock, Page 188. Submit responses to questions 1 & 2 for each of these case studies by clicking the submit homework button below
- Read and consider remaining lab activities in this chapter (online posting not required)

Chapter 12

- Complete Review Questions, Pharmacy Calculations Problems, & PTCB Exam Practice Questions, Pages 200-201
- Complete Activities:
 - Complete Activity 12-3: Case Study - Refill Too Soon, Page 202. Submit responses to questions 1 & 2 by clicking the submit homework button below
 - Complete Lab 12-1: Insurance Billing, Pages 203-204. Submit answers to ALL questions within Scenarios 1 & 2 by clicking the submit homework button below
 - Read and consider remaining lab activities in this chapter (online posting not required)

Required Outside Reading

- Concept: CMS five-star quality rating system
 - Read <https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/CertificationandCompliance/FSQRS.html>
 - Required Response:
 1. What is the overall goal of the CMS (Centers for Medicare and Medicaid) for the Five Star Quality Measurement System as it applies to nursing homes in the U.S.?
 2. Submit response by clicking the submit homework button below
- Concept: Procedures to coordinate benefits (e.g., dual coverage and copay reduction plans)
 - Read <https://www.cms.gov/Medicare/Coordination-of-Benefits-and-Recovery/Coordination-of-Benefits-and-Recovery-Overview/Coordination-of-Benefits/Coordination-of-Benefits>
 - Read through the initial material on the COB Process, then click on Coordinating Prescription Drug Benefits
 - Required Response:
 1. Comment on this statement: The goal of the procedures for coordination of benefits in dual coverage situations is to ensure that the amount paid exceeds 100% of the total claim, if possible
 2. Submit response by clicking the submit homework button below

Assessment

- Complete Module 3 – Unit 3 Assessment

Module 3: Community and outpatient clinic pharmacy

Unit 4 – The Business of Community Pharmacy

Video Lecture

- Watch "The Business of Community Pharmacy"

Homework

Foundations Textbook

- Read Chapter 22, Business Math
- Define Key terms on page 337 in the text and make note of these for further study
- Make special note of the shaded area on page 342, Accounting Formulas, and make note of these for further study
- Complete Chapter Review Questions, Page 343

Lab Manual and Workbook

- Complete Review Questions, Pharmacy Calculations problems, PTCB Exam Practice Questions, Pages 302-304
- Complete Activities:
 - 18-1: Case Study - pediatric dosing, page 304-305. Submit responses to questions 1 & 3 by clicking the submit homework button below.
 - 18-2: Case Study - tablets, page 305. Submit responses to questions 1 & 2 by clicking the submit homework button below
 - 18-3: Case Study - cream, page 306. Submit responses to questions 1 & 2 by clicking the submit homework button below

Math Textbook: Complete Math Review for the Pharmacy Technician

- Read Chapter 12 Business Math Page 169
- Complete all Practice Problems and Advanced Problems in chapter-Answer Keys by chapter- back of text
- Study the information in shaded areas of the margins of chapter. Make note of these for further study
- Math Text Homework, Calculations Corner
 - Solve calculations problems here and submit responses by clicking the submit homework button below
 1. How much will Martin's Pharmacy receive for reimbursement on claims submitted to Always Honest Insurance Co that have a total AWP of \$1800 for 40 prescriptions? This insurance company reimburses following the formula AWP -6% + \$2 per prescription.
 2. Bill's Pharmacy dispensed gabapentin capsules 300 mg #40. The selling price was \$23.40. The cost of the medication was \$16.20. What is the gross profit?
 3. Evan's Pharmacy dispensed azithromycin capsules 250 mg #14. The selling price was \$26.40. The cost of the medication was \$14.20 and the dispensing costs were \$9.30. What was the net profit?

Assessment

- Complete Module 3 – Unit 4 Assessment

Module 3: Community and outpatient clinic pharmacy

Unit 5 – Pediatric, Neonatal, Geriatric, and Special Populations

Video Lecture

- Watch "Pediatric & Neonatal Patients"

Homework

Foundations Textbook

- Read Chapter 37, Special Considerations for Pediatric and Geriatric Patients
- Define Key terms Page 634 in the text and make note of these for further study
- Complete Chapter Review Questions, Page 646
- Critical Thinking: Review and consider questions 1-4, Page 647 (online posting not required)

Lab Manual and Workbook

- Complete Review Questions, Pharmacy Calculations Problems, & PTCB Exam Practice Questions, Pages 547-549
- Complete Activities:
 - 37-1: Case Study - A Bad Cough, Page 547
 - 37-3: Case Study - Three Age-Related Issues, Page 549

- Submit responses to questions 1,2 & 3 of each of these case studies by clicking the submit homework button below
- Read and consider remaining lab activities in this chapter (online posting not required)

Math Textbook: Complete Math Review for the Pharmacy Technician

- Read Chapter 4 Interpreting Drug Orders and Calculating Doses
- Begin page 54 Body Surface Area and Chemotherapy Dosing
- Do Practice problems #26 and #33 Answer Keys by chapter- back of text
- Study the information in shaded areas of the margins of chapter. Make note of these for further study
- Math Text Homework, Calculations Corner
 - Solve calculations problems here and submit responses by clicking the submit homework button below
 1. The dose of a drug is 1 mg per square meter of body surface area. How many micrograms of the drug should be administered to a child who is 42 inches tall and weighs 43 pounds? Use the child's nomogram on page 56 of your Math Text to determine the BSA (body surface area) for this child.

Assessment

- Complete Module 3 – Unit 5 Assessment

Module 3: Community and outpatient clinic pharmacy

Unit 6 – Extemporaneous Compounding

Video Lecture

- Watch "Extemporaneous Compounding"

Homework

Foundations Textbook

- Read Chapter 14, Introduction to Compounding
- Define Key terms on page 231 in the text and make note of these for further study
- Complete Chapter Review Questions, Pages 244
- Critical Thinking: Review and consider questions, Page 245

Lab Manual and Workbook

- Complete Review Questions, Pharmacy Calculations Problems, & PTCB Exam Practice Questions, Pages 221-223
- Complete Activities:
 - 14-1: Case Study - Compounded Laser Gel, Pages 223-224
 - 14-2: Case Study - Veterinary, Pages 224-225
- Submit responses to question #3 for each of these cases by clicking the submit homework button below
- Read and consider remaining lab activities in this chapter (online posting not required)

Math Textbook: Complete Math Review for the Pharmacy Technician

- Read Chapter 5 Reducing and Enlarging Formulas and Compounding Page 67
- Complete all Practice Problems and Advanced Problems in chapter - Answer Keys by chapter - back of text
- Do not be overly concerned about the Hyperalimentation Formula (Pg 73-74) It is an exercise in solving by ratio and proportion. There is more work with Parenteral Calculations in Module 4, Unit 3
- Study the information in shaded areas of the margins of chapter. Make note of these for further study

- Math Text Homework, Calculations Corner
 - Solve calculations problems here and submit responses by clicking the submit homework button below
 - The Marley is an 11-year-old patient who has very significant allergies. Her pediatric allergist has written a prescription for Epi-Pen, an injectable epinephrine which she is to have near her in case of potentially serious allergic reactions as from bee stings, etc. However, he also wants the family to keep on hand a rather large quantity of both an antihistamine and an anti-inflammatory. The challenge is that Marley still has difficulty swallowing oral capsules and tablets and must have her medication in liquid form. However, she is allergic to the dyes used to color most liquid medications and consequently must have the liquid medications specifically compounded for her pursuant to a prescription from her doctor.
 1. Diphenhydramine liquid 12.5 mg/ 5 ml Qty 1 pint Compounded in colorless vehicle
How many grams of diphenhydramine powder would you weigh out in order to correctly compound this prescription? This amount would be dissolved in colorless vehicle to make how many milliliters of final product?
 2. Ibuprofen liquid 100 mg / 5 ml Qty 1 pint Compounded in colorless vehicle
How many grams of ibuprofen powder would you weigh out in order to correctly compound this prescription? This amount would be dissolved in colorless vehicle to make how many milliliters of final product?

Video Lecture

- Watch Extemporaneous Nonsterile Compounding Lab Video - "Non-sterile Compounding"

Required Outside Reading: USP Revised Chapter 795 Pharmaceutical Compounding – Nonsterile Preparations

Read the following:

- USP Fact Sheet on Chapters 795, 797
- USP Expert Discusses Revisions to Compounding Chapters 795,797
- Required Response
 1. Identify the specific period of time between the date of publication of the USP Chapter 795 for nonsterile compounding and the date of implementation of the standards?
 2. With consideration to nonsterile compounding processes, what is the alternative term which is used for BUD's (beyond use dates)?
 3. Explain the importance of the newly introduced term "water activity" in revised Chapter 795?
- Submit responses by clicking the submit homework button below

Assessment

- Complete Module 3 – Unit 6 Assessment

Module 3: Community and outpatient clinic pharmacy

Unit 7 – Calculations IV (Percentage concentration, w/w, w/v, v/v, Dilutions, Alligations)

Video Lecture

- Watch "Calculations IV (Percentage Conc,w/w,v/v,w/v, Dilutions, Alligations)"

Homework

Foundations Textbook

- Read Chapter 19 Concentrations and Dilutions and Chapter 20 Alligations, Pages 302-312
- Chapter 20 Alligations, (Pages 313-322) Define Key terms on pages 302 and 313 in the text and make note of these for further study Complete all Practice Problems for both chapters

- Complete Chapter Review Questions, Pages 311-312 and Page 322
- Critical Thinking: Review and consider questions, Page 312

Lab Manual and Workbook

Chapter 19

- Complete Review Questions, Pharmacy Calculations Problems, & PTCB Exam Practice Questions, Pages 311-313
- Complete Activities:
 - 19-1: Case Study - Dosing, Page 314
 - 19-2: Case Study - Reconstitution, Page 315
 - 19-3: Case Study - Concentration, Page 316
- Submit responses to question #1 for each of these cases by clicking the submit homework button below.
- Read and consider remaining lab activities in this chapter (online posting not required)

Chapter 20

- Complete Review Questions, Pharmacy Calculations Problems, & PTCB Exam Practice Questions, Pages 321- 324
- Complete Activities:
 - PTCB Exam Practice Questions Page 323
 - Calculate the answer to Question #3
 - Show all work in submitted homework. Hint: None of the answer choices are correct
- Submit response to this question by clicking the submit homework button below.

Math Textbook: Complete Math Review for the Pharmacy Technician

- Read Chapter 8 Percentage Calculations Page 101
- Read Chapter 9 Concentrations and Dilutions Page 125
- Complete all Practice Problems and Advanced Problems in chapter-Answer Keys by chapter- back of text
- Study the information in shaded areas of the margins of chapter. Make note of these for further study
- Math Text Homework, Calculations Corner
 - Solve calculations problems here and submit responses by clicking the submit homework button below

A fluid ounce of a 20% w/v boric acid solution is diluted to a liter with water.

 1. What is the percent strength of the dilution?
 2. What is the ratio strength of the diluted solution?
 3. How much boric acid is in a tablespoonful of the dilution?
 4. How much boric acid was in a teaspoonful of the concentrated solution before the dilution was made?
- Submit responses to questions 1, 2, 3 and 4 by clicking the submit homework button below

Assessment

- Complete Module 3 – Unit 7 Assessment

Module 4: Health system or institutional pharmacy

Unit 1 – Institutional Pharmacy, Workplace Safety and Infection Control

Video Lecture

- Watch “Institutional Pharmacy”

Homework

Foundations Textbook

- Read Chapter 9, Health-System Pharmacy, Page 152
- Read Chapter 36, Workplace Safety and Infection Control, Page 623
- Define Key terms on page 152 in the text and make note of these for further study
- Complete Chapter Review Questions, Page 173
- Critical Thinking: Review and consider questions, Page 174
- Read Chapter 36, Workplace Safety and Infection Control, Page 623
- Define Key terms on page 623 in the text and make note of these for further study
- Complete Chapter Review Questions, Page 631
 - Critical Thinking: Review and consider questions, Page 631

Lab Manual and Workbook

- Complete Chapter 9 Review Questions, Pharmacy Calculations Problems, & PTCB Exam Practice Questions, Pages 136-138
- Complete Activities:
 - 9-2 Medication Order Translation Worksheet, Page 141-143
 - Submit responses to all questions for Medication Orders #1, #2 and #3 by clicking the submit homework button below. Medication Order #4 must be omitted in recognition that as of now all forms of Ranitidine have been withdrawn from the market due to cardiac arrhythmias.
 - 9-3: Case Study-Healthcare Professional Demands Medication, Page 145
 - Submit responses to questions 1 & 2 by clicking the submit homework button below.
- Read and consider remaining lab activities in chapter 9 (online posting not required)
- Complete Chapter 36 Review Questions, Pharmacy Calculations Problems, & PTCB Exam Practice, Pages 536-537
- Complete Activity 36-1: Case Study Page 538. Experiencing a cytotoxic spill in the flow hood.
 - Submit responses to questions 1, 2, & 3 by clicking the submit homework button below. Read and consider remaining lab activities in chapter 36 (online posting not required)

Assessment

- Complete Module 4 – Unit 1 Assessment

Module 4: Health system or institutional pharmacy

Unit 2 – Aseptic (Sterile) Technique

Video Lecture

- Watch "Aseptic Technique-Overview"
- Watch "Sterile Technique-Devices and Equipment"
- Watch "Practical Aspects of Handling Sterile Products"

Homework

Foundations Textbook

- Read Chapter 15, Introduction to Sterile Products
- Define Key terms on page 246 in the text and make note of these for further study
- Complete Chapter Review Questions, Page 259
- Critical Thinking: Review and consider questions, Page 260

Lab Manual and Workbook

- Complete Review Questions, Pharmacy Calculations Problems, & PTCB Exam Practice Questions, Pages 243-246
- Complete Activities:
 - 15-1:Case Study - USP 797 and Training Personnel, Page 247
 - Submit responses to questions #1 and #2 by clicking the submit homework button below
 - 15-4: Case Study - Identifying Errors in Aseptic Technique, Pages 250-251
 - Respond to all ten parts of Question #1 by clicking the submit homework button below
- Read and consider remaining lab activities in this chapter (online posting not required)

Video Lecture

- Watch Sterile Compounding Lab Video "Sterile Compounding"

Required Outside Reading: USP Revised Chapter 797 Pharmaceutical Compounding – Sterile Preparations

Read the following:

- USP Fact Sheet on Chapters 795, 797
- USP Expert Discusses Revisions to Compounding Chapters 795,797
- Required Response
 1. What is the detailed definition of BUDs (Beyond Use Dates)?
 2. Why are BUDs necessary for both NSCPs (nonsterile compounded preparations) and for SCPs (sterile compounded preparations)?
 3. Within the revised USP Chapter 797, among Categories 1, 2, and 3 storage specifics, what is the longest BUD possible for a sterile compounded preparation under any storage condition?
 4. Within the storage conditions for a sterile compounded preparation (SCP), what is the meaning of CRT?

Assessment

- Complete Module 4 – Unit 2 Assessment

Module 4: Health system or institutional pharmacy

Unit 3 – Parenteral Calculations

Video Lecture

- Watch "Calculations V (Intravenous and TPN Calculations)"
- Watch "Calculations of Medications Measured in Units & mEq."

Homework

Foundations Textbook

- Read Chapter 21, Parenteral Calculations
- Define Key terms on page 323 in the text and make note of these for further study. Work through all Example Problems in Chapter 21 and be sure you understand the explanation of the mathematical concepts
- Complete Chapter Review Questions, Page 335

Lab Manual and Workbook

- Complete Review Questions, Pharmacy Calculations Problems, & PTCB Exam Practice Questions, Pages 330- 332
- Complete Activities:
 - 21-1: Case Study - Iron Dextran, Page 332
 - Submit responses to questions 1 & 2 for this activity by clicking the submit homework button below
 - 21-2 The Delicate Art of TPN Compounding, Pages 333-335
 - Submit responses to questions 1, 4, & 7 for this activity by clicking the submit homework button below
- Read and consider remaining lab activities in this chapter (online posting not required)

Math Textbook: Complete Math Review for the Pharmacy Technician

- Read Chapter 6 Reconstitution of Dry Powders Page 81
- Read Chapter 7 Intravenous Flow Rates Page 91
- Read Chapter 10 Electrolyte Solutions Page 149
- Complete all Practice Problems and Advanced Problems in the three chapters-Answer Keys by chapter- back of text
- Study the information in shaded areas of the margins of chapter. Make note of these for further study
- Math Text Homework, Calculations Corner
 - Solve calculations problems here and submit responses by clicking the submit homework button below
 1. The label on a 100 ml bottle of cephalexin 250 mg/5 ml dry powder for oral suspension, directs you to add 88 mls of water to suspend the drug prior to dispensing it.
 - a. How many milligrams of cephalexin are in the bottle?
 - b. What is the dry powder volume of cephalexin in the bottle?
 2. A physician orders 1000 ml of Normal Saline to be infused in 8 hours.
 - a. How many milliliters will be infused every hour?
 - b. How many drops per minute must be infused using a 10-gtt/ml set to deliver the entire volume?
 3. How many grams of sodium chloride (NaCl) are required to prepare a liter of a solution containing 154 mEq of sodium chloride (NaCl)?

Needed information:
Molecular Weight of sodium (Na = 23, Valence = +1)
Molecular Weight of chloride (Cl = 35.5, Valence = -1)

Assessment

- Complete Module 4 – Unit 3 Assessment

Module 4: Health system or institutional pharmacy

Unit 4 – Pharmacy Technology

Video Lecture

- Watch “Computer Applications in Pharmacy”

Homework

Foundations Textbook

- Read Chapter 10, Technology in the Pharmacy
- Define Key terms on page 176 in the text and make note of these for further study
- Complete Chapter Review Questions, Pages 184-185
- Critical Thinking: Review and consider questions, Page 185

Lab Manual and Workbook

- Complete Review Questions, Pharmacy Calculations Problems, & PTCB Exam Practice Questions, Pages 170- 172
 - Complete Activities:
 - Case Study 10-1 Bar Coding, Page 172
 - Case Study:10-4 Online Billing, Pages 176-177
- Submit responses to questions 1 & 2 for each of these cases by clicking the submit homework button
- Read and consider remaining lab activities in this chapter (online posting not required)

Math Homework - Final Review

Avoid Mistakes Contributing to Medication Errors

ISMP Error-Prone Abbreviations

Problem abbreviation	Correction
tiw	
q1d	
AD, AS, AU	
q.d. or QD	
Qod	

Error-Prone Calculations

1. Benztropine mesylate is a drug used for Parkinson's disease. It is available in the following tablet strengths: 0.5 mg, 1 mg, and 2 mg. A patient is to receive 250 mcg of the drug. If the order is filled with 0.5 mg tablets, how many tablets will provide the prescribed dose?
2. An order is written for Phenergan 25 mg and Demerol 25 mg to be given together as a single IM dose. Phenergan is available in ampules of 25 mg/1 ml and Demerol is available in ampules 50 mg/1 ml. What is the final volume and what is the drug composition of that volume in order to provide the prescribed dose?

3. A 44-pound child is ordered to receive ceftazidime IV for a pulmonary infection. The IV pediatric dose for children 12 years and younger is 50 mg/kg given every 8 hours - not to exceed 6 grams per day. What is the dose in grams to be given IV every 8 hours?
4. A product information package insert states that the product is to be stored in the range of 2 degrees to 8 degrees C. Convert this stability range to Fahrenheit. Should this product be stored in the freezer, refrigerator, or at room temperature?
5. A 4.4-pound neonate is to receive 5 mg/kg/day of an IV antibiotic in four equal doses. How much drug will the baby receive in each dose of the IV antibiotic?

Assessment

- Complete Module 4 – Unit 4 Assessment (Does not include math review)

Module 5: Pharmacology 1

Unit 1 – Skin Anatomy, Conditions, and Treatment

Video Lecture

- Watch "Skin Anatomy, Conditions, and Treatment"

Homework

Foundations Textbook

- Read Chapter 24, The Skin
- Define Key terms on Page 363 in the text and make note of these for further study
- Complete Chapter Review Questions, Page 373-374
- Critical Thinking: Review and consider questions, Page 374

Lab Manual and Workbook

- Complete Review Questions, Pharmacy Calculations Problems, & PTCB Exam Practice Questions, Pages 370-372
- Complete Activity; 24-1 Anatomy Worksheet, Page 372
 - Submit responses by clicking the submit homework button below.
- Read and consider remaining lab activities in this chapter (online posting not required)

There is no Top Prescribed Drugs material or assessment for this unit.

Assessment

- Complete Module 5 – Unit 1 Assessment

Module 5: Pharmacology 1

Unit 2 – Conditions of the Gastrointestinal Tract (Mouth, Throat, Stomach, Intestine)

Video Lecture

- Watch "Conditions of the GI Tract I"
- Watch "Conditions of the GI Tract II"

Homework

Foundations Textbook

- Read Chapter 26, The Gastrointestinal System
- Define Key terms on page 396 in the text and make note of these for further study
- Complete Chapter Review Questions, Pages 415-416
- Critical Thinking: Review and consider questions, Page 416

Lab Manual and Workbook

- Complete Review Questions, Pharmacy Calculations Problems, & PTCB Exam Practice Questions, Pages 386 - 389
- Complete Activity: 26-1 Anatomy Worksheet, Page 389
 - Submit responses by clicking the submit homework button below.
- Read and consider remaining lab activities in this chapter (online posting not required)

Assessment

- Complete Module 5 – Unit 2 Assessment

Top Prescribed Drugs

Below is a chart listing the Top Prescribed drugs in the U.S. which are associated with the therapeutic category in this unit of study. You are responsible for learning all of this material: overall c classification, therapeutic classification, trade name, generic name, as well as any other information given within the chart. When you are prepared, please access the Top Prescribed Drugs Assessment in the therapeutic category that is covered in this unit. In order for you to function well in the workplace, it is extremely important for you to demonstrate proficiency in this Top Prescribed drug area of knowledge. You must score a minimum of 70 on each Top Prescribed Drugs assessment in order to progress in the course.

Top Prescribed Drugs - Gastrointestinal (Gastroenterology)

Overall Classification	Therapeutic Class	Trade Name	Generic Name
Gastroenterology			
	Gastrointestinal Reflux (GERD)		
		Aciphex (Proton Pump Inhibitor) (PPI)	Rabeprazole
		Nexium (PPI)	Esomeprazole
		Pepcid (Histamine 2 receptor blocker)	Famotidine
		Prevacid (PPI)	Lansoprazole
		Prilosec (PPI)	Omeprazole
		Protonix (PPI)	Pantoprazole
	Nausea/Vomiting		
		Phenergan	Promethazine
		Reglan	Metoclopramide
		Zofran ODT	Ondansetron ODT = Oral dispersible tablets

Assessment

- Complete Assessment: Top Prescribed Drugs- Gastrointestinal (Gastroenterology)

Module 5: Pharmacology 1

Unit 3 – Eyes And Ears (Eyes, Ears, Nose and Throat, ENT)

Video Lecture

- Watch " Conditions Affecting the Eyes & Ears"

Homework

Foundations Textbook

- Read Chapter 25, Eyes and Ears
- Define Key terms Page 376 in the text and make note of these for further study
- Complete Chapter Review Questions, Pages 393-394
- Critical Thinking: Review and consider questions, Page 394

Lab Manual and Workbook

- Complete Review Questions, Pharmacy Calculations Problems, & PTCB Exam Practice Questions, Pages 378-380
- Complete Activities:
 - 25-1 Anatomy Worksheet, Page 381. Submit responses to illustration of the EAR only by clicking the submit homework button below.
 - 25-3: Case Study - An Eye Condition, Page 382. Submit responses to questions 3 & 4 by clicking the submit homework button below.
- Read and consider remaining lab activities in this chapter (online posting not required)

Assessment

- Complete Module 5 – Unit 3 Assessment

Top Prescribed Drugs

Below is a chart listing the Top Prescribed drugs in the U.S. which are associated with the therapeutic category in this unit of study. You are responsible for learning all this material: overall classification, therapeutic classification, trade name, generic name, as well as any other information given within the chart. When you are prepared, please access the Top Prescribed Drugs Assessment in the therapeutic category that is covered in this unit. In order for you to function well in the workplace, it is extremely important for you to demonstrate proficiency in this Top Prescribed drug area of knowledge. You must score a minimum of 70 on each Top Prescribed Drugs assessment in order to progress in the course.

Top Prescribed Drugs - Eyes, Ears, Nose and Throat

Overall Classification	Therapeutic Class	Trade Name	Generic Name
Ear, Nose and Throat			
Oral Antihistamines			
		Allegra (OTC)	Fexofenadine
		Clarinex	Desloratadine
		Claritin (OTC) Alavert	Loratadine
		Zyrtec (OTC)	Cetirizine
Nasal Steroids			
		Flonase (OTC) Veramyst	Fluticasone Nasal

Overall Classification	Therapeutic Class	Trade Name	Generic Name
		Nasacort (OTC)	Triamcinolone Nasal
	Oral Steroids	Sterapred	Prednisone (Oral)
	Ear (Otic)	CiproDex Otic	Ciprofloxacin (+) Dexamethasone Otic
Eyes			
	Antihistamine Ophth.	Pataday Patanol Pazeo	Olopatadine Ophthalmic 0.2% 0.1% 0.7%
	Glaucoma Ophth.	Xalatan	Latanoprost Ophthalmic Solution 0.005%
	Antimicrobial Ophth.	Vigamox	Moxifloxacin (Ophthalmic)
		Quixin	Levofloxacin (Ophthalmic)
		AzaSite	Azithromycin (Ophthalmic)

Assessment

- Complete Assessment: Top Prescribed Drugs- Eyes, Ears, Nose, and Throat

Module 5: Pharmacology 1

Unit 4 – The Musculoskeletal System

Video Lecture

- Watch " Musculoskeletal Diseases and Treatment"

Homework

Foundations Textbook

- Read Chapter 27, The Musculoskeletal System
- Define Key terms Page 417 in the text and make note of these for further study
- Complete Chapter Review Questions, Pages 434

Lab Manual and Workbook

- Complete Review Questions, Pharmacy Calculations Problems, & PTCB Exam Practice Questions, Pages 398-401
- Complete Activity 27-4: Case Study - Posture Changes, Pages 407-408
 - Submit responses to all five questions following this case study by clicking the submit homework button below.
- Read and consider remaining lab activities in this chapter (online posting not required)

Assessment

- Complete Module 5 – Unit 4 Assessment

Top Prescribed Drugs

Below is a chart listing the Top Prescribed drugs in the U.S. which are associated with the therapeutic category in this unit of study. You are responsible for learning all this material: overall classification, therapeutic classification, trade

name, generic name, as well as any other information given within the chart. When you are prepared, please access the Top Prescribed Drugs Assessment in the therapeutic category that is covered in this unit. In order for you to function well in the workplace, it is extremely important for you to demonstrate proficiency in this Top Prescribed drug area of knowledge. You must score a minimum of 70 on each Top Prescribed Drugs assessment in order to progress in the course.

Top Prescribed Drugs - Musculoskeletal

Overall Classification	Therapeutic Class	Trade Name	Generic Name
Analgesic	Skeletal Muscle Relaxants	Flexeril	Cyclobenzaprine
		Robaxin	Methocarbamol
		Soma	Carisoprodol
		Zanaflex	Tizanidine
	NSAIDs	Celebrex	Celecoxib
		Mobic	Meloxicam
		Motrin (Advil) OTC	Ibuprofen 100mg, 200mg 400,600,800 mg RX
		Naprosyn	Naproxen 375 mg 500 mg RX
		Aleve (OTC) Anaprox	Naproxen Sod 220mg 275mg and 550 mg
		Voltaren XR Voltaren Topical Gel 1%	Diclofenac 50mg,75mg ER 100 mg Diclofenac Topical Gel 1%
	Other Analgesics	Lidoderm	Lidocaine Patch 5%
		Ultram Ultram ER Ultracet	Tramadol tab 50 mg ER several strengths Tramadol/APAP 37.5/325 mg

Assessment

- Complete Assessment: Top Prescribed Drugs: Musculoskeletal

Module 5: Pharmacology 1

Unit 5 – Cardiovascular, Circulatory and Lymph Systems

Video Lecture

- Watch "Diseases of the Cardiovascular and Lymphatic Systems (Video 1)"
- Watch "Diseases of the Cardiovascular and Lymphatic Systems (Video 2)"

Homework

Foundations Textbook

- Read Chapter 29, The Cardiovascular, Circulatory, and Lymph Systems
- Define Key terms Page 460 in the text and make note of these for further study
- Complete Chapter Review Questions, Pages 490
- Critical Thinking Page 490

Lab Manual and Workbook

- Complete Review Questions, Pharmacy Calculations Problems, & PTCB Exam Practice Questions, Pages 432-435
- Complete Activities:
 - 29-1: Anatomy Worksheet Label the illustration for pulmonary circulation, Page 436. For each labeled part, clearly indicate whether each anatomical part handles oxygen rich or oxygen poor blood.
 - 29-2: Case Study - Leg Pain, Page 437-438. What is the condition for which you think Mrs. Stark is at greatest risk? What past activity may predispose her to this condition? What in her medical history would you see as a potential cofactor for the development of this condition?
 - 29-3: Case Study - Medical Emergency, Page 438. Questions 1 & 2.
 - 29-5: Analyzing Cholesterol Screening Test Results Part 1, Page 439-440. Questions 2,5, & 7
 - Submit responses to the above indicated questions by clicking the submit homework button below
- Read and consider remaining lab activities in this chapter (online posting not required)

Assessment

- Complete Module 5 – Unit 5 Assessment

Top Prescribed Drugs

Below is a chart listing the Top Prescribed drugs in the U.S. which are associated with the therapeutic category in this unit of study. You are responsible for learning all of this material: overall classification, therapeutic classification, trade name, generic name, as well as any other information given within the chart. When you are prepared, please access the Top Prescribed Drugs Assessment in the therapeutic category that is covered in this unit. In order for you to function well in the workplace, it is extremely important for you to demonstrate proficiency in this Top Prescribed drug area of knowledge. You must score a minimum of 70 on each Top Prescribed Drugs assessment in order to progress in the course.

Top Prescribed Drugs - Cardiovascular

Overall Classification	Therapeutic Class	Trade Name	Generic Name
Cardiovascular			
	Antihyperlipidemics - Statins		
		Crestor	Rosuvastatin
		Lescol Lescol XL	Fluvastatin (Caps) Tablets, ER
		Lipitor	Atorvastatin
		Livalo	Pitavastatin
		Mevacor	Lovastatin
		Pravachol	Pravastatin
		Zocor	Simvastatin

Overall Classification	Therapeutic Class	Trade Name	Generic Name
	Antihyperlipidemics-Other		
		Lopid	Gemfibrozil
		Lovaza	Omega-3-acid ethyl esters
		Niaspan	Niacin
		Questran	Cholestyramine resin
		TriCor	Fenofibrate
		Vascepa	Icosapent ethyl
		Welchol	Colesevelam
		Zetia	Ezetimibe
		Vytorin	Ezetimibe (+) Simvastatin
	HTN- ACE Inhibitors		
		Accupril	Quinapril
		Altace	Ramipril
		Capoten	Captopril
		Lotensin	Benazepril
		Vasotec	Enalapril
		Zestril	Lisinopril
		Zestoretic	Lisinopril (+) Hydrochlorothiazide
	HTN-Angiotensin Receptor Blockers (ARB's)		
		Avapro	Irbesartan
		Avalide	Irbesartan (+) Hydrochlorothiazide
		Benicar	Olmesartan
		Cozaar	Losartan
		Hyzaar	Losartan (+) Hydrochlorothiazide
		Diovan	Valsartan
		Edarbi	Azilsartan
	HTN- Beta Blockers		
		Bystolic	Nebivolol
		Coreg Coreg CR	Carvedilol (Tabs) ER = Capsules
		Lopressor	Metoprolol
		Tenormin	Atenolol
		Toprol XL	Metoprolol Succinate
		Zebeta	Bisoprolol
	HTN-Calcium Channel Blockers	Norvasc	Amlodipine

Overall Classification	Therapeutic Class	Trade Name	Generic Name
		Lotrel	Amlodipine (+) Benazepril
		Plendil	Felodipine ER
		ProcardiaXL Nifedical XL	Nifedipine ER
		Calan Calan SR	Verapamil Verapamil ER
		Cardizem CD	Diltiazem ER
	HTN-Diuretic		
		Aldactone	Spironolactone
		Lasix	Furosemide
		Microzide Dyazide Maxzide	Hydrochlorothiazide (+) Triamterene (caps) (+) Triamterene (tabs)
	HTN- Other		
		Apresoline	Hydralazine
		Catapres Catapres TTS	Clonidine (tabs) Clonidine (Transdermal Patch)
		Tekturna	Aliskiren
Miscellaneous- Cardiovascular			
	Anticoagulants	Coumadin	Warfarin
		Pradaxa	Dabigatran
	Antiplatelet	Plavix	Clopidogrel
		Low Dose Aspirin	Aspirin 80 mg
	Cardiac Vasodilators	Imdur ER	Isosorbide Mononitrate
		Nitrostat	Nitroglycerin
	Cardiac Glycoside	Lanoxin	Digoxin
	Electrolyte Supplement	Klor Con Klor Con M -	Potassium Chloride M = 10,15,20 mEq

Assessment

- Complete Assessment: Top Prescribed Drugs: Cardiovascular

Module 6: Pharmacology 2

Unit 1 – Respiratory Conditions and Treatment

Video Lecture

- Watch "Respiratory Conditions and Treatment"

Homework

Foundations Textbook

- Read Chapter 28, The Respiratory System
- Define Key terms Page 436 in the text and make note of these for further study
- Complete Chapter Review Questions, Pages 457-458
- Critical Thinking - Review and consider questions, Page 458

Lab Manual and Workbook

- Complete Review Questions, Pharmacy Calculations Problems, and PTCB Exam Practice, Pages 414-416
- Complete Activities:
 - 28-1 Anatomy Worksheet, Part 1 Upper Respiratory Tract, Page 417 and Part 2, Lower Respiratory Tract, Page 418 (online posting not required)
 - 28-4 Multi-Ingredient Products, Page 422-423
 - Submit responses to questions 3 and 4 by clicking the submit homework button
- Read and consider remaining lab activities in this chapter (online posting not required)

Assessment

- Complete Module 6 – Unit 1 Assessment

Top Prescribed Drugs

Below is a chart listing the Top Prescribed Drugs in the U.S. which are associated with the therapeutic category in this unit of study. You are responsible for learning all of this material: overall classification, therapeutic classification, trade name, generic name, as well as any other information given within the chart. When you are prepared, please access the Top Prescribed Drugs Assessment in the therapeutic category that is covered in this unit. In order for you to function well in the workplace, it is extremely important for you to demonstrate proficiency in this Top Prescribed Drugs area of knowledge. You must score a minimum of 70 on each Top 200 assessment in order to progress in the course.

Top Prescribed Drugs- Respiratory (Pulmonary)

Overall Classification	Therapeutic Class	Trade Name	Generic Name
Pulmonary	Inhaled Corticosteroid	Flovent HFA	Fluticasone propionate 44 mcg, 110 mcg, 220 mcg
		Flovent Diskus	Fluticasone propionate 100 mcg
	Inhaled Corticosteroids + Long acting beta agonists	Advair HFA	Fluticasone 45 mcg(+) Salmeterol 21 mcg
		Advair Diskus	Direct Pressure Inhaler (Fluticasone/Salmeterol): 250/50 mcg 500/50mcg

Overall Classification	Therapeutic Class	Trade Name	Generic Name
		Pulmicort Symbicort	Budesonide (+) Formoterol
	Inhaled Short-acting beta agonists		
		Proventil AccuNeb	Albuterol Metered Dose Inhaler (MDI) Nebulizer -albuterol solution
		Xopenex	Levalbuterol (MDI) Nebulizer solutions- various strengths
	Inhaled Anticholinergic	Atrovent	Ipratropium
	Inhaled Anticholinergic + Albuterol	Combivent DuoNeb	Ipratropium (+) albuterol=Respimat DPI Nebulizer Solution
		Spiriva	Tiotropium (DPI)
	Leukotriene Modifier	Singulair (oral) 10 mg	Montelukast (tablets) 10 mg

Assessment

- Complete Assessment: Top Prescribed Drugs- Respiratory (Pulmonary)

Module 6: Pharmacology 2

Unit 2 – The Nervous System

Video Lecture

- Watch "Nervous System I (Anatomy and Physiology)"
- Watch "Nervous System II (Diseases and Treatment)"

Homework

Foundations Textbook

- Read Chapter 34, The Nervous System
- Define Key terms Page 579 in the text and make note of these for further study
- Complete Chapter Review Questions, Page 609-610

Lab Manual and Workbook

- Complete Review Questions, Pharmacy Calculations Problems, and PTCB Exam Practice, Pages 508-510
- Complete Activity:
 - 34-1 Questions, Page 514, Submit responses to questions 1 and 2 (a through e) by clicking the submit homework button.
- Read and consider remaining lab activities in this chapter (online posting not required)

Assessment

- Complete Module 6 – Unit 2 Assessment

Top Prescribed Drugs

Below is a chart listing the Top Prescribed Drugs in the U.S. which are associated with the therapeutic category in this unit of study. You are responsible for learning all of this material: overall classification, therapeutic classification, trade name, generic name, as well as any other information given within the chart. When you are prepared, please access the Top Prescribed Drugs Assessment in the therapeutic category that is covered in this unit. In order for you to function well in the workplace, it is extremely important for you to demonstrate proficiency in this Top Prescribed Drugs area of knowledge. You must score a minimum of 70 on each Top Prescribed Drugs assessment in order to progress in the course.

Top Prescribed Drugs - Central Nervous System

Overall Classification	Therapeutic Class	Trade Name	Generic Name
Psychiatry	Stimulant C-II		
		Adderall Adderall XR	Dextroamphetamine/amphetamine ER
		Concerta (CD, ER) Ritalin (IR,LA,SR)	Methylphenidate IR (Immed. Release), as well as various sustained release forms
		Focalin XR	Dexmethylphenidate ER
		Vyvanse	Lisdexamfetamine
	Anxiolytic / hypnotics		
	Benzodiazepines C-IV		
		Ativan	Lorazepam
		Klonopin	Clonazepam
		Restoril	Temazepam
		Valium	Diazepam
		Xanax	Alprazolam
	Non- Benzodiazepines C-IV		
		Lunesta	Eszopiclone
		Ambien CR	Zolpidem ER: 6.25, 12.5mg
	Bipolar Disease Treatment		
		Depakote ER	Divalproex Sodium ER = 250, 500mg
		Eskalith	Lithium Carbonate
	Treatment of Depression		
	Antidepressant SNRI (Selective Norepinephrine Reuptake Inhibitors)		
		Cymbalta	Duloxetine
		Effexor Effexor XR	Venlafaxine Tabs ER Caps = several strengths
	Antidepressant SSRI (Selective Serotonin Reuptake Inhibitors)		

Overall Classification	Therapeutic Class	Trade Name	Generic Name
		Celexa	Citalopram
		Lexapro	Escitalopram
		Paxil Paxil CR	Paroxetine ER= several strengths
		Prozac Prozac Weekly	Fluoxetine DR 90mg
		Zoloft	Sertraline
	Antidepressant (Other Treatments)	Desyrel	Trazodone
		Elavil	Amitriptyline
		Wellbutrin Wellbutrin XL Wellbutrin SR Zyban	Bupropion ER= 150, 300mg ER: 100, 150, 200mg ER 150 smoking cessation
	Psychosis (treatment of)		
		Abilify	Aripiprazole
		Geodon	Ziprasidone
		Risperdal	Risperidone
		Saphris	Asenaprine
		Seroquel Seroquel XR	Quetiapine ER= several strengths
		Zyprexa	Olanzapine
Analgesic			
	Opioids and opioid combinations		
	C II	Duragesic	Fentanyl Oral tabs, SL, buccal Fentanyl transdermal patch
	C II	Norco Vicodin Vicodin ES	Hydrocodone/APAP ER
	C II	OxyContin	Oxycodone CR
	C II	Percocet	Oxycodone/APAP
	All tablet formulations are C III Elixir is C-V	Tylenol #2, Tylenol #3 Tylenol #4 Tylenol with Codeine Elixir	15 mg codeine/300 mg APAP tab 30mg codeine/300 mg APAP tab 60 mg codeine/300 mg APAP tab 12 mg codeine/120 mg APAP per 5 ml
Neurology			
	Alzheimer's Disease treatment		
		Aricept	Donepezil
		Namenda XR	Memantine Tabs ER: Caps
	Migraine Treatment		
		Fioricet(C-III)	Butalbital/acetaminophen/caffeine

Overall Classification	Therapeutic Class	Trade Name	Generic Name
			Caps and tabs
		Imitrex	Sumatriptan
		Maxalt Maxalt-MLT	Rizatriptan Oral dispersible
	Seizure Treatment		
		Lamictal	Lamotrigine
		Lyrica (C-V)	Pregabalin
		Neurontin	Gabapentin
		Tegretol Tegretol XR	Carbamazepine ER

Assessment

- Complete Assessment: Top Prescribed Drugs- Central Nervous System (CNS)

Module 6: Pharmacology 2

Unit 3 – Endocrine Diseases and Treatment

Video Lecture

- Watch “Endocrine Diseases and Treatment”

Homework

Foundations Textbook

- Read Chapter 32, The Endocrine System
- Define Key terms Page 536 in the text and make note of these for further study
- Complete Chapter Review Questions, Pages 559-560
- Critical Thinking – Review and consider questions on page 560

Lab Manual and Workbook

- Complete Review Questions, Pharmacy Calculations Problems, and PTCB Exam Practice, Pages 476-479
- Complete Activities:
 - 32-1: Anatomy Worksheet, label endocrine glands on diagram, Page 479
 1. Complete questions only on glands a, b, and f, Page 480 (Describe and name the hormones each of these three glands secretes and discuss the function of each hormone's function within the body) and submit responses by clicking the submit homework button.
 - 32-4: Case Study - Insulin. Page 483 Post responses to questions 1 and 2 by clicking the submit homework button below.
- Read and consider remaining lab activities in this chapter (online posting not required)

Assessment

- Complete Module 6 – Unit 3 Assessment

Top Prescribed Drugs

Below is a chart listing the Top Prescribed Drugs in the U.S. which are associated with the therapeutic category in this unit of study. You are responsible for learning all of this material: overall classification, therapeutic classification, trade name, generic name, as well as any other information given within the chart. When you are prepared, please access the Top Prescribed Drugs Assessment in the therapeutic category that is covered in this unit. In order for you to function well in the workplace, it is extremely important for you to demonstrate proficiency in this Top Prescribed Drugs area of knowledge. You must score a minimum of 70 on each Top Prescribed Drugs assessment in order to progress in the course.

Top Prescribed Drugs - Endocrine Diseases And Treatment

Overall Classification	Therapeutic Class	Trade Name	Generic Name
Endocrine			
	Diabetes Injectable Agents		
		Byetta	Exenatide (pen)
		Humalog (rapid acting) Novolog (rapid acting)	Insulin lispro Pen and Vial Insulin aspart
		Humulin N (OTC) Novolin N (OTC) Intermediate-acting	Insulin NPH Pen and Vial
		Humulin R (OTC) Novolin R (OTC) Short-acting	Insulin Regular Vial
		Lantus (long-acting)	Insulin glargine Pen and Vial
		Levemir (long-acting)	Insulin detemir
		Trulicity (weekly)	Dulaglutide
	Diabetes Oral Agents		
		Actos	Pioglitazone
		Amaryl	Glimepiride
		DiaBeta Glynase Glucovance	Glyburide (+) Metformin
		Glucophage	Metformin
		Glucotrol	Glipizide
		Januvia	Sitagliptin
		Janumet	Januvia + Metformin
	Gout (Treatment)		
		Benemid	Probenecid
		Colcrys	Colchicine
		Zyloprim	Allopurinol
	Osteoporosis (Treatment)		
		Actonel	Risedronate
		Boniva	Ibandronate

Overall Classification	Therapeutic Class	Trade Name	Generic Name
		Fosamax	Alendronate
	Thyroid (Treatment)		
		Synthroid Levoxyl	Levothyroxine
	Women's Health		
		Evista (Selective estrogen receptor modulator (SERM))	Raloxifene
		Folvite	Folic Acid
		Premarin	Conjugated equine estrogens oral tablets Vaginal Cream available also
	Birth Control		
		NuvaRing	Estrogen/progestin (vaginal ring)
		Ortho Tri-Cyclen Yaz	Tabs of various strengths

Assessment

- Complete Assessment: Top Prescribed Drugs – Endocrine

Module 6: Pharmacology 2

Unit 4 – The Reproductive System: Anatomy, Diseases, and Treatment

Video Lecture

- Watch “The Reproductive System: Anatomy, Diseases, and Treatment”

Homework

Foundations Textbook

- Read Chapter 33, The Reproductive System
- Define Key terms Page 561 in the text and make note of these for further study
- Complete Chapter Review Questions, Pages 577-578
- Critical Thinking: Review and consider questions on page 578

Lab Manual and Workbook

- Complete Review Questions, Pharmacy Calculations Problems, and PTCB Exam Practice, Pages 494-496
- Complete Activities:
 - 33-2: Case Study - Gonorrhea, Page 498. Submit responses to questions 2 and 3 by clicking the submit homework button
 - 33-4: Case Study - Oxytocin, Page 500. Submit responses to questions 1 and 2 by clicking the submit homework button
- Read and consider remaining lab activities in this chapter (online posting not required)

Assessment

- Complete Module 6 – Unit 4 Assessment

There is no Top Prescribed Drugs material or assessment for this unit. Products included with Endocrine Top Prescribed Drugs List.

Module 6: Pharmacology 2

Unit 5 – Renal Diseases and Treatment

Video Lecture

- Watch “Renal Diseases and Treatment”

Homework

Foundations Textbook

- Read Chapter 31, The Renal System
- Define Key terms Page 524 in the text and make note of these for further study
- Complete Chapter Review Questions, Page 534

Lab Manual and Workbook

- Complete Review Questions, Pharmacy Calculations Problems, and PTCB Exam Practice, Pages 462-464
- Complete Activities:
 - 31-1 Anatomy Worksheet, Complete parts of the Urinary System, Page 465
 - Submit responses to anatomy identification as well as responses to Questions 1 and 2, Page 466 by clicking the submit homework button below. Clarifying instructions to also submit the anatomy ID's.
- Read and consider remaining lab activities in this chapter (online posting not required)

Assessment

- Complete Module 6 – Unit 5 Assessment

Top Prescribed Drugs

Below is a chart listing the Top Prescribed Drugs in the U.S. which are associated with the therapeutic category in this unit of study. You are responsible for learning all of this material: overall classification, therapeutic classification, trade name, generic name, as well as any other information given within the chart. When you are prepared, please access the Top Prescribed Drugs Assessment in the therapeutic category that is covered in this unit. In order for you to function well in the workplace, it is extremely important for you to demonstrate proficiency in this Top Prescribed Drugs area of knowledge. You must score a minimum of 70 on each Top Prescribed Drugs assessment in order to progress in the course.

Top Prescribed Drugs - Renal Diseases and Treatment (Urology)

Overall Classification	Therapeutic Class	Trade Name	Generic Name
Urology	Benign Prostatic Hypertrophy (BPH)		
	Reductase Inhibitors	Avodart	Dutasteride (*Caution for women handling- absorbed through skin- Pregnancy Risk as Finasteride)
		Proscar	Finasteride Tab. 5 mg (*Caution for women

Overall Classification	Therapeutic Class	Trade Name	Generic Name
		Propecia	handling-breathed/absorbed through skin-risk to fetus in pregnant women) Tab 1mg for male hair loss
	Alpha Blockers	Cardura Cardura XL	Doxazosin Tab. ER Tab.
		Flomax	Tamsulosin Cap
		Hytrin	Terazosin Cap.
		Uroxatral	Alfuzosin
	Erectile Dysfunction		
		Cialis	Tadalafil (Tab.)
		Levitra	Vardenafil (Tab.)
		Viagra	Sildenafil(Tab.)
		Stendra	Avanafil
	Urinary Incontinence		
		Detrol Detrol LA	Tolterodine (Tab) sustained release (Caps)
		Ditropan Ditropan XL	Oxybutynin (Tab) sustained release: (Tabs)
		Vesicare Vesicare LS	Solifenacin
		Toviaz	Fesoterodine

Assessment

- Complete Assessment: Top Prescribed Drugs- Renal

Module 6: Pharmacology 2

Unit 6 – Abnormalities in the Immune System and Treatments

Video Lecture

- Watch “Abnormalities in the Immune System and Treatments”

Homework

Foundations Textbook

- Read Chapter 30, The Immune System
- Define Key terms Page 492 in the text and make note of these for further study
- Complete Chapter Review Questions, Page 522

Lab Manual and Workbook

- Complete Review Questions, Pharmacy Calculations Problems, and PTCB Exam Practice, Pages 448-451
- Complete Activity:
 - 30-1 Anatomy Worksheet, only submit responses to question 3 (matching), Page 453 by clicking the submit homework button.

- Read and consider remaining lab activities in this chapter (online posting not required)

Assessment

- Complete Module 6 – Unit 6 Assessment

Top Prescribed Drugs

Below is a chart listing the Top Prescribed Drugs in the U.S. which are associated with the therapeutic category in this unit of study. You are responsible for learning all of this material: overall classification, therapeutic classification, trade name, generic name, as well as any other information given within the chart. When you are prepared, please access the Top Prescribed Drugs Assessment in the therapeutic category that is covered in this unit. In order for you to function well in the workplace, it is extremely important for you to demonstrate proficiency in this Top Prescribed Drugs area of knowledge. You must score a minimum of 70 on each Top Prescribed Drugs assessment in order to progress in the course.

Top Prescribed Drugs - Immune System (Antimicrobials)

Overall Classification	Therapeutic Class	Trade Name	Generic Name
Antimicrobials			
	Cephalosporins (selected oral)		
		Ceftin	Cefuroxime
		Keflex	Cephalexin
		Omnicef	Cefdinir
	Cephalosporins (selected injectable)		
		Ancef, Kefzol	Cefazolin
		Maxipime	Cefepime
		Rocephin	Ceftriaxone
	Macrolides		
		Biaxin XL	Clarithromycin ER
		Ery-Tab	Erythromycin base
		Zithromax	Azithromycin
		ZPak Zmax	Tab Susp
	Penicillins		
		Amoxil Augmentin	Amoxicillin (+) Clavulanate (tab., susp-several strengths)
		Augmentin XR Augmentin ES-600	Tab (sustained release) 1000/62.5mg Suspension 600/42.9 mg per 5 ml.
		Principen	Ampicillin
		Veetids (Pen VK)	Penicillin VK
	Quinolones		
		Avelox	Moxifloxacin
		Cipro	Ciprofloxacin
		Levaquin	Levofloxacin
	Tetracyclines		

Overall Classification	Therapeutic Class	Trade Name	Generic Name
		Minocin Dynacin	Minocycline (caps) Tabs
		Sumycin	Tetracycline
		Vibramycin	Doxycycline
	Antifungal (oral)		
		Diflucan	Fluconazole
	Antivirals (oral)		
		Tamiflu	Oseltamivir
		Relenza	Zanamivir
		Zovirax Sitavig	Aciclovir
		Valtrex	Valacyclovir
	Urinary Antiseptics		
		Macrobid	Nitrofurantoin
	Other Antimicrobials		
		Bactrim (Septra) Bactrim DS (Septra DS)	Sulfamethoxazole/trimethoprim Single strength 400/80 mg Double strength 800/160 mg
		Cleocin	Clindamycin
		Flagyl	Metronidazole

Assessment

- Complete Assessment: Top Prescribed Drugs- Immune System (Antimicrobials)

Experiential (Externship) Portion of Course

The experiential portion of the course includes 120 hours of externship at a licensed pharmacy practice site under the supervision of a university-approved pharmacy preceptor. This experiential component is coordinated through the Offices of Experiential Learning and the Division of Continuing Education in the WVU School of Pharmacy.

Students must apply for registration as a Pharmacy Technician Trainee with the WV Board of Pharmacy and obtain their notarized certificate through WVU School of Pharmacy before beginning their experimental learning with the preceptor at the pharmacy practice site.

Documentation of student performance is completed by the preceptor indicating observation/performance of a very extensive and specific list of pharmacy technician related competencies. These tasks include, but are not limited to, communication skills, principles of patient interaction, data entry skills, knowledge and requirements of practice standards/pharmacy law, fundamental billing and reimbursement, elements of patient safety and quality assurance, and basic inventory management. Assessments of student competencies are completed by the preceptor via an electronic platform according to a well-defined scale of:

Non- proficient, Satisfactory (minimal skill performance), Capable, Proficient and Very proficient.

A summary statement by the preceptor indicates areas of strength as well as suggested areas where improvement is needed by the student and an overall appraisal of the student's experience is noted to be outstanding, above average, average or unsatisfactory. This evaluation is completed on-site with both the preceptor and the student "signing off" on each skill level attainment. The completed evaluation is forwarded to the School of Pharmacy appointed Externship Coordinator. The documentation of student performance is maintained in the academic file of the student and may be used to validate the training competencies.

Upon successful completion of the program, the student becomes eligible to take a national pharmacy technician certification exam. Arrangements for payment of exam fees and administration times/locations are the responsibility of the student. Pharmacy Technician trainees may sit for the PTCE after completion of this PTCB recognized pharmacy technician education and training program without further hours of work experience.