### Spring 2019 Syllabus

<table>
<thead>
<tr>
<th>Title of Course:</th>
<th>NURS 238 Nursing Pharmacology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Description:</td>
<td>This course introduces the nursing student to pharmacologic nursing practice from a conceptual approach.</td>
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<tr>
<td>Credit Hours and Contact Hours:</td>
<td>3 CH: 3 credits didactic = 3 hours/week or 48 contact hours</td>
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</table>

#### Course Outcomes

- Identify the nurse’s professional role related to pharmacotherapeutics in diverse populations across the lifespan.
- Identify safety issues and minimize risk potential associated with pharmacotherapeutics and complementary and alternative medicine.
- Utilize evidence-based information integrating pharmacologic and pathophysiologic concepts to guide medication therapeutics.
- Describe health-care system protocols related to pharmacotherapeutics.
- Identify methods for communication with the health care team related to pharmacotherapeutics.
- Utilize informatics systems related to pharmacotherapeutics.
- Describe common classes of drugs that are used in health care, including pharmacokinetics, pharmacodynamics, and pharmacotherapeutics.

#### Required Text(s) and Supporting Materials:

<table>
<thead>
<tr>
<th>Course Communication</th>
<th>Effective, ongoing communication is a key element of success in the nursing program. Instructors and staff communicate with students via email when not in class. Students need to check their UNM and Blackboard email accounts regularly. Full-time nursing instructors have voice mail, and communication should take place directly with your instructor. Full-time instructors hold scheduled office hours as posted in their syllabus and outside of their offices, and students may schedule conferences as needed. In addition, there is student representation on the nursing faculty committee, and the representatives are responsible for communicating pertinent information to classmates. Part-time faculty will identify their preferred method for communication to the students.</th>
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<tbody>
<tr>
<td>Electronic Device Usage:</td>
<td>Cellphones and other devices except laptop computers are not permitted in the classroom setting. They must be silenced and put away. Cellphone that ring or are used during class or testing will result in the student being excused from the class or test. Any make-up of assignments or exams due to violation of this policy is solely at the discretion of the instructor. The use of computers is acceptable in the learning context of the class. Lectures may be audiotaped at the express permission of the instructor. Classroom capture is not available at this time.</td>
</tr>
</tbody>
</table>
| Academic Integrity | Having academic integrity is paramount to your success in any class. Plagiarism or cheating is not tolerated. Any instance of this will result in a grade of zero for that assignment. Here is the link to the UNM Academic Dishonesty Policy: policy.unm.edu/regents-policies/section-4/4-8.html. The policy states:  

*Each student is expected to maintain the highest standards of honesty and integrity in academic and professional matters. The University reserves the right to take disciplinary action, up to and including dismissal, against any student who is found guilty of academic dishonesty or who otherwise fails to meet the expected standards. Any student judged to have engaged in academic dishonesty in course work may receive a reduced or failing grade for the work in question and/or for the course.*  

Academic Dishonesty is defined as:  
*"Academic dishonesty" includes, but is not limited to, dishonesty in quizzes, tests, or assignments; claiming credit for work not done or done by others; hindering the academic work of other students; misrepresenting academic or professional qualifications within or without the University; and nondisclosure or misrepresentation in filling out applications or other University records.* |
| Classroom Use/ Attendance/ Professional Behavior | The classroom is available for student use outside of regularly scheduled classes when other classes are not in session. There is a reference area and computers available. In accordance with UNM policy there is no eating or drinking allowed in the classroom. Students may have water in enclosed bottles during class. See the current Student Nurse Handbook for complete listing of attendance and professional behavior policies. [https://valencia.unm.edu/academics/nursing/applications/student-handbook-2016.docx](https://valencia.unm.edu/academics/nursing/applications/student-handbook-2016.docx) |
| Student Concerns or Grievances | UNM-Valencia nursing program follows the specific Grievance Procedure as provided in the UNM-Valencia Catalog. Prior to participating in the campus procedure, the student is encouraged to review their complaint within the nursing department by following these steps:  

**SBAR:** To be used as a tool for communicating student concerns in a professional manner.  

**Instructions:**  
- The student completes the SBAR using professional language to communicate a concern about classroom, clinical or lab. You may check with your faculty if you are unsure if this process is necessary.  
- Email the completed SBAR to the instructor.  
- The instructor will contact the student after reviewing the SBAR to schedule a face to face meeting to discuss the SBAR. The student should bring a printed copy to the meeting. |
| STUDENTS WITH DISABILITIES: | In accordance with University Policy 2310 and the Americans with Disabilities Act (ADA), reasonable accommodations are made to all qualified students unless such accommodations fundamentally alter a program or service or place an undue hardship on the operation of the University. If you have a documented disability, the Equal Access Services office will provide me with a letter outlining your accommodations. I will then discuss the accommodations with you to determine the best learning environment. If you feel that you need accommodations, but have not documented your disability, please contact Jeanne Lujan, the coordinator for Equal Access Services at 925-8910 or jmlujan@unm.edu. |
| EQUAL OPPORTUNITY AND NON-DISCRIMINATION: | In an effort to meet obligations under Title IX, UNM faculty, Teaching Assistants, and Graduate Assistants are considered “responsible employees” by the Department of Education (see page 15 - [www2.ed.gov/about/offices/list/ocr/docs/qa-201404-title-ix.pdf](http://www2.ed.gov/about/offices/list/ocr/docs/qa-201404-title-ix.pdf)). This designation requires that any report of gender discrimination which includes sexual harassment, sexual misconduct and sexual violence made to a faculty member, TA, or |
Teaching Methods: NURS 238 will use a variety of approaches to meet the course outcomes. These instructional methods may include, but are not limited to lecture, audio-visual materials, guided discussions, group projects, role playing, self-evaluation, written assignments, computer and on-line activities, and decision-making exercises.

Successful completion of NURS 238 requirements:
A cumulative average of all theory tests at 77% or higher and
An overall course grade of 77% or higher and
Completion of all components of the course.

Tests 8 75%
Adaptive Quizzing 10%
Pharmacology Project 5%
Kaplan 10%
TOTAL: 100%

KAPLAN POLICY

The UNM-Valencia Nursing Program has adopted a comprehensive assessment and review program from Kaplan Nursing. The intent of this program is to provide students with the tools they need to be successful in the nursing program and on the NCLEX-RN. The Kaplan program is 10% of the student’s grade in all nursing courses except HCHS125, NURS242, and NURS110. In NURS242, the Kaplan component is 35% of the course grade and there are no Kaplan points in HCHS 125 and NURS 110.

Kaplan also provides both focused review (practice) and integrated (proctored tests). The focused review tests are designed for student self-assessment and provide students with immediate question feedback and rationales. Instructors will direct the students to the appropriate focused review tests in each course. In order to receive credit, students must complete the focused review tests as assigned and during the designated time period specified in individual course syllabi. In order for the student to take the Kaplan integrated test, each student must have completed the assigned online focused review test(s). Grade points for focused review tests are awarded based on the score achieved. The 10% of each course grade allotted to Kaplan will be derived from four sources and totaled for a possible 100 points

<table>
<thead>
<tr>
<th>Focused Review (practice) Test in Assigned Content Area</th>
<th>Points</th>
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<tbody>
<tr>
<td>90-100%</td>
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<tr>
<td>80-89.9%</td>
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<tr>
<td>60-79.9%</td>
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<tr>
<td>40-59.9%</td>
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<tr>
<td>&lt; 39.9%</td>
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**Integrated (proctored) Test in Content Area**

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<th>Percentile Range</th>
<th>Score</th>
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<td>≥ 70th percentile</td>
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<tr>
<td>60-69.99th percentile</td>
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<tr>
<td>50–59.9th percentile</td>
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<td>40–49.9th percentile</td>
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<tr>
<td>&lt; 40th percentile</td>
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**Remediation of Focused Review Test(s)**

<table>
<thead>
<tr>
<th>Remediation Type</th>
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<tr>
<td>Remediates all questions minimum of 1 minute</td>
<td>25</td>
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<tr>
<td>Remediates all questions minimum of 45 seconds</td>
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</tr>
<tr>
<td>Remediates only wrong questions minimum of 45 seconds</td>
<td>15</td>
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<tr>
<td>Remediates &gt;50% minimum of 45 seconds</td>
<td>10</td>
</tr>
<tr>
<td>Remediates &lt; 50% and/or minimum of 45 seconds</td>
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**Remediation of Integrated Test**

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<tbody>
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<td>10</td>
</tr>
<tr>
<td>Remediates &lt; 50% and/or minimum of 45 seconds</td>
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**Total points**

**Focused Review Tests**

Focused review tests are assigned by course faculty. Tests taken at times other than when they are assigned will mean no points are awarded for the test.

**Evaluation/Grading Methods:**

See the Nursing Student Handbook for all policies and requirements.

*This Syllabus, including the Course Schedule, is subject to change at the discretion of the instructor in accordance with UNM Valencia Academic Policies. In the event there is a discrepancy between the syllabus and the Student Handbook, the current Student Handbook is the authoritative source.*

**Grading Scale:**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>98-100</td>
<td>A+</td>
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<tr>
<td>93-97</td>
<td>A</td>
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<tr>
<td>90-92</td>
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<td>87-89</td>
<td>B+</td>
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<tr>
<td>83-86</td>
<td>B</td>
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<tr>
<td>80-82</td>
<td>B-</td>
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<tr>
<td>79</td>
<td>C+</td>
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<td>79-78</td>
<td>C</td>
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<td>73-76</td>
<td>D+</td>
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<tr>
<td>70-72</td>
<td>D</td>
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<tr>
<td>67-69</td>
<td>D-</td>
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<tr>
<td>0-67</td>
<td>F</td>
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</table>

*This Syllabus, including the Course Schedule, is subject to change at the discretion of the Instructor in accordance with UNM Valencia Academic Policies. In the event there is a discrepancy between the syllabus and the Student Handbook, the current Student Handbook is the authoritative source.*

Rubrics SPECIFIC TO COURSE to be added
<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Concepts/Objectives</th>
<th>Topic/Content/Exemplars</th>
<th>Preparation</th>
</tr>
</thead>
</table>
| 1    | Jan 15 | **Introductions & Syllabus Review**  
Review of Pharmacology Project  
  
**Concepts: Apply to classes of medications:**  
• Classification  
• Pharmacokinetics  
• Pharmadynamics  
• Adverse Effects  
• Safety  
• Developmental Concerns  
• Legal and Ethical Issues  
• Genetics and Medications  
• Nursing Process  
  
**Objectives:**  
Chapter 1:  
• Identify the three core ethical principles  
• Relate the core ethical principles that govern informed consent and the risk-benefit ratio  
• Discuss the 2015 American Nurses Association Code of Ethics and its nine provisions.  
• Describe the objectives of each phase of human clinical experimentation.  
• Discuss federal legislation acts related to US Food and Drug Administration drug approvals  
• Describe the function of the state nurse practice acts  
• Differentiate between chemical, generic and brand names of drugs.  
• Define “over the counter” drugs  
• Identify three useful drug reference resources.  
Chapter 2:  
• Differentiate the three phases of drug action.  
• Describe the four processes of pharmacokinetics  
• Identify the four receptor families  
• Describe the influence of protein binding on drug bioavailability. | Chapter 1: Drug Development and Ethical Considerations  
Chapter 2: Pharmacokinetics, Pharmacodynamics and Pharmacogenetics  
Chapter 3: Cultural Considerations  
  
**Self Study:**  
Chapter 4 Complementary and Alternative Therapies (no NMNEC exemplars) | Read assigned chapters  
Adaptive Quizzing:  
• Chapter 1 & 2: Due 1/16 @ 10:00 pm  
• Chapter 3: Due 1/18 @ 10:00 pm |
<table>
<thead>
<tr>
<th>2 Jan 22</th>
<th>TEST 1: 1, 2, 3 &amp; 4 Concepts: Developmental Concerns Nursing Process</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objectives:</strong> Chapter 5:</td>
<td><strong>Objectives:</strong> Chapter 5:</td>
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<tr>
<td>• Apply principles of pharmacokinetics and pharmacodynamics to pediatric drug administration</td>
<td>• Check drugs for half life, percentage of protein binding, therapeutic index and side effects in a drug reference book.</td>
</tr>
<tr>
<td>• Differentiate components of pharmacology unique to pediatric patients.</td>
<td>• Anticipate potential unique responses to drugs based on biologic variations.</td>
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<td>• Synthesize knowledge about pediatric drug safety and administration with current or potential nursing practice.</td>
<td>• Differentiate the four types of drug interactions.</td>
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<td>• Explain the three mechanisms involved with drug-drug interactions.</td>
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<td>• Describe the effects of drug-nutrient interactions.</td>
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<td>• Explain the meaning of drug induced photosensitivity.</td>
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<td>• Describe the nursing implications of pharmacokinetics and pharmacodynamics.</td>
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Chapter 3:
- Recognize verbal and nonverbal communication practices of various social and cultural groups.
- Explain appropriate spatial configurations for patients when delivering nursing care.
- Discuss the importance of including significant members of the social group in the planning and implementation of patient care.
- Compare patients’ perception of time based on cultural constructs.
- Describe patients’ need to exercise control in their environment.
- Anticipate potential unique responses to drugs based on social, cultural, and biologic influences.
- Safeguard patients’ rights to confidentiality during inclusion of significant others in the plan of care.
<table>
<thead>
<tr>
<th>3 Jan 29</th>
<th>Concepts: Safety, Nutrition and Comfort</th>
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</table>
| **Objectives:**  
**Chapter 9:**  
- Describe the original “five plus five” rights of medication administration.  
- Analyze safety risks with medication administration  
- Discuss the culture of safety and include the Institute of Medicine’s “To Err is Human” and the American Nurses Association’s “Just Culture” impact on nursing.  
- Discuss safe disposal of medications  
- Discuss high alert drugs and strategies for safe administration.  
- Discuss the nurse’s rights when administering medications.  
- Discuss safety regulations for pregnancy.  
- Apply the nursing process to safe administration of medications.  
**Chapter 13:**  
- Discuss the four justifications for the use of vitamin supplements.  
- Differentiate between water soluble and fat soluble vitamins.  |
| CH 9: Safety & Quality  
CH 13: Vitamin and Mineral Replacement  
CH 25: Analgesics  |
| Read assigned chapters  
Adaptive Quizzing:  |

**Exemplars:**  
**Vitamins**  
- folic acid  
**Minerals**  
- iron  
- calcium  
**Analgesics**  
**Opioids:**  
- morphine sulfate  
- hydrocodone/APAP  
- buprenorphine & naloxone  
**Opioid antagonists:**  
- naloxone  
**Non-opioid**  
- acetaminophen
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|   | • Relate food sources and deficiency conditions associated with each vitamin.  
• Explain the need for iron and foods that are high in iron.  
• Explain the uses for iron, copper, zinc, chromium and selenium.  
• Describe the nursing interventions including patient teaching, related to vitamin and mineral uses.  
Chapter 25:  
• Differentiate between acute and chronic pain.  
• Compare indications for non-opioid and opioid analgesics.  
• Describe the serum therapeutic ranges of aspirin and acetaminophen.  
• Contrast the side effects of aspirin and opioids.  
• Explain the methadone treatment program.  
• Discuss nursing interventions and patient teachings for non opioid and opioid analgesics.  
• Formulate a nursing process for a patient with morphine patient controlled analgesia. |   |
| 4  | Feb 5 | **TEST 2: 5, 6, 8, 9, 13 & 25**  
**Concept: Cellular Regulation**  
**Objectives:**  
Chapter 15:  
• Explain major responses to stimulation of adrenergic receptors.  
• Differentiate between selective and nonselective adrenergic agonists.  
• Contrast the uses of alpha and beta antagonists.  
• Compare general side effects of adrenergic agonists and adrenergic antagonists.  
• Describe nursing interventions, including patient teaching, associated with adrenergic agonists and adrenergic antagonists.  
• Apply the nursing process for the patient taking beta adrenergic antagonists.  
• Compare the indications of adrenergic agonists and adrenergic antagonists.  
Chapter 16:  
• Compare the responses of cholinergic agonist and antagonist drugs.  
• Differentiate between direct-acting and indirect acting cholinergic agonists. | CH 15: Adrenergic Agonists and Antagonists  
CH 16: Cholinergic Agonists and Antagonists  
**Self-Study Chapter:**  
CH 44: Eye & Ear Disorders (no NMNEC exemplars)  
**Exemplar Drugs**  
Autonomic Agents  
Adrenergic agonist: -epinephrine  
Adrenergic blockers  
Cholinergic agonist: -donepezil  
Anticholinergic: -atropine | Evolve Resources  
Adaptive Quizzes |
<table>
<thead>
<tr>
<th>Day</th>
<th>Date</th>
<th>Concepts: Infection</th>
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<tbody>
<tr>
<td>5</td>
<td>Feb 12</td>
<td><strong>Objectives:</strong></td>
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<tr>
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<td>Chapter 26:</td>
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<tr>
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<td>• Explain the mechanisms of action of antibacterial drugs.</td>
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<td>• Differentiate between bacteria that are naturally resistant and those that have acquired resistance to an antibiotic.</td>
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<td>• Summarize the three general adverse effects associated with antibacterial drugs.</td>
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<td>• Differentiate between narrow-spectrum and broad-spectrum antibiotics.</td>
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<td>• Compare the effects of the natural, broad-spectrum (extended), penicillinase-resistant, and antipseudomonal penicillins.</td>
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<td>• Contrast the effects of first-, second-, third-, and fourth-generation cephalosporins.</td>
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<td>• Apply the nursing process for patients receiving penicillins and cephalosporins.</td>
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<td>• Describe the pharmacokinetics and pharmacodynamics of erythromycin.</td>
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<td>• Apply the nursing process for tetracyclines, including patient teaching.</td>
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<td>• Summarize the nurse’s role in detecting ototoxicity and nephrotoxicity associated with the administration of aminoglycosides.</td>
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<td>• Explain the importance for ordering peak and trough concentration levels for aminoglycosides.</td>
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<td>• Develop a teaching plan for a patient prescribed a fluoroquinolone (quinolone).</td>
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<td>• Contrast the nursing interventions for each of the drug categories: macrolides, tetracyclines, aminoglycosides, and fluoroquinolones.</td>
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<td>• Differentiate between short-acting and intermediate-acting sulfonamides.</td>
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|      |        | **Self Study:**   |
|      |        | Chapter 29: HIV and AIDS related Drugs (Exemplar: retrovirals) |

|      |        | **Exemplars:**    |
|      |        | Antibiotics       |
|      |        | Penicillins       |
|      |        | -amoxicillin      |
|      |        | Cephalosporins    |
|      |        | -cephalexin       |
|      |        | Macrolides        |
|      |        | -azithromycin     |
|      |        | Lincosamides      |
|      |        | -clindamycin      |
|      |        | Tetracyclines     |
|      |        | -doxycycline      |
|      |        | Aminoglycosides   |
|      |        | -gentamicin       |
|      |        | Fluoroquinolones  |
|      |        | -ciprofloxacin    |
|      |        | Sulfonamides      |
|      |        | -sulfamethoxazole/trimethoprim |
|      |        | Glycopeptides     |
|      |        | -vancomycin       |
|      |        | Antituberculars   |
|      |        | Antifungals       |

<p>|      |        | <strong>Read assigned chapters</strong> |
|      |        | <strong>Adaptive Quizzing</strong>  |</p>
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<tbody>
<tr>
<td></td>
<td>Compare the similarities and differences between the sulfonamides and sulfadiazine.</td>
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<td>Explain the pharmacokinetics of the sulfonamides.</td>
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<td>Apply the nursing process to the patient taking trimethoprim-sulfamethoxazole.</td>
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<td>Develop a teaching plan for a patient prescribed metronidazole.</td>
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<td>Chapter 27</td>
<td>Compare first line and second line antitubercular drugs and give examples of each.</td>
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<td>Differentiate between the groups of antifungal drugs.</td>
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<td>Explain the uses of polyenes.</td>
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<td>Differentiate the adverse reactions of antitubercular and antifungal and antiviral drugs.</td>
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<td>Apply the nursing process for patients taking antitubercular, antifungal and antiviral drugs.</td>
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### 6 Feb 19

**TEST 3: 15, 16, 44, 26, 27 & 29**

**Concept: Gas Exchange**

**Objectives:**

**Chapter 35:**
- Compare antihistamine, decongestant, antitussive and expectorant drug groups.
- Differentiate between rhinitis, sinusitis and pharyngitis.
- Describe the side effects of nasal decongestants and how they can be avoided.
- Apply the nursing process for drugs used to treat the common cold.

**Chapter 36:**
- Compare COPD and restrictive lung disease.
- Differentiate the drug groups used to treat COPD, asthma, and the desired effects of each.
- Compare the side effects of beta2-adrenergic agonists and methylxanthines.
- Describe the therapeutic serum or plasma theophylline level and toxic level.

**CH 35: Upper Respiratory Disorders**
- CH 36: Lower Respiratory Disorders

**Self-Study Chapter:**
- CH 31: Vaccines (Exemplars: Vaccine & Toxoids: flu; Immune globulins: TIG* [Concept: Immunity] *not in textbook

**Exemplars:**
- Antihistamine:
  - diphenhydramine
- Antitussive
  - dextromethorphan
- Mucolytics - guaifenesin
- Leukotriene modifiers
  - montelukast
- Bronchodilators
- Beta agonist - albuterol

**Read assigned chapters**
**Complete self study**
**Adaptive Quizzing**
- Contrast the therapeutic effects of leukotriene antagonists, glucocorticoids, cromlyn, antihistamines and mucolytics for COPD and asthma.
- Apply the nursing process for the patient taking drugs commonly used for COPD, including asthma and for restrictive lung disease.

<table>
<thead>
<tr>
<th>7 &amp; 8</th>
<th>Feb 26</th>
<th>Concept: Perfusion and Fluid and Electrolyte Balance</th>
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</thead>
</table>

**Objectives:**

Chapter 37:
- Differentiate the actions of cardiac glycosides, antianginal drugs and antidysrhythmic drugs.
- Describe the signs and symptoms of digitalis toxicity.
- Compare the side effects and adverse reactions of nitrates, beta blockers, calcium channel blockers, quinidine and procainamide.
- Apply the nursing process, including patient teaching, related to cardiac glycosides, antianginal drugs and antidysrhythmic drugs.

Chapter 38:
- Compare the action and uses of thiazide, loop and potassium sparing diuretics.
- Differentiate side effects and adverse reactions related to thiazide, loop, and potassium sparing diuretics.
- Explain the nursing interventions-including patient teaching-related to thiazide, loop and potassium sparing diuretics.
- Apply the nursing process for the patient taking thiazide, loop and potassium sparing diuretics.

Chapter 39:
- Differentiate the pharmacologic action of the various categories of antihypertensive drugs.
- Compare the side effects and adverse reactions of sympatholytics, direct acting vasodilators and angiotensin antagonists.
- Apply the nursing process related to antihypertensives including nursing interventions and teaching.
- Describe the blood pressure guidelines for determining hypertension.

**WEEK 8:**

**TEST 4: 35, 36, 31 & 37, 38**

<table>
<thead>
<tr>
<th>7 &amp; 8</th>
<th>Feb 26</th>
<th>Mar 5</th>
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</table>

**Concept:**

**Perfusion and Fluid and Electrolyte Balance**

**Objectives:**

Chapter 37: Cardiac Glycosides, Antianginals, & Antidysrhythmics
- CH 37: Cardiac Glycosides, Antianginals, & Antidysrhythmics
- CH 39: Antihypertensives
- CH 38: Diuretics

**Self-Study Chapter:**

CH 12: Fluid Volume & Electrolytes (Exemplars: IV fluids: NS, D5W; Electrolytes: potassium)  [Concept: Fluid & Electrolyte Balance]

**Exemplars:**

- Inotropes
- Cardiac glycosides -digoxin
- Catecholamine: -epinephrine -norepinephrine -dopamine
- Antianginals
- Nitrates -nitroglycerin
- Calcium channel blockers -amlodipine
- Antidysrhythmics
  - Class 1: lidocaine
  - Class 2: beta blockers
  - Class 3: amiodarone; adenosine
  - Class 4: diltiazem
- Other: digoxin
- Antihypertensives
  - ACE inhibitors -lisinopril
  - Angiotensin blockers

**Read Assigned Chapters**

Adaptive Quizzes
### MARCH 10-MARCH 16 SPRING BREAK

<table>
<thead>
<tr>
<th>9 Mar 19</th>
<th><strong>Concept: Clotting &amp; Perfusion</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objectives:</strong></td>
<td>Chapter 40:</td>
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<tr>
<td></td>
<td>• Compare the actions of anticoagulants, antiplatelets and thrombolytics.</td>
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<tr>
<td></td>
<td>• Differentiate the side effects and adverse reactions of anticoagulants, antiplatelets and thrombolytics.</td>
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<tr>
<td></td>
<td>• Apply the nursing process, including patient teaching, for anticoagulants and thrombolytics.</td>
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<tr>
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<td>Chapter 41:</td>
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<td></td>
<td>• Describe the action of the two main drug groups; antihyperlipidemics and drugs that improve peripheral blood flow.</td>
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<tr>
<td></td>
<td>• Compare the side effects and adverse reactions of antihyperlipidemics.</td>
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<tr>
<td></td>
<td>• Differentiate the side effects and adverse reactions of peripheral vasodilators and blood viscosity reducer agents.</td>
</tr>
<tr>
<td></td>
<td>• Apply the nursing process, including patient teaching, for antihyperlipidemics and blood viscosity reducer agents.</td>
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</tbody>
</table>

Exemplars:
- Anticoagulants
  - warfarin
  - heparin
  - LMWH: enoxaparin
- Antithrombotics
  - clopidogrel
- Thrombolytics
  - tPA (alteplase)
- Antilipemics
  - Statins
  - simvastatin
  - Fibric acid
  - fenofibrate
  - 2-Asetidinone
  - ezetimibe

<table>
<thead>
<tr>
<th>10 Mar 26</th>
<th><strong>TEST 5: 39, 12, 40 &amp; 41</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Concepts: Elimination, Comfort &amp; Nutrition</strong></td>
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<tr>
<td><strong>Objectives:</strong></td>
<td>Chapter 42:</td>
</tr>
<tr>
<td></td>
<td>• Compare the pharmacologic treatment of vomiting, diarrhea and constipation.</td>
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<tr>
<td></td>
<td>• Differentiate the actions and side effects of antiemetics, antidiarrheals and laxatives.</td>
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</table>

Exemplars:
- Antidiarrheals
- Apply the nursing process for the patient taking antiemetics, antidiarrheals and laxatives.
- Differentiate contraindications to the use of antiemetics, antidiarrheals and laxatives.

**Chapter 43:**
- Explain the predisposing factors for peptic ulcers.
- Differentiate between peptic ulcer, gastric ulcer and duodenal ulcer, gastroesophageal reflux disease.
- Compare the actions of the seven groups of antiulcer drugs used in the treatment of peptic ulcer: tranquilizers, anticholinergics, antacids, histamine 2 blockers, proton pump inhibitors, pepsin inhibitors and prostaglandin analogues.
- Plan patient teaching for anticholinergic, antacid and histamine 2 blocker drug groups.
- Differentiate among the side effects of anticholinergics and systemic and nonsystemic antacids.
- Apply the nursing process, including teaching to antiulcer drugs.

**Concept: Metabolism**

**Chapter 46:**
- Compare the hormones secreted from the pituitary, thyroid, parathyroid, and adrenal glands.
- Differentiate among the hormones from the adenohypophysis and the neurohypophysis.
- Differentiate the actions and uses of the hormones from the pituitary, thyroid, parathyroid, and adrenal glands: thyroxine (T4), triiodothyronine (T3), calcitonin, parathyroid hormone (PTH), mineralocorticoids, and glucocorticoids.
- Differentiate the side effects of thyroxine (T4) and triiodothyronine (T3).
- Apply the nursing process, including patient teaching for drug therapy related to hormonal replacement or hormonal inhibition for the pituitary, thyroid, parathyroid, and adrenal glands

**Objectives:**
- Compare the hormones secreted from the pituitary, thyroid, parathyroid, and adrenal glands.
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<tr>
<th>11 Apr 2</th>
<th><strong>Concept: Metabolism</strong></th>
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<tr>
<td><strong>Objectives:</strong></td>
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<tr>
<td>Chapter 47:</td>
<td>CH 47: Antidiabetics</td>
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<td></td>
<td>CH 49: Pregnancy and Preterm Labor (magnesium)</td>
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</table>

**Concept:** Metabolism

**Chapter 47:**
- Compare the hormones secreted from the pituitary, thyroid, parathyroid, and adrenal glands.
- Differentiate among the hormones from the adenohypophysis and the neurohypophysis.
- Differentiate the actions and uses of the hormones from the pituitary, thyroid, parathyroid, and adrenal glands: thyroxine (T4), triiodothyronine (T3), calcitonin, parathyroid hormone (PTH), mineralocorticoids, and glucocorticoids.
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**Concept:** Metabolism

**Chapter 49:**
- Compare the hormones secreted from the pituitary, thyroid, parathyroid, and adrenal glands.
- Differentiate among the hormones from the adenohypophysis and the neurohypophysis.
- Differentiate the actions and uses of the hormones from the pituitary, thyroid, parathyroid, and adrenal glands: thyroxine (T4), triiodothyronine (T3), calcitonin, parathyroid hormone (PTH), mineralocorticoids, and glucocorticoids.
- Differentiate the side effects of thyroxine (T4) and triiodothyronine (T3).
- Apply the nursing process, including patient teaching for drug therapy related to hormonal replacement or hormonal inhibition for the pituitary, thyroid, parathyroid, and adrenal glands
• Compare type 1 and type 2 diabetes mellitus.
• Describe the symptoms of diabetes mellitus.
• Differentiate symptoms of hypoglycemic reaction and hyperglycemia.
• Compare onset, peak, and duration of rapid-acting, short-acting, intermediate-acting, and long-acting insulins.
• Compare the action of oral antidiabetic drugs and their side effects.
• Differentiate among the actions of insulin, oral antidiabetic agents, and glucagon.
• Apply the nursing process to the patient taking insulin and oral antidiabetic agents.

**Concept: Reproduction, Sexuality and Metabolism**

Chapter 49:
• Explain potential health-promoting and detrimental effects of substances ingested during pregnancy.
• Describe the drugs that alter uterine muscle contractility.
• Discuss drug therapy used during preterm labor to decrease the incidence or severity of neonatal respiratory dysfunction.
• Compare systemic and regional medications for pain control during labor.
• Describe the drugs used in gestational hypertension.
• Describe the nursing process, including patient teaching, associated with drugs used during pregnancy and preterm labor.

Chapter 50:
• Critique systemic and regional medications for their action, pain control during labor, side effects, and nursing implications.
• Describe the nursing process associated with the drugs used during labor and delivery and include patient teaching.
• Compare drugs used to enhance uterine contractility during labor and after placental expulsion along with their action, side effects, and nursing implications.
• Discuss the purpose, action, side effects, and nursing implications of the drugs commonly administered during the postpartum period.
• Describe the nursing process related to drugs used during the postpartum period immediately after delivery and include patient teaching.

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**CH 50: Labor, Delivery, and Postpartum (oxytocin)**

**Exemplars:**
- Pancreatic:
  - insulin (Lantus, regular, NPH)
  - oral diabetic drugs (metformin, pioglitazone, glyburide)
- Hormonal contraceptives
  - combine estrogen/progesterone combo
  - progesterone only
- Tocolytics* - magnesium
- Uterine stimulants* - oxytocin

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12 Apr 9 TEST 6: 42, 43, 46, 47, 49 ,50
Concept: Reproduction, Sexuality and Metabolism

Objectives:
Chapter 52:
- Recognize that successful contraception is essential to the health and well-being of women.
- Describe methods of contraception commonly prescribed, patient selection, mechanisms of action, and possible side effects.
- Identify specific nursing actions that will enhance successful contraception for women and their partners.
- Describe the nursing process, including teaching and risk-benefit–alternative education associated with drugs used for contraception and family planning.
- Explain the pathophysiology of women’s health conditions, pharmacologic therapies, and expected outcomes of pharmacologic therapies.
- Understand pharmacologic interventions used in the treatment of female infertility.
- Describe the mechanism of action for ovulatory stimulation therapy.
- Identify drug therapies used for common gynecologic conditions, such as dysfunctional uterine bleeding, endometriosis, dysmenorrhea, and premenstrual syndrome.
- Describe the nursing process, including teaching, related to drugs used in women’s health and infertility.
- Provide information for nonpharmacologic and pharmacologic interventions for women experiencing menopausal symptoms.
- Differentiate among types of drugs used for osteoporosis.
- Describe the nursing process, including teaching and risk-benefit–alternative education associated with drugs used for menopausal symptoms.

Chapter 53:
- Describe the effects of gonadal hormone supplementation on the hypothalamic anterior pituitary feedback loop.
- Describe the role of testosterone therapy in managing developmental problems related to primary and secondary male sex characteristics and spermatogenesis.
- Differentiate common conditions for which androgen therapy and antiandrogen therapy are indicated.

CH 52: Women’s Reproductive Health
CH 53: Men’s Health & Reproductive Disorders
CH 18: Depressants

Self Study:
CH 48: Urinary Disorders

Exemplars:
SERMS
Biphosphonates-alendronate
Anti-BPH -finasteride
Androgens -testosterone
Erectile dysfunction -sildenafil
Hormones
Estrogens: -Premarin
Anesthetics -lidocaine -propofol
-general anesthetic nursing implications
Describe those for whom androgen therapy is particularly risky.
- Assess patients for therapeutic and adverse effects of androgen therapy.
- Categorize commonly prescribed drugs that can impair male sexual function.
- Explain the nursing process, including patient teaching, related to drugs used to treat male reproductive disorders.

**Concepts: Comfort and Cognition**

**Chapter 18:**
- Differentiate the types and stages of sleep.
- Explain several nonpharmacologic ways to induce sleep.
- Differentiate among these adverse effects: hangover, dependence, tolerance, withdrawal symptoms, and rapid eye movement (REM) rebound.
- Discuss the uses of benzodiazepines.
- Apply the nursing process for the patient taking benzodiazepines for hypnotic use.
- Differentiate nursing interventions related to barbiturates, benzodiazepines, nonbenzodiazepines, and melatonin agonist hypnotics.
- Compare the stages of anesthesia.
- Explain the uses for topical anesthetics.
- Differentiate general and local anesthetics and their major side effects.

**Con 19: Antiseizure Drugs**

**Objectives:**

**Chapter 19:**
- Contrast the two international classifications of seizures with characteristics of each type.
- Differentiate between the types of seizures.
- Summarize the pharmacokinetics, side effects and adverse reactions, therapeutic plasma level, contraindications for use, and drug interactions of phenytoin.
- Compare the actions of hydantoins, long-acting barbiturates, succinimides, benzodiazepines, iminostilbenes, and valproate.
- CH 19: Antiseizure Drugs
- CH 20: Drugs for Parkinson’s Dse & Alzheimer’s Dse
- CH 21: Drugs for Neuromuscular D/O & Muscle Spasms

**Self Study:**
- CH 24: Antiinflammatories
  - Exemplars: T-cell inhibitors: cyclosporin*; NSAIDs: ASA, ibuprofen; DMARDs; Urate lowering therapy:
### Concepts: Cognition and Mobility

#### Objectives:
**Chapter 20:**
- Summarize the pathophysiology of Parkinson disease and Alzheimer disease.
- Contrast the actions of anticholinergics, dopaminergics, dopamine agonists, monoamine oxidase (MAO) B inhibitors, and catechol O-methyltransferase (COMT) inhibitors in the treatment of Parkinson disease.
- Compare the side effects of various antiparkinson drugs.
- Apply the nursing process to anticholinergics, dopaminergics, and acetylcholinesterase inhibitors.
- Differentiate the phases of Alzheimer disease with corresponding symptoms.
- Compare the side effects/adverse effects of acetylcholinesterase inhibitors used to treat Alzheimer disease.

**Chapter 21:**
- Contrast the pathophysiology of myasthenia gravis and multiple sclerosis.
- Discuss the drug group used to treat myasthenia gravis.
- Discuss the drug group used to treat multiple sclerosis.
- Differentiate between the muscle relaxants used for spasticity and those used for muscle spasms.
- Apply the nursing process to drugs used to treat myasthenia gravis and muscle spasms.

### Concepts: Cognition, Anxiety, Mood & Affect, Cellular Regulation

#### Objectives:
**Chapter 22:**
- Differentiate between antipsychotic and anxiolytic drug groups.
- Contrast the action, uses, side effects, and adverse effects of traditional typical and atypical antipsychotics.

### Exemplars:
- Dopaminergics: - carbidopa-levodopa
- Cholinesterase inhibitors: - donepezil
- Muscle relaxants
- Anticonvulsants: - phenytoin
- - clonazepam
- - cyclobenzaprine

### Self Study:
- CH 17: Stimulants (no NMNEC exemplars)
- Plan nursing interventions, including patient teaching, for the patient taking antipsychotics and anxiolytics.
- Apply the nursing process to the patient taking an atypical antipsychotic, a typical antipsychotic, and an anxiolytic.

Chapter 23:
- Contrast the various categories of different antidepressants and give an example of one drug for each category.
- Describe the side effects and adverse reactions of antidepressants.
- Plan nursing interventions, including patient teaching, for antidepressants (tricyclic antidepressants [TCAs], monoamine oxidase inhibitors [MAOIs], selective serotonin reuptake inhibitors [SSRIs], and selective norepinephrine reuptake inhibitors [SNRIs], and atypical antidepressants).
- Explain the uses of lithium and its serum/plasma therapeutic ranges, side effects and adverse reactions, and nursing interventions.
- Apply the nursing process to the patient taking lithium, carbamazepine, and valproic acid.

Chapter 7:
- Define substance use disorder and differentiate among mild, moderate, and severe cases.
- Describe the short- and long-term effects of drug use.
- Identify the physical and psychological assessment findings associated with drugs most commonly used.
- Explain the rationale for the use of drug-assisted treatments during toxicity, withdrawal, and maintenance of abstinence from commonly misused drugs.
- Prioritize appropriate nursing interventions to use during the treatment of patients with drug toxicity and withdrawal.
- Identify nursing interventions appropriate during the management of surgical experiences and pain in patients with substance use disorder.
- Describe the nurse’s role in recognizing and promoting the treatment of nurses with substance use disorder.
- Implement the nursing process in the care of patients with substance use disorders.

**Exemplars:**
- Phentothiazines antipsychotics -fluphenazine
- Nonphenothiazines antipsychotics -haloperidol -risperidone
- Benzodiazepines -lorazepam
- Antidepressants Tricyclics: -amitriptyline
  - SSRI: -sertraline
  - Heterocyclic antidepressants: -trazodone
  - NDRI: -buproprion
  - SNRI: -duloxetine
- MAOI Nursing Implications Mood stabilizer -lithium
- Nicotine receptor blocker -varenicline

15 Apr 30  **Concept: Cellular Regulation**

CH 34: Biologic Response Modifiers
Objectives:
Chapter 34:
- Compare the mechanisms of action of drugs classified as biologic response modifiers with those of standard chemotherapy drugs.
- Distinguish among the different types of biologic response modifiers with regard to indications, common side effects and adverse effects, route of administration, and nursing responsibilities.
- Discuss three common side effects of interferons, colony-stimulating factors, and interleukin.
- Incorporate the nursing process related to the needs of patients receiving biologic response modifiers.

Chapter 45:
- Differentiate among acne vulgaris, psoriasis, drug-induced dermatitis, and contact dermatitis.
- Describe nonpharmacologic measures used to treat mild acne vulgaris.
- Describe at least three drugs that can cause drug-induced dermatitis and their characteristic symptoms.
- Compare the topical antibacterial agents used to prevent and treat burn tissue infection.
- Discuss the nursing process, including teaching, related to commonly used drugs for acne vulgaris, psoriasis, and burns.

Chapter 33:
- Identify the different forms of targeted therapy for cancers.
- Compare the mechanisms of action of targeted therapies for cancer with those of standard chemotherapy drugs.
- Explain the pharmacokinetics and pharmacodynamics for the different types of targeted therapy.
- Incorporate the nursing process related to the needs of patients receiving targeted therapies for cancer.
- Evaluate a focused teaching plan for patients, family, and caregivers for the different types of targeted therapies for cancer.

CH 45: Dermatologic Disorders (no NMNEC exemplars)
*CH 33: Targeted Therapies to Treat Cancer

Self Study:
CH 32: Anticancer Drugs
(Exemplars: Chemotherapeutic agents: Cell cycle specific CCS: 5-FU; CCNS: cyclophosphamide; Hormones: megestrol acetate)

Exemplars:
Biologic Response Modifiers
Interferons
MoAbs* -trastuzumab
Colony-stimulating factors -Epoetin

15 Apr 30 1300 Kaplan Exam
16 May 7 Final Test 8: 22, 23, 7, 17, 34, 45, 33