By the completion of this unit, the student will be able to do the following:

1. Describe the Mechanism of Actions (MOA) for all the anti-infective drug classes.

2. Identify key important information about each drug class.
   EX:
   a. Identify which drugs causes sun sensitivity.
   b. Identify which drug classes can cause crystallization.

3. Describe major important side effects that stand out for each drug class.
   EX:
   a. Identify which drug classes cause Nephrotoxicity.
   b. Identify which drug classes cause Ototoxicity.

4. Match the drug name (generic or brand) to the appropriate drug class.

   _______ penicillin (Veetids®)                  a.  Anti-fungal
   _______ cephalexin (Keflex®)                  b.  Cephalosporin
   _______ clotrimazole (Lotrimin®)              c.  Sulfonamide
   _______ sulfasalazine (Azulfidine®)           d.  Penicillin
   _______ gentamicin (Garamycin®)               e.  Aminoglycoside

5. Describe the differences between benign and malignant tumors.

6. Discuss general information on cancer and cancer therapy options.

7. Identify cancer drugs that cause low, very low, and high nausea and vomiting.

8. **Describe why chemotherapy drugs cause nausea and vomiting as a major side effect.

9. Discuss the differences between carcinomas and sarcomas and be able to identify examples from each classification.

10. Define AIDS and the drug treatment options.

11. Identify the drug class that acyclovir (Zovirax®) belongs to.


14. Describe the differences between cancer cells and normal cells. (Include cells that divide fast and cells that divide slow).

15. Identify the 6 drug classes that treat cancer and become familiar with each of the MOA.

16. Define CCNS and CCS.

17. Describe the difference between CCNS and CCS.

18. Identify some examples of cancer medication that fall under CCNS and CCS.

19. Describe the different parts of the cell cycle phases and what is occurring in each phase.

20. Identify the anti-infective (antibiotics) and identify which classes of drugs are bacteriostatic and bacteriocidal.

21. Identify the MOA for the six drug classes that are used to treat HIV and AIDS related patients.
   a. Reverse transcriptase inhibitors
   b. Protease Inhibitors
   c. Non-nucleotide transcriptase inhibitors
   d. Fusion Inhibitors
   e. Entry Inhibitors
   f. Integrase Inhibitors

22. Define the purpose of immunomodulators and give drug examples.

23. Identify common cancers in male and female.

24. Describe the goals for chemotherapy.

25. Identify the common combination chemotherapy for breast, colon, lung, and Hodgkin's disease.

26. Identify the 3 characteristics used when selecting drugs for combination therapy.

27. Identify the four basic mechanisms of action target sites of antibiotics and their drug examples.

28. Identify the five biochemical bases of resistance. Identify some drug examples for each resistance.

29. Discuss anti-fungal’s role in treating fungus.

30. Identify common uses for alendronate (Fosamax®)?

31. Identify a common side effect of alendronate (Fosamax®) as it relates to dental care. What are additional side effects related to alendronate (Fosamax®)?

32. Discuss some important patient teaching regarding alendronate (Fosamax®).