

Bossier Parish Community College
Master Syllabus

Course Prefix and Number: ALHT 115

Credit Hours: 3

Course Title: Pharmacology for Allied Health Students

Course Prerequisites: BLGY 110, 120 or 230

Textbook: Turley, Susan; Understanding Pharmacology for Health Professionals, 5th edition

Course Description:

To provide allied health students with an understanding of pharmacology as it relates to current drug therapy. The major concepts include drug classifications, mechanisms of action, therapeutic effects, clinical indications, methods of administration, adverse reactions, and drug interactions.

Learning Outcomes:

At the end of the course, the student will

- A. apply knowledge of pharmacological concepts and terminology to patient care and the clinical setting; and
- B. utilize knowledge of anatomy and physiology of the body systems to understand pharmacokinetics and mechanism of action of various drugs; and
- C. identify the classifications of medications including indications for use, desired effects (therapeutic effects), side effects, and adverse reactions; and
- D. match various drugs to the treatment of specific disease processes.

To achieve the learning outcomes, the student will

- 1. Use pharmacological terminology which is used in medical practice. (A)
- 2. Recognize medical uses for drugs. (B, C, D)
- 3. Identify the different sources of drugs. (A)
- 4. Describe the drug laws and agencies that protect consumers. (A)
- 5. Differentiate between C-I to C-V schedules and the different categories/types of the drugs. (A)
- 6. Discuss drug nomenclature. (A)
- 7. Understand the processes of absorption, distribution, metabolism and excretion in pharmacokinetics and variables which affect these processes. (A, B)
- 8. Name a pregnancy category. (A)
- 9. Describe the different effects of a drug. (A, B)
- 10. Identify the different types of receptors and their actions. (B, C)
- 11. Compare the two divisions of the autonomic nervous system and their functions. (B)
- 12. Explain the effects of the neurotransmitters norepinephrine, epinephrine, and acetylcholine. (B, C)
- 13. List acceptable drug references. (A)
- 14. Using anatomy & physiology of the skin, describe the mechanism of action of drugs used to treat skin diseases. (B)
- 15. When given a prefix or suffix, identify what drug classification it belongs to and what disease it treats. (D)
- 16. Recognize drugs used to treat skin conditions, other indications, and their effects on the body. (C, D)
- 17. Explain the mechanism of action and effects of each of the major drug classes of anti-infectives including antibiotics, antifungals, and antivirals. (B, C)
- 18. Recognize the signs and symptoms of allergic reaction and anaphylaxis. (A)

19. Explain the role of the kidneys in water and drug excretion. (B)
20. Using anatomy & physiology of the renal system, describe the mechanism of action of drugs used to treat diseases affecting the renal system and the male reproductive tract. (B)
21. Recognize drugs used to treat conditions/diseases affecting the renal system and male reproductive tract, other indications, and their effects on the body. (C, D)
22. Using anatomy & physiology of the GI system, describe the mechanism of action of drugs used to treat diseases affecting the GI system. (B)
23. When given a prefix or suffix, identify what drug classification it belongs to and what disease it treats. (D)
24. Recognize drugs used to treat conditions/diseases affecting the GI system, other indications, and their effects on the body. (C, D)
25. Using anatomy & physiology of the musculoskeletal system, describe the mechanism of action of drugs used to treat diseases affecting the musculoskeletal system. (B)
26. Recognize drugs used to treat conditions/diseases affecting the musculoskeletal system, other indications, and their effects on the body. (C, D)
27. Describe the different techniques used to assess pain. (A, B)
28. Using anatomy & physiology, describe the mechanism of action of analgesics such as NSAIDs and narcotics. (B)
29. Recognize drugs used to treat pain, fever, and inflammation, other indications, contraindications, and their effects on the body. (C, D)
30. Understand the potential for tolerance and addiction to opioid agents that may occur in long term use. (C)
31. Using anatomy & physiology of the neurological system, describe the mechanism of action of drugs used to treat diseases affecting the neurological system. (B)
32. Recognize drugs used to treat conditions/diseases which affect the neurological system, other indications, and their effects on the body. (C, D)
33. Using anatomy & physiology of the mind & body, describe the mechanism of action of drugs used to treat diseases which affect mental health. (B, D)
34. Recognize drugs used to treat conditions which affect mental health, other indications, and their effects on the body. (C, D)
35. Recognize drugs used to treat withdrawal from addictive substances. (C, D)
36. Recognize drug addiction, the substances involved, and symptoms of drug addiction. (B, C, D)
37. Identify the risk factors that predispose patients to substance abuse. (A, B)
38. Discuss the symptoms shown by a patient under the influence of drugs. (B, C, D)
39. Using anatomy & physiology of the respiratory system, describe the mechanism of action of drugs used to treat diseases affecting the respiratory system. (B, D)
40. Recognize drugs used to treat conditions/diseases which affect the respiratory system, other indications, and their effects on the body. (C, D)
41. Name different types of equipment used to deliver respiratory medications by inhalation. (A, B, D)
42. Identify important drug classifications that produce respiratory depression. (B, C, D)
43. Using anatomy & physiology of the cardiovascular system, describe the mechanism of action of drugs used to treat diseases affecting the cardiovascular system. (B, D)
44. Recognize drugs used to treat conditions/diseases which affect the cardiovascular system, other indications, and their effects on the body. (C, D)
45. Differentiate between anticoagulant and thrombolytic drugs, their MOA, indications, and their effects. (B, C, D)
46. Name drugs used to treat anemia and hemophilia and their side/adverse effects. (C, D)
47. Compare and contrast the routes of administration for emergency drugs. (A, B, D)
48. Describe the various types of drugs given during emergency resuscitation and their therapeutic effects. (B, C, D)
49. Name several types of IV fluids, their components, and their indications. (B, C)
50. State the blood products, their indications, and how they affect the body. (B, C, D)

51. Using anatomy & physiology of the reproductive system, describe the mechanism of action of drugs used to treat diseases and conditions affecting the reproductive system. (B, D)
52. Recognize drugs used to treat conditions/diseases which affect the reproductive system, other indications, and their effects on the body. (C, D)
53. Using anatomy & physiology of the endocrine system, describe the mechanism of action of drugs used to treat diseases affecting the endocrine system. (B, D)
54. Recognize drugs used to treat conditions/diseases which affect the endocrine system, other indications, and their effects on the body. (C, D)
55. Define the key terms and characteristics associated with antineoplastic drugs. (A, B, C)
56. Name some drug classifications which treat cancer. (C, D)
57. Identify the mechanism of actions and effects of the antineoplastic agents. (B, C)
58. Discuss the vaccines, their schedules, how they provide immunity, and their effects on the body. (B, C, D)
59. Discuss how an immune globulin works. (B, C)
60. Recognize basic anesthetic terminology. (A)
61. Differentiate between drugs used for local, regional, epidural, spinal anesthesia and drugs used for general anesthesia. (A)
62. List drug classifications used preoperatively and postoperatively and their effects. (C, D)
63. Name anesthetics and their effects. (C, D)
64. Identify the classifications of medications including: indications for use, desired effect, side effects, adverse reactions.

Minimum Course Requirements: To earn a grade of “C” or higher the student must earn 70% of the total points for the course and meet all of the following course requirements.

- minimum 60% average on major tests
- one satisfactory presentation or written review on current developments in pharmacology and/or a specific therapeutic drug
- minimum score of 70% on the Comprehensive Final Exam (on-campus) for students enrolled in the online format of this course
- Students enrolled in this course online will be required to take the Comprehensive Final Exam on the BPCC campus or ProctorU

Course Grading Scale:

- A- 90% or more of total possible points and meet all of the minimum course requirements.
- B- 80% or more of total possible points and meet all of the minimum course requirements.
- C- 70% or more of total possible points and meet all of the minimum course requirements.
- D- 60% or more of total possible points and meet all of the minimum course requirements.
- F- less than 60% of total possible points or failure to meet one or more of the minimum course requirements.

Attendance Policy: The college attendance policy is available at <http://catalog.bpcc.edu/content.php?catoid=5&navoid=369#class-attendance>

Nondiscrimination Statement

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COORDINATOR FOR SECTION 504 AND ADA

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Equity/Compliance Coordinator

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Updated by Wendy McGee April 2021