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<table>
<thead>
<tr>
<th>Course Information</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Semester &amp; Year:</strong></td>
<td>Fall 2013</td>
</tr>
<tr>
<td><strong>Course ID &amp; Section Number:</strong></td>
<td>NURS 10A 034334</td>
</tr>
<tr>
<td><strong>Number of Credits/Units:</strong></td>
<td>2 Units</td>
</tr>
<tr>
<td><strong>Day/Time:</strong></td>
<td>Online Course</td>
</tr>
<tr>
<td><strong>Location:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Instructor’s Name:</strong></td>
<td>R. Farrar</td>
</tr>
<tr>
<td><strong>Contact Information:</strong></td>
<td>Office location and hours: AT 114, by Appointment Phone: 476-4251 Email: <a href="mailto:roberta-farrar@redwoods.edu">roberta-farrar@redwoods.edu</a></td>
</tr>
</tbody>
</table>

**Course Description** (catalog description as described in course outline):

An introduction to pharmacology in the practice of nursing that incorporates the legal, cultural, psychological, professional, and ethical aspects of medication administration across the lifespan. Clinical judgment and reasoning skills as well as client education programs will be delineated and integrated throughout the course.

**Student Learning Outcomes** (as described in course outline):

1. Integrate key principles and elements of pharmacology into nursing practice as they relate to the client, patient care setting and clinical context.
2. Educate the client on the pharmacological aspects of their medical treatment for successful self-management.
3. List the legal and ethical regulations surrounding medication therapy.

**Special accommodations:** College of the Redwoods complies with the Americans with Disabilities Act in making reasonable accommodations for qualified students with disabilities. Please present your written accommodation request at least one week before the first test so that necessary arrangements can be made. No last-minute arrangements or post-test adjustments will be made. If you have a disability or believe you might benefit from disability related services and may need accommodations, please see me or contact Disabled Students Programs and Services. Students may make requests for alternative media by contacting DSPS.

**Academic Misconduct:** Cheating, plagiarism, collusion, abuse of resource materials, computer misuse, fabrication or falsification, multiple submissions, complicity in academic misconduct, and/or bearing false witness will not be tolerated. Violations will be dealt with according to the procedures and sanctions proscribed by the College of the Redwoods. Students caught plagiarizing or cheating on exams will receive an “F” in the course. The student code of conduct is available on the College of the Redwoods website at: [http://www.redwoods.edu/District/Board/New/Chapter5/Ap5500.pdf](http://www.redwoods.edu/District/Board/New/Chapter5/Ap5500.pdf)

College of the Redwoods is committed to equal opportunity in employment, admission to the college, and in the conduct of all of its programs and activities.
<table>
<thead>
<tr>
<th>Wk Date</th>
<th>Quiz/Assign</th>
<th>Lecture Topics</th>
<th>Reading Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td># 1 8/25-31</td>
<td></td>
<td>Orientation to N10A &amp; Intro to Pharmacology &amp; Pharmacological Principles</td>
<td>Lilley: Chapter 2; Instructional Packet Pg</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ATI- Pharm: Unit 1 - Chapters 1 &amp; 5</td>
</tr>
<tr>
<td># 2 9/01-07</td>
<td></td>
<td>Intro to Pharmacology &amp; Pharmacological Principles continued</td>
<td>Lilley: Chapter 2; Instructional Packet Pg</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ATI- Pharm: Unit 1 - Chapters 1 &amp; 5</td>
</tr>
<tr>
<td># 3 9/08-14</td>
<td></td>
<td>The Nursing Process &amp; Drug Therapy; Cultural, Legal &amp; Ethical Considerations</td>
<td>Lilley: Chapters 1 &amp; 4; Instructional Packet Pg 7-8; Davis: Evidenced Based Practice and Pharmacotherapeutics: Implications for Nurses</td>
</tr>
<tr>
<td># 4 9/15-21</td>
<td>Quiz 1 Online CTA Opens</td>
<td>Drug Therapy for the Elderly Patients; Over-The-Counter Drugs &amp; Herbal Products &amp; Dietary Supplements</td>
<td>Lilly: Chapter 3 pgs. 40-47; &amp; Chapter 8; Davis: Med Safety Tools: Beers Criteria &amp; Drugs Associated with Increased Risk of Falls in the Elderly; ATI-pharm: Unit 1 - Chapter 6 (focus on elderly)</td>
</tr>
<tr>
<td># 5 9/22-28</td>
<td>MCS #1</td>
<td>Analgesics Drugs, Adrenal, Anti-inflammatory &amp; Antigout Drugs.</td>
<td>Lilly: Chapters 11, 33 &amp; 44; Davis: Appendix Controlled Substance Schedules; Equi-analgesic Dosing Guidelines; ATI-Pharm: Unit 9 Chapters 35-37, 38 pg 469-472; &amp; 40 pg 512-513</td>
</tr>
<tr>
<td># 6 9/29-10/05</td>
<td>Quiz 2 Online</td>
<td>CNS Depressants &amp; Muscle Relaxants and CNS Stimulants</td>
<td>Lilly: Chapters 13 &amp; 14 ATI-Pharm: Unit 2 Chapters 11 pgs. 138-140; 15 pgs. 187-189; 16 pgs. 195-198</td>
</tr>
<tr>
<td># 7 10/06-12</td>
<td>MCS #2</td>
<td>Antidiabetic Drugs</td>
<td>Lilly: Chapter 32; Davis: Appendix – Insulin &amp; Insulin Therapy. ATI-Pharm: Unit 10 – Chapter 39</td>
</tr>
<tr>
<td># 8 10/13-19</td>
<td>Quiz 3 Online</td>
<td>Medication Errors: Preventing &amp; Responding, Medication Administration (Pass over IV Therapy Content), &amp; Treatment of Anaphylaxis</td>
<td>Lilly: Chapters 6 &amp; 10; Davis: Medication Errors: Improving Practice and Patient Safety. Appendix- Medication Administration Techniques; Formulas helpful for Calculating Doses; Commonly Used Abbreviations; Early Management of Anaphylactic Reactions; ATI-Pharm: Unit 1 – Chapters 2 &amp; 3</td>
</tr>
<tr>
<td># 9 10/20-26</td>
<td>Midterm Exam Fri 10/25 9:00-10:00 On Campus Room TBA</td>
<td>Patient Education and Drug Therapy</td>
<td>Lilly: Chapter 7; Davis: Educating Patients about Safe Medication Use</td>
</tr>
</tbody>
</table>

College of the Redwoods - Health Occupations – ADN Program
N 10A PROFESSIONAL PHARMACOLOGY CLASS CALENDAR - FALL 2013
Professor Roberta Farrar RN MN
<table>
<thead>
<tr>
<th>Wk Date</th>
<th>Quiz/Assign</th>
<th>Lecture Topics</th>
<th>Reading Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td># 10 10/27-11/02</td>
<td>MCS #3 Opens</td>
<td>Heart Failure Drugs: Cardiac Glycosides; Diuretics; Fluids &amp; Electrolytes (Pass over Crystalloids &amp; Blood Products)</td>
<td>Lilly: Chapters 22, 26 &amp; 27; Davis: Appendix Common Laboratory Tests -Chemistry: Na+, K+, Ca++ &amp; Mg++; Renal: BUN &amp; Creatinine; Drug Levels: Digoxin; ATI-Pharm: Unit 4 – Chapters 19, 21 &amp; 30 pgs. 377-380</td>
</tr>
<tr>
<td># 11 11/03-09</td>
<td>Quiz 4 Online</td>
<td>Anesthetics, Bowel Disorder Drugs, Antiemetic and Anti-nausea Drugs</td>
<td>Lilly: Chapters 12; 51, &amp; 52; ATI-Pharm: Unit 2 – Chapters 15 pgs. 184-186; 16 pgs. 200-201 Unit 6 – Chapter 29 pgs. 355-364</td>
</tr>
<tr>
<td># 12 11/10-16</td>
<td>CTA Due</td>
<td>Beginning Concepts of Intravenous Therapy</td>
<td>Lilly: Chapters 27 pgs 418-423 &amp; 10 pgs 132-137; ATI-Pharm: Unit 1 – Chapter 4</td>
</tr>
<tr>
<td># 13 11/17-23</td>
<td>Quiz 5 Online</td>
<td>Antibiotics Part 1 &amp; 2 Antiviral &amp; Antifungal Drugs</td>
<td>Lilly: Chapters 38, 39, 40, &amp; 42; ATI-Pharm: Unit 12 Chapters 43-46; 47 pgs 600-602 &amp; 48</td>
</tr>
<tr>
<td># 14 11/24-30</td>
<td></td>
<td>Men’s Health Drugs and Dermatologic Drugs</td>
<td>Lilly: Chapters 35 &amp; 56; ATI-Pharm: Unit 7 – Chapter 31 pgs 400-405</td>
</tr>
<tr>
<td># 15 12/01-07</td>
<td>Quiz 6 Online</td>
<td>Substance Abuse</td>
<td>Lilly: Chapter 9; ATI-Pharm: Unit 2 – Chapter 12</td>
</tr>
<tr>
<td># 16 12/13</td>
<td>Final Exam Fri 12/13 9:00-11:00</td>
<td>COMPREHENSIVE N10A FINAL EXAM Location to be Announced</td>
<td><em>Note: The Instructor reserves the right to make changes</em></td>
</tr>
</tbody>
</table>

**Prerequisites:** Admission to the ADN program required for enrollment. Appropriate for licensed professional for update or review with permission of the instructor

**Program Outcomes (NLN):**

- **Human Flourishing**
  Promote holistic health, well-being and self-determination in patients and families.

- **Clinical Reasoning and Judgment**
  Draw warranted, judicious, valid conclusions, justify actions taken, explain assumptions and reasons for prioritizing and delegating care to patients and families.

- **Spirit of Inquiry**
  Differentiate clinical opinion from research and evidence summary, identify own assumptions and determine faulty thinking to improve quality of nursing care.

- **Professional Identity**
  Develop collaborative relationships with patients, families and other health care team members that integrate core nursing values.
Integrating Concepts (QSEN):
- Patient Centered Care
- Teamwork & Collaboration
- Evidenced Based Practice
- Quality Improvement
- Safety
- Informatics

Core Values:
1. Caring
2. Diversity and social justice
3. Ethics and integrity
4. Excellence and life-long learning
5. Holism
6. Uniqueness of the individual
7. Flexibility and adaptability

Course Topics included within two categories:

Professional Aspects of Pharmacology & Nursing Responsibilities in Drug Therapy:
Orientation to Pharmacology & Pharmacological Principles; Legal, Ethical, Cultural & Psychological Considerations in Clinical Pharmacology; Nursing Process & Patient Education in Pharmacology; Medication Errors: Preventing & Responding; Management of Anaphylaxis; Chemical Dependency and Substance Abuse/Misuse; Drug Administration in the Elderly/Geriatric Client; Introduction to Intravenous Therapy

Classification of Drugs and Nursing Implications: Over-The-Counter Drugs, Herbal Products & Supplements; Cardiac Glycosides, Diuretics and Electrolytes; Sedatives & Hypnotics, Muscle Relaxants & CNS Stimulants; Anti-diabetics; Basic Medication Administration Guidelines; Opioid and Non-opioid Analgesics & Antagonists, NSAIDs, Antigout Agents; Antibiotics, Antivirals & Antifungals; Antiseptics; Anesthetics, Gastrointestinal Agents: Antidiarrheal’s, Laxatives and Anti-Emetics; Anti-infectives; Men’s Health Agents, Dermatological Agents.

Teaching/Learning Methodologies:
Active involvement in the learning process is essential. Instructors serve as facilitators of learning and engage students in a variety of activities to promote the acquisition of professional nursing competence and values. Reading course materials is essential to achieving subject matter mastery, and students should come to the virtual classroom prepared. Though recorded lecture-presentations are an important element of the learning experience, additional participative activities (e.g. discussion, debate, group work, reflection and application) enhance the learning process. Each member of the class, instructor and student alike, is responsible for creating an effective and enjoyable e-learning environment. Therefore, students are asked to respond to others in their group in a professional and timely manner.
Web-based Course Management via MyCR: Learning activities, class handouts, announcements and or other activities specific to N10A will be posted within the course site accessed through your personal MY WORKSPACE on MYCR (Sakai). The primary method for communicating via email between the instructor and student is through the N10A course site messaging feature.

ATI: Assessment Technologies Institute (ATI) Content Mastery Series is being used by College of the Redwoods Nursing Programs to assist students with academic performance and preparation for NCLEX testing after graduation. The ATI Pharmacology Assessment Exam will be taken at the completion of N10B Pharmacology II in the Spring. Reading assignments from the ATI pharmacology text have been included in the lecture outline.

Assignments and Evaluation (Grades): Quizzes, examinations, and other assignments allow both student and faculty to evaluate learning, and assist nursing students in preparing for NCLEX. Quizzes and Medication Case Study (MCS) cover a relatively small amount of material and are not cumulative. Because acquiring the knowledge required to practice nursing safely and competently builds on prior learning, midterm and final exams are cumulative; however, they are weighted to emphasize the most recent course content. Quizzes and medication case studies are available for review by the student for learning purposes however, to preserve the integrity of testing materials faculty retain all hard copies of exams (Midterm & Final). All academic papers must be typed, collegial and submitted via MyCR course site. Explanations and grading criteria for assignments such as medication case study and critical thinking assignment are located in “Resources” and will be presented through a tegrity recording.

Course Assignments and Grading
To demonstrate mastery of course objectives, students will accomplish a variety of assignments.

<table>
<thead>
<tr>
<th>Assignments</th>
<th>% Of Course Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quizzes</td>
<td>10 %</td>
</tr>
<tr>
<td>Medication Case Study</td>
<td>10 %</td>
</tr>
<tr>
<td>Participation</td>
<td>10 %</td>
</tr>
<tr>
<td>Midterm Exam</td>
<td>30 %</td>
</tr>
<tr>
<td>Final Exam</td>
<td>30 %</td>
</tr>
<tr>
<td>CTA (Pharmacology Paper)</td>
<td>10 %</td>
</tr>
</tbody>
</table>

Please Note: There are two components to the determination of your final course grade.

The quiz average (with the lowest quiz score dropped), medication case study average, midterm and final examinations are combined and the % score computed. You must have 75% cumulative examination score in order to pass the course and to progress within the nursing program.

The examination and CTA scores are combined and computed to determine the final course grade.

How the course grade is calculated
Quizzes: Quizzes account for 10% of the course grade. Once the lowest quiz score is dropped the quiz average is multiplied by 0.1 which provides the number of points for this section. 10 points is the maximum number for this category. If the quiz average was 85% the number of points for this section would be calculated like this: Example 85 x 0.1 = 8.5 pts.
Medication Case Study (MCS): Medication Case Study accounts for 10% of the course grade. The average MCS score is multiplied by 0.1 which provides the number of points for this section. 10 points is the maximum number for this category. If the quiz average was 85% the number of points for this section would be calculated like this: Example 85 x 0.1 = 8.5 pts.

Participation: Course participation accounts for 10% of the course grade. Participation points average score is multiplied by 0.1 which provides the number of points for this section. 10 points is the maximum number for this category. If the participation points average score is 85% the number of points for this section would be calculated like this: Example 85 x 0.1 = 8.5 pts.

Midterm: The midterm accounts for 30% of the course grade. The midterm percentage score is multiplied by 0.3. 30 points is the maximum for this category. If the midterm score was 85% the number of points for this section would be calculated like this: Example 85 x 0.3 = 25.5 pts.

Final: The final accounts for 30% of the course grade. The final percentage score is multiplied by 0.3. 30 points is the maximum for this category. If the final score was 85% the number of points for this section would be calculated like this: Example 85 x 0.3 = 25.5 pts.

Cumulative Examination Score: The number of points for each section is added and the sum is divided by 90 points since the total number of points for the following categories: quizzes, MCS, participation, midterm and final category equal 90 points. Example: 8.5 + 8.5 + 8.5 + 25.5 + 25.5 = 76.5 pts. This number is divided by 90 to arrive at the score which must be equal to or greater than 74.5 in order to pass the course. Example: 76.5/90=85%. Once this is achieved then the CTA score is added. Scores equal to or lower than 74.4 do not meet the criteria as explained above to pass the course despite the grade received on the CTA and the student receives a letter grade of “D” for the course.

CTA: The CTA accounts for 10% of the course grade. The CTA percentage score is multiplied by 0.1. 10 points is the maximum for this category. If the CTA score was 85% the number of points for this section would be calculated like this: Example 85 x 0.1 = 8.5 pts.

Course Grade: Once the cumulative exam score meets the criteria for a passing score ≥ 74.5% the number of points for the CTA are added. Example: 8.5 + 8.5 + 8.5 + 25.5 + 25.5 + 8.5 = 85 points or 85% which equates to a letter grade of B.

Testing Guidelines:

- Examinations: Quizzes, Midterm & Final Exams
  - There will be scheduled quizzes (with lowest quiz dropped), a cumulative midterm examination and a comprehensive final examination. The quizzes are timed tests that will be taken online through MyCR. Students will be given a 48 hour time period in which to complete the quiz. The Midterm and Final are proctored Exams and must be taken in the classroom.
  - There will be no make-up quizzes. If a student must miss a quiz for any reason it becomes the students dropped quiz.
  - The student will not be able to submit their quiz if it’s past the due date and time. The student is responsible for starting the quiz so there is enough time to complete it.
  - Permission for an alternate arrangement for midterm and final examinations may be possible only in extreme circumstances deemed so by the Department Director and necessary paperwork may be required to substantiate the request.
  - The faculty retain all exams.
- **Medication Case Study (MCS)**
  - Due dates for MCS assignments will be posted in the N10A class calendar. These written assignments when due must be submitted via MyCR course site under “Assignments”.

- **Critical Thinking Assignment (CTA) Guidelines**
  - Due date for the CTA assignment will be posted in the N10A class calendar. This written assignment when due must be submitted via MyCR course site in “Assignments”. Completion and submission of all written assignments is mandatory. Failure to submit a CTA results in an “F” grade for the course.

- **Late Work Policy**
  - Five (5) percentage points will be deducted from the MCS or CTA assignment grade for every business day the paper is late. *Any assignment turned in after midnight Pacific Standard Time on the due date is considered late.*

- **Make-Up Policy**
  - No re-writes will be afforded to substandard MCS or CTA assignments.

**Grading Scale:**
A grade of “C” or better is required for progression and completion of the ADN program. A minimal average of seventy five (75) percent is required for a passing grade of “C.” In the ADN program, the following letter grade symbols and GPA will be awarded for the attainment of the following numerical grade:

<table>
<thead>
<tr>
<th>Grade Symbol</th>
<th>Course Grade (%)</th>
<th>Clinical Component</th>
<th>GPA</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>95 – 100</td>
<td>Pass</td>
<td>4.0</td>
<td>Excellent</td>
</tr>
<tr>
<td>A-</td>
<td>90 – 94</td>
<td>Pass</td>
<td>3.7</td>
<td>Excellent</td>
</tr>
<tr>
<td>B+</td>
<td>87 – 89</td>
<td>Pass</td>
<td>3.3</td>
<td>Good</td>
</tr>
<tr>
<td>B</td>
<td>84 – 86</td>
<td>Pass</td>
<td>3.0</td>
<td>Good</td>
</tr>
<tr>
<td>B-</td>
<td>81 – 83</td>
<td>Pass</td>
<td>2.7</td>
<td>Good</td>
</tr>
<tr>
<td>C+</td>
<td>78 – 80</td>
<td>Pass</td>
<td>2.3</td>
<td>Satisfactory</td>
</tr>
<tr>
<td>C</td>
<td>75 – 77</td>
<td>Pass</td>
<td>2.0</td>
<td>Satisfactory</td>
</tr>
<tr>
<td>D</td>
<td>65 – 74</td>
<td>Pass</td>
<td>1.0</td>
<td>Poor, No progression</td>
</tr>
<tr>
<td>F</td>
<td>&lt; 65 or clinical failure</td>
<td></td>
<td>0.0</td>
<td>Fail. No progression</td>
</tr>
<tr>
<td>I</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>Incomplete (see C/R Catalog)</td>
</tr>
<tr>
<td>W</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>Official Withdrawal</td>
</tr>
</tbody>
</table>

*Students’ scores for all assignments will be posted on MyCR.*

**Academic Support:** If you are having difficulty with course content or assignments, please make an appointment with your instructor immediately to discuss your situation and explore strategies.
Textbooks:

N10A Course Packet (online)


ATI: Pharmacology for Nursing Version 5.0

*Textbooks can be purchased in the College of the Redwoods bookstore or online from the publisher or through Amazon.com. ATI texts are purchased from Assessment Technologies Institute.

Supplies

Students should have access to a computer and printer in order to view tegritiy recordings as well as print out outlines. Both are accessed through MyCR.

Important Dates from the College Calendar

Last day to Add a Class - - - - - - 8/30/2013
Last day to Drop and Receive a Refund - - - - - 9/06/2013
Last day to Drop without a “W” (No Refund)- - - - - 9/08/2013
Last day for Student-Initiated Drop - - - - - 11/1/2013

Academic Standards and Policies:

Students are expected to follow the program policies (Ethics, Attendance and Dishonesty) as discussed in the Health Occupation Nursing Program Handbook, 2013-2014.
N 10A Pharmacology in Professional Nursing I

**Topic: Introduction to MyCR**

**Objectives:**

1. Able to navigate through MyCR easily
2. Access current and previous announcements for the course
3. Post responses to topic questions and reply to classmates correctly
4. Utilize the messages feature to email faculty or other students throughout the course
5. Enter the chat-room and have a discussion with other students or faculty
6. Access pages in the course packet and print required pages as needed
7. Retrieve Medication Case Studies from the Assignments section during the term
8. Take and submit an online quiz
9. Navigate the FDA website to find up to date information related to medications
10. Locate the resources folder to obtain weekly assignments for the term
N 10A Pharmacology in Professional Nursing I

**Topic:** Introduction to Pharmacology & Pharmacologic Principles

**Objectives:**
1. Define common/key terms used in pharmacology.
2. Describe the difference between chemical, generic and trade names of drug products.
3. Understand the role of pharmaceutics, pharmacokinetics (absorption, distribution, biotransformation/metabolism, and elimination/excretion), and pharmacodynamics (mechanism of drug action) in medication administration.
4. Differentiate among the following solid drug forms: tablets, scored tablets, capsules, enteric coated tablets, extended release tablets and sublingual tablets.
5. Identify the composition of each of the following oral liquid drug forms: syrups, elixirs, tinctures, solutions, suspensions, gels, emulsions, and powders.
6. Identify the composition of parenteral drug forms.
7. Differentiate between systemic and local drug effects; between therapeutic and side effects.
8. Recognize descriptions of major adverse reactions, list the types of adverse drug reactions (with examples of each), and state the nurses responsibility to adverse reactions.
9. Discuss the importance of understanding drug interactions.
10. Explain: plasma and peak plasma level, loading dose, half-life, and therapeutic index (TI).
11. Identify outcome when two drugs compete for the same binding sites on the plasma protein.
12. Demonstrate an understanding of the principles of pharmacotherapeutics.

**Preparation for Class:**

1. **Readings** as assigned on the N10A Course Calendar
2. **Review glossary** listed at the beginning of text chapter.

3. **e-Learning Activities (optional):** Student Resources at [http://evolve.elsevier.com/Lilley](http://evolve.elsevier.com/Lilley)
   a. **Animations – additional (View the following animations)**
      Agonists/Antagonists; Drug movement through the body; Half-life of intravenously administered ampicillin; Overview of pharmacokinetics: Oral Administration Receptor Interaction
   b. **Medication Errors Checklist**
      Interpreting medication orders; Reviewing medication orders; Transcribing medication orders
   c. **Answer NCLEX-style review questions**
      At the end of assigned text chapter
e-Learning: Prepare for Exams – Review Questions, Prepare for NCLEX Exam
N 10A Pharmacology in Professional Nursing I

**Topic:** The Nursing Process and Drug Therapy

**Objectives:**

1. Discuss the function and purposes of the nursing process as related to drug therapy
2. Identify the components of the assessment process in clients receiving medications including the collection and analysis of both subjective and objective data.
3. Describe how the nursing process would be specifically used in medication administration
4. State the six parts of a medication order that must be included to be legally correct and that are essential for safe, effective drug administration
5. Discuss how to obtain an accurate drug history from a client
6. Discuss how nursing diagnoses are formulated for clients receiving medications
7. Identify possible goals and outcome criteria for clients receiving medications
8. List specific nursing interventions that would be appropriate for clients receiving medications; including, specific procedures to maintain client safety during the preparation and administration of medications
9. Discuss the evaluation process as it relates to the administration of medications.

**Preparation for Class:**

1. **Readings** as assigned on the N10A Course Calendar
2. **Review glossary** listed at the beginning of text chapter.

3. **e-Learning Activities (optional):** Student Resources at [http://evolve.elsevier.com/Lilley](http://evolve.elsevier.com/Lilley)
   a. **Animations** – additional (View the following animation)
      Patient Noncompliance
   d. **Answer NCLEX-style review questions**
      At the end of assigned text chapter
      e-Learning: Prepare for Exams – Review Questions, Prepare for NCLEX Exam
N 10A Pharmacology in Professional Nursing I

**Topic:** Legal, Ethical and Cultural Aspects of Drug Therapy

**Objectives:**

1. Briefly discuss important components of drug legislation at the state and federal levels
2. Identify the impact of drug legislation on drug therapy and nursing
3. Discuss the various categories of controlled substances with specific drug examples in each category.
4. State the process involved in the development of a new drug prior to marketing, including phases of investigational drug studies, and the process for informed consent.
5. Discuss the various cultural, genetic, racial or ethnic, and psychological factors that may influence an individual’s response to medications, as well as their compliance and/or adherence to drug therapy
6. List the various drugs that more commonly show variations in response due to cultural, racial and ethnic factors

**Preparation for Class:**

1. **Readings** as assigned on N10A Course Calendar
2. **Review glossary** listed at the beginning of text chapter
3. **e-Learning Activities (optional):** Student Resources at [http://evolve.elsevier.com/Lilley](http://evolve.elsevier.com/Lilley)
   a. **Answer NCLEX-style review questions**
      At the end of assigned text chapter
   e-Learning: Prepare for Exams – Review Questions, Prepare for NCLEX Exam
N 10A Pharmacology in Professional Nursing I

**Topic:** Drug Therapy for the Elderly/Geriatric Client

**Objectives:**

1. Describe alterations in pharmacokinetics and pharmacodynamics related to aging
2. Provide several examples of how age affects absorption, distribution, metabolism, and excretion of drugs in the elderly population
3. Discuss factors that promote drug misuse in the elderly
4. Identify the risk factors for ineffective management of the medication regimen by the geriatric client (especially polypharmacy)
5. Discuss the importance and application of the Beer’s Criteria for evaluation of drug use in the elderly
6. Identify appropriate nursing actions related to drug administration for the elderly.
7. Discuss general guidelines to use in teaching the elderly about their drug therapy.
8. Identify strategies to promote compliance with drug therapy in the elderly.

**Preparation for Class:**

1. **Readings** as assigned on N10A Course Calendar
2. **Review glossary** listed at the beginning of text chapter.
3. **e-Learning Activities (optional):** Student Resources at [http://evolve.elsevier.com/Lilley](http://evolve.elsevier.com/Lilley)
   a. **Answer NCLEX-style review questions** (focus on the elderly)
      At the end of assigned text chapter
      e-Learning: Prepare for Exams – Review Questions, Prepare for NCLEX Exam
N 10A Pharmacology in Nursing

**Topic:** Over-the-Counter (OTC) Drugs, Herbal Products, and Dietary Supplements

**Objectives:**
1. Discuss the differences between prescription drugs, over-the-counter (OTC) drugs, and herbal products, including the legal implications
2. Explain the differences in federal legislation that govern the promotion and sale of prescription vs. OTC and herbal products/dietary supplements
3. Describe the advantages and disadvantages of OTC drugs and herbal products/dietary supplements
4. Discuss the role of nonprescription drugs, specifically herbals and dietary supplements as an integrative approach to nursing and health care
5. Compare and contrast strength, dosing, and other recommendations for prescription and OTC drugs
6. Discuss potential dangers associated with OTC drugs, herbal products/dietary supplements
7. Describe appropriate advising of the client on safe self-administration of selected OTC drugs and herbal products/dietary supplements
8. Describe the nursing responsibilities in care of clients who use herbal therapy and other dietary supplements.
9. Identify your personal attitude regarding use of herbs and other dietary supplements.

**Preparation for Class:**

1. **Readings** as assigned on N10A Course Calendar
2. **Review glossary** listed at the beginning of text chapter.
3. **e-Learning Activities (optional):** Student Resources at [http://evolve.elsevier.com/Lilley](http://evolve.elsevier.com/Lilley)
   a. **Answer NCLEX-style review questions**
      At the end of assigned text chapter
      e-Learning: Prepare for Exams – Review Questions, Prepare for NCLEX Exam
N 10A Pharmacology in Professional Nursing I

**Topic:** Analgesics: Opioid and Non-Opioid & Opioid Antagonists

**Objectives:**
1. Discuss the use of opioids and non-opioids in pain management
2. Explain how opioid analgesics act to relieve pain
3. Contrast the differences between an opioid agonist, agonist-antagonist, and antagonist agents
4. Discuss the use of nonopioids, salicylates, NSAIDs, and opioids in pain management.
5. Compare mechanisms of action, drug effects, indications/therapeutic uses, side effects, adverse effects, contraindications, and interactions of the opioid agonists, the agonist-antagonists, and the nonopioids analgesics for differences.
6. Develop a comprehensive nursing care plan as it relates to the administration of analgesics and adjunctive agents for the client experiencing pain
7. Identify the essential components the nurse should include in teaching a client to self administer opioid analgesics
8. Discuss the different “special” pain situations such as cancer pain and their management and the established pain standards as noted by the WHO and Joint Commission

**Preparation for Class:**
1. **Readings** as assigned on N10A Course Calendar
2. **Review glossary** listed at the beginning of text chapter.
3. **Patient Teaching Tips** must be read, reviewed and understood

4. **e-Learning Activities (optional):** Student Resources at [http://evolve.elsevier.com/Lilley](http://evolve.elsevier.com/Lilley)
   a. **Animations**
      Opiate Intoxication
   b. **Answer NCLEX-style review questions**
      At the end of assigned text chapter
      e-Learning: Prepare for Exams – Review Questions, Prepare for NCLEX Exam
N 10A Pharmacology in Professional Nursing I

**Topic:** Non-Steroidal Anti-Inflammatory Drugs (NSAIDs) and Anti-Gout Drugs

**Objectives:**

1. Discuss the inflammatory response and the part it plays in the generation of pain.
2. Contrast the various nonsteroidal anti-inflammatory drugs (NSAIDs), COX-2 inhibitors, and antigout agents in relation to their mechanisms of action, indications, side effects, dosage ranges, cautions, contraindications, drug interactions, adverse effects and toxicities.
3. Explain how salicylates, NSAIDs, and the anti-gout medications act to relieve pain, fever, and inflammation.
4. Identify the signs and symptoms of: salicylate toxicity; acetaminophen toxicity; and NSAIDs toxicity.
5. Describe the nursing implications associated with the administration of salicylates, acetaminophen, NSAIDs and anti-gout medications.
6. Develop a nursing care plan that includes all phases of the nursing process for the client receiving NSAIDs and antigout agents.

**Preparation for Class:**

1. **Readings** as assigned on N10A Course Calendar
2. **Review glossary** listed at the beginning of text chapter.
3. **Patient Teaching Tips** must be read, reviewed and understood
4. **e-Learning Activities (optional):** Student Resources at [http://evolve.elsevier.com/Lilley](http://evolve.elsevier.com/Lilley)
   
   a. **Answer NCLEX-style review questions**
      At the end of assigned text chapter
   b. **e-Learning:** Prepare for Exams – Review Questions, Prepare for NCLEX Exam
N 10A Pharmacology in Nursing

**Topic:** Adrenal Drugs: Corticosteroids

**Objectives:**
1. Discuss the normal functions of the adrenal glands, the specific adrenal hormones, and the feedback mechanism of hormonal control
2. Compare and contrast glucocorticoids and mineralocorticoids
3. Describe the mechanisms of action, drug effects, indications/therapeutic uses, toxicity, contraindications, and interactions of topical and systemic corticosteroids
4. Name major expected side effects and significant adverse effects of corticosteroids
5. Describe the nursing implications for the administration of corticosteroids
6. Discuss significant major drug-drug interactions of the glucocorticoids
7. Discuss a recommended method for corticosteroid drug withdrawal
8. Describe the essential information that the nurse should include in teaching a client to self-administer oral and/or topical corticosteroids
9. Develop a nursing care plan that includes all phases of the nursing process for clients receiving corticosteroids

**Preparation for Class:**
1. **Readings** as assigned on N10A Course Calendar
2. **Review glossary** listed at the beginning of text chapter.
3. **Patient Teaching Tips** must be read, reviewed and understood
4. **e-Learning Activities (optional):** Student Resources at [http://evolve.elsevier.com/Lilley](http://evolve.elsevier.com/Lilley)
   a. **Animations**
      Corticosteroids
   b. **Answer NCLEX-style review questions**
      At the end of assigned text chapter
      e-Learning: Prepare for Exams – Review Questions, Prepare for NCLEX Exam
N 10A Pharmacology in Professional Nursing I

**Topic:** Drugs that Depress or Stimulate the Central Nervous System (Sedatives/Hypnotics and Stimulants) and Muscle Relaxants

**Objectives:**
1. Briefly describe the functions of the central nervous system (CNS)
2. Differentiate between a sedative, a hypnotic, and a sedative-hypnotic agent
3. Identify commonly used drugs within each of the following category of CNS depressant agents: barbiturates, benzodiazepines, nonbenzodiazepines, muscle relaxants, and miscellaneous drugs
4. Define anorexiant, and attention-deficit/ hyperactivity disorder
5. Discuss CNS stimulants, sedatives and hypnotics in regards to the Controlled Substance Act
6. Compare the action of central-acting and peripheral-acting skeletal muscle relaxants
7. Identify mechanisms of action, drug effects, indications, interactions, cautions, contraindications, significant adverse effects, toxic effects, and routes of administration for various sedative/ hypnotics, muscle relaxants, and CNS stimulants
8. Identify precautions for geriatric clients when administering sedative/hypnotics, and or muscle relaxants
9. Discuss the nursing process as it relates to the nursing care of clients receiving sedative hypnotics, muscle relaxants, and CNS stimulants
10. Understand the importance of encouraging the use of nonpharmacological approaches to treat sleep disturbances before initiating drug therapy
11. Promote education for clients receiving sedative-hypnotic agents, muscle relaxants, and/or CNS stimulants

**Preparation for Class:**
1. **Readings** as assigned on N10A Course Calendar
2. **Review glossary** listed at the beginning of text chapter.
3. **Patient Teaching Tips** must be read, reviewed and understood
4. **e-Learning Activities (optional):** Student Resources at [http://evolve.elsevier.com/Lilley](http://evolve.elsevier.com/Lilley)
   c. **Answer NCLEX-style review questions**
      At the end of assigned text chapter
      e-Learning: Prepare for Exams – Review Questions, Prepare for NCLEX Exam
N 10A Pharmacology in Nursing

**Topic:** Anti-Diabetic Agents

**Objectives:**

1. Discuss the actions and functions of the pancreas and its regulation by a feedback system
2. Contrast Type 1 and Type 2 diabetes mellitus using the following: age of onset, signs and symptoms, pharmacologic and nonpharmacological treatment, incidence, and etiology
3. Discuss the various factors influencing the blood glucose levels in non-diabetic individuals and in clients with either type of diabetes mellitus
4. Identify and contrast the various agents used to manage Type 1 and Type 2 diabetes mellitus (sources and classifications of insulin preparations and types of oral hypoglycemic agents)
5. Contrast the signs and symptoms and related treatment of hypoglycemia and hyperglycemia
6. Discuss the mechanisms of action, indications, contraindications, cautions, drug interactions, and adverse effects associated with the various categories of insulin and the various types of oral hypoglycemic agents
7. Compare rapid-, short-, intermediate-, and long-acting insulin’s with regard to their onset of action, peak action/effects, duration of action, routes, indications, side effects, and cautions and contraindications
8. Describe nursing implications of administration of insulin and oral hypoglycemic agents
9. Describe the essential information that the nurse should include in teaching a client to self-administer insulin and or oral hypoglycemic agents
10. Develop nursing care plans that include all phases of the nursing process for clients with Type 1 or Type 2 diabetes mellitus, with a focus on drug therapies

**Preparation for Class:**

1. **Readings** as assigned on N10A Course Calendar
2. **Review glossary** listed at the beginning of text chapter.
3. **Patient Teaching Tips** must be read, reviewed and understood
4. **e-Learning Activities (optional):** Student Resources at [http://evolve.elsevier.com/Lilley](http://evolve.elsevier.com/Lilley)
   a. **Animation and Animations Additional**
      Insulin Function, Type 1 & Type 2 Diabetes
      Mixing two medications in one syringe from two vials
   b. **Answer NCLEX-style review questions**
      At the end of assigned text chapter
      e-Learning: Prepare for Exams – Review Questions, Prepare for NCLEX Exam
N 10A Pharmacology in Professional Nursing I

**Topic:** Medication Errors (Preventing and Responding) & Anaphylaxis

**Objectives:**

1. Compare the following terms related to drug therapy in the context of professional nursing practice: adverse drug event (ADE), adverse drug reaction (ADR), allergic reaction, idiosyncratic reaction, medical error, and medication error (ME)
2. Describe the most commonly encountered medication errors
3. Discuss nursing measures to prevent medication errors
4. Identify possible physical and emotional consequences of a medication error
5. Describe causative factors and symptoms of anaphylaxis
6. Discuss initial emergency nursing actions for the client experiencing anaphylaxis
7. Discuss the impact of culture and age on the occurrence of medication errors
8. Identify the impact of medication errors on the cost of health care
9. Analyze the various ethical dilemmas related to professional nursing practice associated with medication errors
10. Discuss the correct procedure for handling medication errors, including documentation and reporting procedures
11. Identify agencies concerned with prevention of and response to medication errors
12. Discuss the possible consequences of medication errors for professional nurses and other members of the health care team

**Preparation for Class:**

1. **Readings** as assigned on N10A Course Calendar
2. **Review glossary** listed at the beginning of text chapter.
3. **e-Learning Activities (optional):** Student Resources at [http://evolve.elsevier.com/Lilley](http://evolve.elsevier.com/Lilley)
   a. **Medication Errors Checklists**
      - Administering Medications; Assessing Patient Response; Appropriate Documentation of Medication Administration; Preparing Medications; Procedural Safeguards; Reporting Medication Errors;
   b. **Answer NCLEX-style review questions**
      - At the end of assigned text chapter
N 10A Pharmacology in Professional Nursing I

**Topic:** General Principles of Medication Administration

**Objectives:**

1. Define selected terms and abbreviations related to the administration of medications
2. Describe factors in establishing the dosage, dosing intervals, and scheduling of medication
3. Recognize systems of measurement that are used in the administration of medications
4. Compare various medication administration systems used to prepare and administer medications as well as various routes
5. Identify the basic components included on all drug labels
6. List the essential steps to follow when administering a medication
7. State the “rights” to safe and accurate medication administration
8. Discuss appropriate administration and disposal of controlled substances according to legal and agency policies
9. Demonstrate appropriate use of a drug manual for researching medications
10. Describe the equipment needed to administer oral, topical, and parenteral medications
11. Identify acceptable sites and appropriate landmarks used for subcutaneous (SQ), and intramuscular (IM) injections
12. List steps of injection techniques for SQ, IM and ID (intradermal) medications
13. Explain the purpose and rationale for use of the “Z” track method of IM injections
14. Discuss variations in equipment and administration techniques for both SQ Heparin and short, intermediate, and long-acting insulin
15. Explain importance of rotating injection sites when administering parenteral medications
16. Describe proper sequence for preparation of two or more medications in a single syringe
17. Describe essential steps in safely administering topical medications: dermatologic, ophthalmic, otic, nasal, vaginal, respiratory inhalation, and rectal preparations

**Preparation for Class:**

1. **Readings** as assigned on N10A Course Calendar
2. **Review glossary** listed at the beginning of text chapter
3. **e-Learning Activities:** Student Resources at [http://evolve.elsevier.com/Lilley](http://evolve.elsevier.com/Lilley)
   a. **Animations – Additional**
      Mix-O-Vial; Mixing two medications in one syringe from two vials; Procedure for drawing up medication from an ampule; Procedure for drawing up medication from a vial;
N 10A Pharmacology in Professional Nursing I

**Topic:** Client Education for Drug Administration

**Objectives:**

1. Discuss the importance of patient education in the safe administration of medications
2. Discuss some of the teaching-learning principles related to patient education and drug therapy in various health care settings and with clients of any age
3. Assess a client regarding the need and readiness to self-administer medications
4. Identify factors that affect client compliance in self-administration of medications
5. Discuss three teaching techniques that may increase a client’s knowledge of medications
6. Write measurable outcomes for the client who is learning to self-administer medications
7. Describe the importance of documentation for patient education, including content, method, and progress towards learning goals
8. Identify the nursing diagnoses of knowledge deficit and noncompliance relating to self-administration of medications
9. Discuss how to individualize a generic prepared teaching plan
10. Develop a comprehensive patient teaching care plan for medication administration

**Preparation for Class:**

1. **Readings** as assigned on N10A Course Calendar
2. **Review glossary** listed at the beginning of text chapter.
3. **Patient Teaching Tips** must be read, reviewed and understood
4. **e-Learning Activities (optional):** Student Resources at [http://evolve.elsevier.com/Lilley](http://evolve.elsevier.com/Lilley)
   a. **Answer NCLEX-style review questions**
      At the end of assigned text chapter
   e-Learning: Prepare for Exams – Review Questions, Prepare for NCLEX Exam
A Pharmacology in Professional Nursing I

**Topic:** Heart Failure Drugs - Cardiac Glycosides

**Objectives:**
1. Differentiate between the terms: inotropic, chronotropic, and dromotropic
2. Explain the physiologic effects of the cardiac glycosides on the affected and/or diseased heart, such as with Atrial Fibrillation, Heart Failure etc
3. State the mechanism of action, drug effects, indications/therapeutic uses, dosage forms and routes of administration, cautions, contraindications, side effects, and adverse effects of the cardiac glycosides
4. List the reference range for digoxin and standard doses
5. Describe signs and symptoms of digoxin toxicity, and explain why it frequently occurs
6. Identify significant drug-drug, drug-laboratory test, and drug-food interactions associated with digoxin
7. Briefly discuss the process of rapid vs. slow digitalization, as well as the use of the antidote digoxin immune fab, including nursing considerations.
8. Discuss the nurse’s responsibility to clients experiencing digoxin toxicity and to designated drug therapy.
9. Develop a nursing care plan that includes all phases of the nursing process for the client receiving cardiac glycosides.

**Preparation for Class:**
1. **Readings and Activities** as assigned on N10A Course Calendar
2. **Review Glossary** listed at the beginning of text chapter.
3. **Patient Teaching Tips** must be read, reviewed and understood
4. **e-Learning Activities (optional):** Student Resources at [http://evolve.elsevier.com/Lilley](http://evolve.elsevier.com/Lilley)
   - **Answer NCLEX-style review questions**
     - At the end of assigned text chapter
N 10A Pharmacology in Professional Nursing I

**Topics:** Diuretics & Electrolyte Replacement

**Objectives:**

1. Summarize the various indications for diuretics.
2. Distinguish among the different classes of diuretics, fluid and electrolyte agents with regard to mechanisms of action, indications, dosages, routes of administration, adverse effects, toxicity, cautions, contraindications and drug interactions.
3. Identify essential components to teach a client self-administration of diuretic medications.
4. Describe the fluid and electrolyte imbalance that can frequently occur from diuretic therapy, and how to prevent this imbalance.
5. Identify various electrolyte agents used in the management of electrolyte disorders.
6. Describe the pharmacodynamics, pharmacokinetics and pharmacotherapeutics of potassium, calcium, sodium and magnesium.
7. Explain the specific nursing actions associated with administration of the major electrolyte replacement agents.
8. Develop a nursing care plan that includes all phases of the nursing process for the client receiving diuretics and/or electrolyte replacement agents.

**Preparation for Class:**

1. **Readings** as assigned on N10A Course Calendar.
2. **Review glossary** listed at the beginning of text chapter.
3. **Patient Teaching Tips** must be read, reviewed and understood.
4. **e-Learning Activities (optional):**
   - **Animations:** Diuretics; Furosemide & Aldosterone Regulation Mechanism.
   - **Calculators:**
     - Creatinine Clearance – Estimated (Cockroft-Gault)
     - Fluid Volume Deficit.
   - **Answer NCLEX-style review questions:** At the end of assigned text chapter pg 416 & 431.
   - **e-Learning:** Prepare for Exams – Review Questions, Prepare for NCLEX Exam.
N 10A Pharmacology in Professional Nursing I

**Topics:** Anesthetics

**Objectives:**
1. Define anesthesia
2. Discuss the similarities and differences between general and local anesthetics
3. List the most commonly used general and local anesthetics and associated risk factors
4. Compare the nursing care required for clients receiving local anesthesia vs. clients receiving general anesthesia
5. Discuss the differences between depolarizing neuromuscular agents (NMBAs) and nondepolarizing neuromuscular NMBAs
6. Compare the mechanism of action, side effects, cautions, contraindications, nursing implications, and indications for general anesthesia and local anesthesia
7. Provide patient education guidelines for clients receiving an anesthetic
8. List common drugs that interact with anesthetic agents and possible result of concomitant use
9. Develop a nursing care plan that includes pre-anesthesia and post-anesthesia care for clients receiving either general or local anesthesia

**Preparation for Class:**
1. **Readings** as assigned on N10A Course Calendar
2. **Review glossary** listed at the beginning of text chapter.
3. **Patient Teaching Tips** must be read, reviewed and understood
4. **e-Learning Activities (optional):** Student Resources at [http://evolve.elsevier.com/Lilley](http://evolve.elsevier.com/Lilley)
   a. **Answer NCLEX-style review questions**
      At the end of assigned text chapter
      e-Learning: Prepare for Exams – Review Questions, Prepare for NCLEX Exam
N 10A Pharmacology in Professional Nursing I

**Topic:** Drugs to Improve Gastrointestinal Function (Pt I): Laxatives, Antidiarrheals and Antinausea/Antiemetic Agents

**Objectives:**

1. Identify the various agents affecting bowel elimination, including both the agents used to manage diarrhea and those used to treat constipation
2. Recognize clinical indications for bulk forming, emollient stimulant, and lubricant laxatives
3. Discuss the pathophysiology of nausea and vomiting, including specific precipitating factors and/or diseases
4. Identify the various antiemetic agents and their drug classification groupings
5. Discuss the mechanisms of action, indications, cautions, contraindications, drug interactions, dosages, routes of administration, and adverse effects of the various laxatives, antidiarrheals, and antiemetic agents
6. Compare the pharmacokinetic and pharmacodynamic properties of the antihistamines and phenothiazines as well as those of other antiemetics
7. Describe the nursing implications for administering transdermal scopolamine
8. Describe essential components to teach a client about self-administration of antidiarrheal, laxative or antiemetic agents
9. Develop a nursing care plan as related to the nursing process to describe the nursing care of clients receiving antidiarrheals, laxatives and antiemetic agents

**Preparation for Class:**

1. **Readings** as assigned on N10A Course Calendar
2. **Review glossary** listed at the beginning of text chapter.
3. **Patient Teaching Tips** must be read, reviewed and understood
4. **e-Learning Activities (optional):** Student Resources at [http://evolve.elsevier.com/Lilley](http://evolve.elsevier.com/Lilley)
   a. **Answer NCLEX-style review questions**
      At the end of assigned text chapter
      e-Learning: Prepare for Exams – Review Questions, Prepare for NCLEX Exam
N10A Pharmacology in Professional Nursing

**Topic: Beginning Concepts of Intravenous Therapy**

**Objectives:**

1. Identify the role of the RN and other health care staff in intravenous therapy
2. List three indications for venipuncture and intravenous therapy
3. Compare the advantages and disadvantages of intravenous therapy
4. Discuss the nurse’s role in understanding fluid and electrolyte balance as a prerequisite to safely initiating, maintaining, and monitoring intravenous infusions
5. Differentiate between isotonic, hypotonic, and hypertonic solutions including uses, physiologic responses, and definitions
6. Describe the nurse’s responsibility in the initiation and maintenance of IV solution infusions; electrolyte infusions; and drug administration
7. Discuss the legal and ethical implications posed to nurses administering IV therapy
8. Evaluate the role of the RN in preventing nosocomial infections related to intravenous therapy
9. Differentiate between local and systemic complications with intravenous therapy
10. Describe the signs & symptoms and nursing interventions for the following local complications of intravenous therapy: pain & irritation; infiltration & extravasation; occlusion & loss of patency; phlebitis; thrombosis & thrombophlebitis; hematoma formation; venous spasm; vessel collapse; cellulitis
11. Describe the signs & symptoms and nursing interventions for the following systemic complications of intravenous therapy: contamination & infection; drug & fluid interaction; hypersensitivity reactions; sepsis; emboli; and speed shock
12. Explain how IV therapy varies for infants, children, adults, and geriatric clients

**Preparation for Class:**

1. **Readings** as assigned on N10A Course Calendar
2. **Review glossary** listed at the beginning of text chapter with focus on IV therapy.

3. **e-Learning Activities (optional):** Student Resources at [http://evolve.elsevier.com/Lilley](http://evolve.elsevier.com/Lilley)
   a. **Animations – Additional Infusion**
   b. **Clinical Reference – IV Therapy Checklists**
      - Administering a bolus medication through a continuous IV
      - Administering medication through an intermittent IV (Saline Lock)
      - Adding medication to an IV bag, bottle or volume control set
      - Administering medication via a piggyback or secondary set
      - Changing the container of an existing intravenous solution
N 10A Pharmacology in Professional Nursing I

**Topic**: Antibiotics Part 1 & 2

**Objectives**:
1. Discuss the general principles of antibiotic therapy
2. Classify the various antibiotic categories with examples of specific drugs in each classification grouping
3. Compare the pharmacodynamics, pharmacokinetics and pharmacotherapeutics of these major antibiotic drug families
4. Discuss the mechanisms of action, indications, cautions, contraindications, drug interactions, dosages, routes of administration, and adverse effects of the various antibiotics
5. Describe the signs and symptoms and importance of detecting an antibiotic allergy
6. Differentiate between bacteriostatic and bactericidal antibiotics
7. Discuss the pros and cons of antibiotic usage
8. Describe the various concerns with overuse of antibiotics
9. Describe the nursing implications associated with administration of antibiotic medications
10. Develop a comprehensive NCP that includes all phases of the nursing process, including patient education, for the client receiving antibiotics

**Preparation for Class**:
1. **Readings Activities** as assigned on N10A Course Calendar
2. **Review glossary** listed at the beginning of text chapter.
3. **Patient Teaching Tips** must be read, reviewed and understood
4. e-Learning Activities (optional): Student Resources at [http://evolve.elsevier.com/Lilley](http://evolve.elsevier.com/Lilley)
   a. **Animations**
      Antibiotics
   b. **Answer NCLEX-style review questions**
      At the end of assigned text chapter
      e-Learning: Prepare for Exams – Review Questions, Prepare for NCLEX Exam
N 10A Pharmacology in Professional Nursing I

**Topic: Antivirals & Antifungals**

**Objectives:**

1. Discuss the effects of viruses and fungi in the human body
2. Identify various antiviral and antifungal drugs and their specific indications
3. Contrast the antimycotic agents used to treat topical and systemic fungal infections
4. Discuss the mechanisms of action, indications, cautions, contraindications, drug interactions, dosages, routes of administration, and adverse effects for antivirals and antifungals
5. Explain precautions for administration of antivirals and antifungals to geriatric clients
6. Describe the nursing implications associated with administration of antivirals and antifungal medications
7. Develop a comprehensive NCP that includes all the phases of the nursing process (especially patient education) for clients receiving: antivirals and/or antifungal medications

**Preparation for Class:**

1. **Readings** as assigned on N10A Course Calendar
2. **Review glossary** listed at the beginning of text chapter.
3. **Patient Teaching Tips** must be read, reviewed and understood
4. **e-Learning Activities (optional):**
    a. **Animations**
        Antivirals
    b. **Answer NCLEX-style review questions**
        At the end of assigned text chapter
        e-Learning: Prepare for Exams – Review Questions, Prepare for NCLEX Exam
N 10A Pharmacology in Professional Nursing I

**Topic:** Male Reproductive/Health Agents

**Objectives:**
1. Recall the normal anatomy and physiology of the male reproductive system
2. List the disorders for which androgen treatment is indicated
3. Compare the various men’s health agents, with discussion of their rationale for use, dosages, and dosage forms
4. Discuss the mechanisms of action, indications, cautions, contraindications, drug interactions, dosages, routes of administration, and adverse effects of the various men’s health agents
5. Describe the therapeutic responses anticipated in clients receiving agents affecting the male reproductive system
6. Develop a comprehensive nursing care plan as related to the nursing process for the client receiving any of the men’s health agents; including client educational needs

**Preparation for Class:**
1. **Readings** as assigned on N10A Course Calendar
2. **Review glossary** listed at the beginning of text chapter.
3. **Patient Teaching Tips** must be read, reviewed and understood
4. **e-Learning Activities (optional):** Student Resources at [http://evolve.elsevier.com/Lilley](http://evolve.elsevier.com/Lilley)
   a. **Answer NCLEX-style review questions**
      At the end of assigned text chapter
      e-Learning: Prepare for Exams – Review Questions, Prepare for NCLEX Exam
N 10A Pharmacology in Nursing

**Topic: Dermatologic Agents**

**Objectives:**

1. State the principles of topical drug absorption
2. Describe the different types of lesions and associated conditions commonly affecting the skin.
3. Identify common drug-induced dermatologic conditions and life-threatening drug-induced skin eruptions
4. Describe the general goals of dermatologic therapy
5. Describe the general dermatologic preparations and their indications: baths, soaps, solutions, lotions, cleansers, and debriding agents
6. Identify the various dermatologic agents that are used in treatment of skin disorders, infections, infestations (ectoparasitic diseases), debridement, or for prophylaxis
7. Discuss the mechanisms of action, indications, cautions, contraindications, drug interactions, dosages, routes of administration, and adverse effects of the various dermatologic agents
8. Describe the difference between antiseptics and disinfectants
9. Identify the most commonly used and prescribed antiseptics and disinfectants
10. Discuss the indications for the use of antiseptics and disinfectants
11. Develop a nursing care plan pertaining to the administration of antiseptics and disinfectants that includes patient education guidelines
12. Develop a nursing care plan that includes all phases of the nursing process for clients receiving dermatologic agents
13. Identify patient teaching guidelines for the client receiving dermatologic agents

**Preparation for Class:**

1. **Readings** as assigned on N10A Course Calendar
2. **Review glossary and e-learning activities**, listed at the beginning of text chapter.
3. **Patient Teaching Tips** must be read, reviewed and understood
4. **e-Learning Activities (optional):** Student Resources at [http://evolve.elsevier.com/Lilley](http://evolve.elsevier.com/Lilley)
   a. **Answer NCLEX-style review questions**
      At the end of assigned text chapter
   e-Learning: Prepare for Exams – Review Questions, Prepare for NCLEX Exam
N 10A Pharmacology in Professional Nursing I

**Topic:** Substance Misuse, Abuse and Chemical Dependency Issues for Professionals

**Objectives:**

1. Describe the scope of substance misuse and abuse in the United States
2. Cite etiologic factors of drug abuse
3. Identify the pharmacologic basis of physical drug dependence and tolerance
4. Describe the pathophysiological changes characteristic of chronic substance abuse
5. Identify the major drug categories for substance abuse and the major individual agents in each category (including street names for drugs commonly used)
6. Identify the physical and psychological effects caused by abuse of opiates (narcotics), CNS depressants or stimulants, alcohol, nicotine and cannabis
7. Identify the signs, symptoms, and treatment for overdose of commonly abused substances
8. Describe alcohol abuse syndrome with a focus on signs and symptoms, alcohol withdrawal symptoms, and associated treatment used during the various stages of withdrawal
9. Explain why withdrawal from CNS depressants should be done under medical supervision
10. Discuss the treatment management of clients who abuse drugs and other substances
11. Identify various assessment tools used during a nursing assessment of substance abuse
12. Develop a nursing care plan with all phases of the nursing process, for the client being treated for chemical dependency and/or abuse
13. Discuss the legal implications and treatment of nurses with chemical dependency issues
14. Identify the risk factors for substance abuse among nurses and other health professionals
15. Discuss the nurse's professional responsibility when suspecting substance use and/or abuse by fellow-employees (including attending physicians)
16. Describe the actions taken by the Board of Nursing (BRN) when substance abuse of a nurse is recognized

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   a. **Answer NCLEX-style review questions**
      At the end of assigned text chapter
      e-Learning: Prepare for Exams – Review Questions, Prepare for NCLEX Exam
The purpose of this assignment is to expose the nursing student to the potential for medication related problems in the geriatric population. The Beer’s Criteria list medications deemed inappropriate for use in older adults (Part I) due to their adverse effects and for use in certain diagnoses or conditions (Part II). The Beers’ Criteria is a tool used in nursing when evaluating the elderly client’s medications. The Hartford Institute for Geriatric Nursing website ConsultGeriRN.org provides videos and articles pertinent to this population. After viewing the video or reading the article which covers the same subject write a paper using the criteria below and two or more resources besides the video/article. Submit this assignment via MYCR.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Excellent -4</th>
<th>Good -3</th>
<th>Satisfactory -2</th>
<th>Less than Satisfactory -0</th>
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</thead>
<tbody>
<tr>
<td>Drug History 30 pts.</td>
<td>Thoroughly explains how to obtain a drug history as well details the information to be gathered when doing a drug evaluation</td>
<td>Sufficiently explains how to obtain a drug history, provides the majority of information to be gathered when doing a drug evaluation</td>
<td>Limited explanation on how to obtain a drug history. Provides basic information to be gathered when doing a drug evaluation</td>
<td>Inaccurate explanation on how to obtain a drug history. Provides minimal information to be gathered when doing a drug evaluation</td>
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<tr>
<td>Nursing 25 pts.</td>
<td>Comprehensively describes what the nurse would do when a patient is found to be taking a drug within the Beers’ Criteria.</td>
<td>Adequately describes what the nurse would do when a patient is found to be taking a drug within the Beers’ Criteria.</td>
<td>Weakly describes what the nurse would do when a patient is found to be taking a drug within the Beers’ Criteria.</td>
<td>Unable to describe at all what the nurse would do when a patient is found to be taking a drug within the Beers’ criteria.</td>
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<tr>
<td>Reflection 25 pts.</td>
<td>Personally reflects on what was learned about the Beers’ Criteria and how it will be incorporated into own nursing practice.</td>
<td>Personally reflects on what was learned about the Beers’ Criteria with a less in-depth plan of how to incorporate it into own nursing practice.</td>
<td>Personally reflects on what was learned about the Beers’ Criteria and vaguely explains how it will be incorporated into own nursing practice.</td>
<td>Lacks personal input on knowledge learned about Beer’s Criteria. No suggestions given on how to incorporate into own nursing practice.</td>
</tr>
<tr>
<td>Content 10 pts.</td>
<td>Paper contains an abstract, introduction, body and conclusion that are clearly defined.</td>
<td>Paper contains an introduction, body and conclusion. No abstract</td>
<td>Paper contains an introduction, body and conclusion that are not well defined. No abstract</td>
<td>Paper is 1-3 paragraphs without semblance of an introduction, body or conclusion. No abstract</td>
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<tr>
<td>Grammar Spelling and APA Format</td>
<td>10 pts.</td>
<td>Paper absent of errors, consistently follows general principles of sentence structure and punctuation. Written in APA format, paper 4-5 pages; three references including article/video.</td>
<td>Paper contains less than 5 spelling errors. General principles of sentence structure and punctuation inconsistent. Uses term Bibliography, 3-4 pages; 2 references including article/video</td>
<td>Paper contains between 5-10 spelling errors. General principles of sentence structure and punctuation occur occasionally. Uses term Bibliography, 2-3 pages; 1 reference including article/video</td>
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<td>Total 100 pts.</td>
<td>90-100 pts.</td>
<td>81-89 pts.</td>
<td>75-79 pts.</td>
<td>&lt; 75 pts.</td>
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