



**INTRODUCTION TO PHARMACOTHERAPEUTICS**

**COURSE SYLLABUS**

**NUR 1141**

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## Course Syllabus – Classroom Courses

### GENERAL CLASS & COURSE INFORMATION

**Course number:** NUR 1141      **Class Reference Number:** Multiple      **Term:** Fall 2011

**Course title:** Introduction to Pharmacotherapeutics      **Credit/Contact hours:** 2 Credits

**Course Description:**

This course introduces the beginning level nursing student to the concepts of pharmacotherapeutics. At the completion of this course the student will have an understanding of the major drug classifications as they relate to the nursing process and the five concepts of human functioning. Lake Worth campus; Belle Glade campus and Distance Learning.

**Course Learning Outcomes:** As a result of taking this course, the student will be able to:

1	Explain significant historical events contributing to the development of pharmacology.
2	Identify the roles of the professional nurse in relation to medication administration, in both acute care and community health settings.
3	Utilize critical thinking skills to determine effects on the body during all phases of drug activity (pharmacokinetics, and pharmacodynamics).
4	Predict the potential for drug-drug interactions and drug-food interactions, including over-the-counter (OTC) and complementary/alternative agents (CAMs).
5	Identify special considerations for dosage related side effects when discussing “at risk” populations such as the fetus, infants, children, pregnant women, and the frail elderly.
6	Develop a knowledge base that includes the use of the nursing process as problem solving steps in medication administration.
7	Identify the correct measures to ensure the prevention of medication errors.
8	Define the ethical and legal aspects of medication administration.
9	Describe the usage of drugs when administering medication to culturally diverse populations.
10	Differentiate between tolerance, resistance, withdrawal, side effects, adverse reaction, agonistic, antagonistic, cumulative, blocker, and stimulant effects in relation to drug administration.
11	Identify major classifications of pharmacotherapeutic agents.
12	Utilize effective communication skills to teach clients essential knowledge of the effects of medication administration on their health and well-being.

### [Course Outline for NUR1141 - INTRO PHARMTHERAPEUT](#)

## Course Syllabus – Classroom Courses

### Textbooks information:

1. Adams, P., Holland, L. & Urban, C. (2011). Pharmacology for Nurses: a pathophysiologic approach. (3rd Ed) New Jersey: Prentice Hall. ISBN 13-978-0-13-508981-1.
2. Pearson. (2011): [www.mynursingkit.com](http://www.mynursingkit.com)
3. Wilson, B. et al (2012). Nurse's drug guide 2012 New Jersey: Prentice Hall. ISBN-10: 013-259867-x OR ISBN-13: 978-0-13-255867-9
4. Palm Beach State College Syllabus for NUR 1141 is posted online.

You may purchase your textbook(s) at any one of Palm Beach State College's campus bookstores or [online](#).

The Electronic [Essential Nursing Resources](#) Video list is recommended & available in [MTIS](#) (Media Technology and Instructional Services) located on the first floor of the LLRC.

**Web Content Information:** Log onto the course web site [Online Learning - Blackboard Campus](#). Use your PantherWeb logon information. To pass the course, you must be able to access this web site. Your password will not work until the first day of class.

It is the student's responsibility to have accessed this site no later than **the semester start date**. The web site has a security system which requires a *Sign on* and a *Password*. Only registered students will be able to access the course. On-line students are not permitted to attend "live lecture classes".

### To login to the course web site:

**User Name:** Use your Palm Beach State College Student ID Number (no hyphens). Your Palm Beach State College Student ID Number can be found on the back of your student ID card. If you do not have a student ID card, you MUST obtain one in the bookstore at Lake Worth campus. For obtaining a student ID card on other campuses, check with the campus directly.

**Password:** The student's Blackboard password will be the student's Palm Beach State College Pin Number.

### What do I do if I forget my password or need assistance with Blackboard?

[E-mail the Blackboard administrator](#). You can also email the Palm Beach State College [Student Help Desk](#) or contact them by phone at (561)868-4000. Be sure you have the following information available:

- your full name
- your Palm Beach State College Student ID number
- course with the reference number
- details of the assistance needed and any error messages

### [Student Help Desk Hours of Operation](#)

On hours and days that the Help Desk is closed, the student may leave a voice message or an e-mail and the issue will be addressed the next business day.

### **"Netiquette Rule" requirements**

Refer to the web site for network application. The faculty expectation is for student adherence to the same standards of behavior online that you follow in real life.

## Course Syllabus – Classroom Courses

### PROFESSOR'S CONTACT INFORMATION

<a href="#">Carol Alexander, MSN, RN</a> Professor I BA121 (561) 868-3425 <a href="#">Email</a>	<a href="#">Shernett DeMarco, MSN, RN</a> Associate Professor CRB220, (561) 993-1195 <a href="#">Email</a>
<a href="#">Deborah Marshall, MSN, MEd, RN</a> Professor II AH 107, (561) 868-3440 <a href="#">Email</a>	
Faculty Office Hours are Posted on Faculty Web Pages and Outside Office	

### CLASS REQUIREMENTS

**Assignments:** NUR 1141 will have six exams, a cumulative final exam, a critique of journal article and class participation. See grading scale for details. All students are encouraged to participate fully in classroom activities. All readings, classroom discussions, AV material, and guest speakers are testable material.

**Late Assignment Policy:** All late assignments will lose 5% for each day beyond the scheduled due date unless prior arrangements have been approved by the instructor.

#### Nursing Department Grading Scale and Policy

90 - 100	= A
83 - 89	= B
75 - 82	= C
Below 75	= F

The minimum score to pass the course is 75%.

All students must achieve an average grade of 75% on all tests before grades for assignments, journal critique, and class participation will be added for a final grade. An end of course grade of 75% is required to pass this course.

**Tests, Quizzes And Final Examination** - Your course grade will be determined by the following:

Test 1	=	10%
Test 2	=	10%
Test 3	=	10%
Test 4	=	10%
Test 5	=	10%
Test 6	=	10%
Final Exam	=	20%
Paper/Journal Article	=	5%
Class participation	=	10%
<u>Assignments/Discussions</u>	=	<u>5%</u>
Total		100%

## Course Syllabus – Classroom Courses

### Make-up Exam Policy:

Please see [Nursing Student Handbook](#) for standard Nursing policy related to Essay Make-up Exams.

### CLASS POLICIES AND METHODOLOGY

**Attendance:** Professors are required to take attendance. **Students are expected to attend all classes.** Students who are actively involved in their learning are more successful. Students are expected to complete all class work and homework and participate in structured class discussions.

**ALL students are expected to attend all classes. In the event of an absence due to extenuating circumstances, the student is expected to notify the appropriate faculty member.**

**Electronic Device Use:** Laptops and Hand-held devices are allowed in class for note-taking purposes, only. The use of Hand-held devices that are iPod capable are encouraged to facilitate downloadable information as learning strategies and study tools. Cell phones must be turned off in class and are prohibited in the campus Testing Centers.

**Email Policy:** All students have access to a college email account. It is the responsibility of the student to activate this account in order to be kept current with college, program and course information. This course has a web component that has email within the course. Course email should be used for all course-related communications with faculty.

Faculty will contact students via college and course email, so be certain to check these email accounts twice weekly for any updates or changes to coursework.

**Equipment & Supplies:** Required text books; access to a computer with active Internet service; word processing and printing capabilities are essential to be successful in this class.

**Professor's Expectations:** The student will participate in discussions; will observe "Netiquette"; will read the assigned chapters; will make an appointment with the faculty member at the first indication of a test grade below 75%, for faculty mentoring and remediation plans.

### Methods of Instruction:

1	Selected reading	8	Student group work
2	Lectures	9	Journal Articles
3	Demonstrations	10	Study Guides
4	Discussions	11	Interactive Educational Activities
5	Audiovisuals	12	Internet – Blackboard Learning System
6	Interactive video software programs	13	Student Lead Presentation
7	Computer-Assisted Instruction	14	Critical Thinking Exercises

### Classroom Strategies

- A. Class Discussion
- B. Media Presentations: Video, Transparencies, PowerPoint
- C. Group Presentations/Case Scenarios
- D. Critical Thinking Exercises

## Course Syllabus – Classroom Courses

### Evaluation Methods

- A. Group/Individual Activities
- B. Class Attendance/Participation
- C. Periodic Exams, Final Examination
- D. Critique of a Journal Article/paper

**Unique Requirements of the Class:** This course has an Internet Component which is on the [Online Learning - Blackboard Campus](#) **To pass the course, you must be able to access this web site.**

Although Nursing is a limited access program and as such maintains policies and procedures specific to Nursing Department needs, all students enrolled in a nursing course will adhere to the Palm Beach State College policies as stated in the Palm Beach State College Student Handbook.

All students enrolled in a Nursing course must maintain compliance with the policies and procedures published in the Nursing Student Handbook in addition to those established for the general college population by Palm Beach State College.

**Please refer to the following documents:**

- Palm Beach State [College Student Handbook](#):
- Palm Beach State College [Nursing Student Handbook](#):
- [PantherWeb](#) Student Information:

## COLLEGE POLICIES AND WEB INFORMATION

### Academic Dishonesty

Academic dishonesty includes the following actions, as well as other similar conduct aimed at making false representation with respect to the student's academic performance:

(1) Cheating on an exam, (2) Collaborating with others on work to be presented, if contrary to the stated rules of the course, (3) Submitting, if contrary to the rules of the course, work previously submitted in another course, (4) Knowingly and intentionally assisting another student in any of the above actions, including assistance in an arrangement whereby work, classroom performance, examination, or other activity is submitted or performed by a person other than the student under whose name the work is submitted or performed, (5) Plagiarism.

Please refer to the **Palm Beach State** [College Student Handbook](#)

### Classroom Etiquette and Student Behavior Guidelines

Students will demonstrate respect for professors and fellow students. Behavior that is disruptive to a positive learning environment reported by the professor will result in a warning on the first instance; the second instance might result in expulsion from the course or campus.

### Computer Competency Component

Each student will, to the satisfaction of the professor, demonstrate a fundamental understanding of basic computer operations through various professor-determined exercises and/or assignments.

## Course Syllabus – Classroom Courses

### **Disability Support Services**

Students with disabilities are advised, in compliance with federal and state laws, that accommodations and services are available through the office of [Disability Support Services](#) (DSS). It is the student's responsibility to contact [Disabled Student Services Advisors](#) and to submit appropriate documentation prior to receiving services.

### **Eating, Drinking and Smoking**

Eating and drinking are confined to areas designated on the campus. Smoking is not permitted in any College building and only in areas designated at each campus.

### **Student Responsibility Policy**

When a student attends the College, s/he becomes subject to its jurisdiction. Students are expected to conduct themselves in a responsible manner, in all areas of campus life. By enrolling, they pledge to obey the rules and regulations of the College and are responsible for observing all College policies and procedures as published in the student handbook, the College catalog and other College publications. The student will be responsible for preparing for class, participating in class, and completing assignments on time.

### **[College Websites of Interest](#)**

**Withdrawal Policy for Individual Courses:** The last day to withdraw from a College course with a "W" grade in this course is posted on the college's academic calendar. It is the responsibility of the student to use the PantherWeb system or visit a campus Registrar's office to withdraw. An official withdrawal entitles the student to a grade of "W" in the class.

## **DEPARTMENT CONTACT INFORMATION**

Kellie Bassell, MSN, EdS, RN  
Nursing Program Director  
AH 110 (561) 868-3412  
Fax (561) 868-3452

**Email:** [bassellk@palmbeachstate.edu](mailto:bassellk@palmbeachstate.edu)

## Course Syllabus – Classroom Courses

### GETTING STARTED

1. Make sure you have all the computer system requirements as listed in the Computer Requirements section of this syllabus.
2. Obtain course materials. The textbook(s) can be purchased at the Palm Beach State College campus bookstore or [online](#).
3. Log onto the course web site [Online Learning - Blackboard Campus](#). Use your PantherWeb logon information.
4. Once inside the course website, read the "Mandatory Online Orientation" and complete the *Orientation Quiz*.
5. Explore the different parts of the web page. Be sure you print the syllabus, course calendar, and assignment sheet so that you know what is expected of you during the semester.
6. Begin completing your assignments as listed on the course calendar and/or class schedule.
7. Print the note-taking handouts for each content section. They are posted in the Learning Modules.

**Have fun!**

#### Disclaimer

**Changes may be made to the syllabus at any time during the term by announcement of the professor. It is the responsibility of the student to make any adjustments as announced.**

**CRITIQUE DIRECTIONS AND GRADING TOOL**

## Course Syllabus – Classroom Courses

### NUR1141 JOURNAL ARTICLE CRITIQUE GRADING RUBRIC

<i>Graded Element</i>	<i>Possible Points</i>	<i>Actual Points Earned</i>
<b>1.</b> <i>Printed copy of article attached to critique</i>	<i>5 points</i>	
<b>2.</b> <i>APA format + 3 Refs</i>	<i>10 points</i>	
<b>3.</b> <i>Opening Summary Paragraph</i>	<i>10 points</i>	
<b>4.</b> <i>Analysis of article</i>	<i>40 points</i>	
<b>5.</b> <i>Impact on Nursing Statement Conclusion</i>	<i>25 points</i>	
<b>6.</b> <i>Appropriate spelling &amp; grammar</i>	<i>10 points</i>	
<i>Total Score</i>	<i>100 points</i>	

Note: Paper must be submitted by due date to be graded. Late papers will not be accepted unless prior arrangements have been made with instructor. If accepted, a late paper will lose 5 points for every day it is late. **This paper is mandatory and must be submitted in order to receive a grade for this course**

Please note the following directions:

This paper must be written on an assigned article from the list provided, not chosen randomly.

Papers should not exceed 2 pages, plus the Title page and Reference page.

Title page must include the student's name; course and number; the day and time of class; and the title of the article read.

Submit a copy of this rubric for grading and comments.

## Course Syllabus – Classroom Courses

### COURSE CONTENT BY CONCEPTS

## Course Syllabus – Classroom Courses

### UNIT I: PROFESSIONALISM - CORE CONCEPTS

OBJECTIVES	CONTENT	RELATED LEARNING ACTIVITIES
<p>The student will:</p> <ol style="list-style-type: none"> <li>1. Discuss drug standards &amp; legislation of pharmacological agents.</li> <li>2. Differentiate between names, classifications and types of drugs.</li> <li>3. Identify licensed personnel legally responsible to administer medications.</li> <li>4. Explain the importance of drug legislation and the role of regulatory bodies.</li> <li>5. Recognize ethical issues related to drug administration.</li> <li>6. Describe the role of the professional registered nurse in drug administration.</li> <li>7. Identify general properties of drugs.</li> <li>8. Explain the differences between the phases of drug action.</li> <li>9. Describe drug-response relationship theory.</li> <li>10. Compare the different responses of drug reactions.</li> <li>11. Discuss how the nursing process applies to the management of medication administration.</li> <li>12. Describe the nurse’s role in drug research.</li> <li>13. Identify community settings where the nurse maybe involved in drug administration.</li> <li>14. Explain how cultural aspects can affect the nurse’s role in medication administration.</li> <li>15. Discuss relevant concerns for fetal health when administering medications to a pregnant mother.</li> </ol>	<ol style="list-style-type: none"> <li>A. Introduction to Pharmacotherapeutics               <ol style="list-style-type: none"> <li>1. Drug Names</li> <li>2. Drug Classification System</li> <li>3. Prescriptions and OTCs</li> <li>4. Drug approval process</li> </ol> </li> <li>B. Principles of Medication Administration               <ol style="list-style-type: none"> <li>1. Administration Responsibility</li> <li>2. Routes                   <ol style="list-style-type: none"> <li>a. Enteral</li> <li>b. Topical</li> <li>c. Parenteral</li> </ol> </li> </ol> </li> <li>C. Phases of Drug Action               <ol style="list-style-type: none"> <li>1. Pharmacokinetics                   <ol style="list-style-type: none"> <li>a. Absorption</li> <li>b. Distribution</li> <li>c. Metabolism</li> <li>d. Excretion</li> <li>e. Half life and dosing</li> </ol> </li> <li>2. Pharmacodynamics                   <ol style="list-style-type: none"> <li>a. Interpatient variability</li> <li>b. Potency and Efficacy</li> <li>c. Drug Actions and Interactions</li> </ol> </li> </ol> </li> <li>D. Nursing Process and Client Teaching               <ol style="list-style-type: none"> <li>1. Administration</li> <li>2. Assessment</li> <li>3. Intervention</li> <li>4. Evaluation</li> </ol> </li> <li>E. Drug Therapy Considerations Throughout the Life Span               <ol style="list-style-type: none"> <li>1. Concerns for Childbearing Populations                   <ol style="list-style-type: none"> <li>a. Effects on Fetus</li> <li>b. Implications of Feeding Method</li> </ol> </li> <li>2. Concerns for Pediatric Populations                   <ol style="list-style-type: none"> <li>a. Implications for Neonate</li> <li>b. Pediatric Drug Administration                       <ol style="list-style-type: none"> <li>1. Legislation</li> <li>2. Nursing Role and Responsibility</li> </ol> </li> </ol> </li> </ol> </li> </ol>	<p>Required reading: Adams, Holland and Urban text Chapters 1-11</p> <p>Recommended Activities: <a href="http://www.MyNursingKit.com">www.MyNursingKit.com</a> exercises for corresponding chapters</p> <p>Text companion CD-ROM exercises: Dosage and Calculations Case Study Audio Glossary Toolbox</p>

## Course Syllabus – Classroom Courses

### UNIT I: PROFESSIONALISM - CORE CONCEPTS

OBJECTIVES	CONTENT	RELATED LEARNING ACTIVITIES
<p>16. Recognize the impact of feeding method on the neonate when medications are being administered to its mother.</p> <p>17. Explain the importance of pediatric drug legislation.</p> <p>18. Recognize the impact of physiological aging on medication administration.</p> <p>19. Discuss how polypharmacy affects the aged.</p> <p>20. Identify the role of educator as a responsibility of the professional registered nurse when administering medications.</p> <p>21. Identify the differences in a pharmaceutical &amp; a phytoceutical agent.</p> <p>22. Describe potential adverse reactions of OTCs.</p> <p>23. Define the nurse’s role in consumer education related to the use of OTCs and phytoceuticals.</p> <p>24. List the sources &amp; herbal properties of phytoceuticals..</p> <p>25. Relate the potential herb vitamin drug interactions of the following: ginseng, cayenne pepper, green tea, ginger, ginkgo, willow bark, vitamin E, dong Quai, garlic, licorice, Kava Kava, Ma huang, valerian and dandelion.</p> <p>26. Contrast the role of the FDA in control of drugs versus herbal preparations.</p> <p>27. Identify general classifications and properties of abused drugs.</p> <p>28. Explain the effects of abused substances on the biopsychosocial being.</p>	<p>3. Concerns for Elderly Populations</p> <p style="padding-left: 20px;">a. Implications of Physiological Aging</p> <p style="padding-left: 40px;">1. Alterations in Mechanism of Action</p> <p style="padding-left: 20px;">b. Implications of Polypharmacy</p> <p style="padding-left: 40px;">1. Combination of Medications</p> <p style="padding-left: 40px;">2. Self Treatment Issues</p> <p style="padding-left: 40px;">3. Nursing Role and Responsibility</p> <p>F. Transcultural Therapies</p> <p style="padding-left: 20px;">1. Psychosocial</p> <p style="padding-left: 20px;">2. Cultural and Ethnic</p> <p style="padding-left: 20px;">3. Genetics</p> <p>G. Medication Errors and Risk Reduction</p> <p style="padding-left: 20px;">1. Impact</p> <p style="padding-left: 20px;">2. Reporting</p> <p style="padding-left: 20px;">3. Strategies to reduce errors</p> <p>H. Herbals and Alternatives</p> <p style="padding-left: 20px;">1. Herbal traditions</p> <p style="padding-left: 20px;">2. Actions and Safety</p> <p>I. Substance Abuse</p> <p style="padding-left: 20px;">1. Physical and Psychological Dependence</p> <p style="padding-left: 20px;">2. Withdrawal and Tolerance</p> <p style="padding-left: 20px;">3. Nursing Interventions specific to:</p> <p style="padding-left: 40px;">a. CNS depressants</p> <p style="padding-left: 40px;">b. Cannabinoids</p> <p style="padding-left: 40px;">c. CNS Stimulants</p> <p style="padding-left: 40px;">d. Nicotine</p>	

## Course Syllabus – Classroom Courses

### UNIT I: PROFESSIONALISM - CORE CONCEPTS

OBJECTIVES	CONTENT	RELATED LEARNING ACTIVITIES
<p>29. Identify the signs of abuse in the alcoholic, opiate addict and cocaine addicted client.</p> <p>30. List common nursing interventions in the care of the addicted client.</p> <p>31. Discuss how the nursing process applies to the management of care for the addicted client.</p> <p>32. Describe the nurse's role in caring for the addicted client.</p>		

## Course Syllabus – Classroom Courses

### UNITS II & III: SENSORY PERCEPTION COGNITION - DRUGS AFFECTING THE NERVOUS SYSTEM

OBJECTIVES	CONTENT	RELATED LEARNING ACTIVITIES
<p>The student will:</p> <ol style="list-style-type: none"> <li>1. Apply anatomy and physiology principles to aid in the understanding of the pharmaco-therapeutic management of neurological disorders related to the autonomic nervous system.</li> <li>2. List the basic action, common uses, common side effects, prototype drug and nursing implications of the following ANS drug classifications:               <ol style="list-style-type: none"> <li>A. adrenergic stimulants and blockers                   <ol style="list-style-type: none"> <li>1. cholinergic agents</li> <li>2. anticholinergic drugs</li> <li>3. anticholinesterase agents</li> </ol> </li> </ol> </li> <li>3. Apply anatomy and physiology principles to aid in the understanding of the pharmaco-therapeutic management of ALL neurological disorders.</li> <li>4. List the basic action, common uses, common side effects, prototype drug and nursing implications of the following drug classifications:               <ol style="list-style-type: none"> <li>A. adrenergic stimulants and blockers                   <ol style="list-style-type: none"> <li>1. cholinergic agents</li> <li>2. anticholinergic drugs</li> <li>3. anticholinesterase agents</li> </ol> </li> </ol> </li> </ol>	<ol style="list-style-type: none"> <li>A. Agents affecting the Autonomic Nervous System (ANS)           <ol style="list-style-type: none"> <li>1. Sympathomimetics/Adrenergic agents               <ol style="list-style-type: none"> <li>a. Catecholamines</li> <li>b. Alpha &amp; Beta Receptors</li> </ol> </li> <li>2. Adrenergic Blockers               <ol style="list-style-type: none"> <li>a. Alpha Blockers</li> <li>b. Beta Blockers                   <ol style="list-style-type: none"> <li>1) Nonselective</li> <li>2) Cardioselective</li> </ol> </li> </ol> </li> <li>3. Parasympathomimetics (Cholinergics)</li> <li>4. Cholinergic Blockers</li> </ol> </li> <li>B. Antianxiety, Sedative, and Hypnotic Drugs           <ol style="list-style-type: none"> <li>1. Antianxiety Agents               <ol style="list-style-type: none"> <li>a. Anxiety Disorders</li> <li>b. Sedatives and Hypnotics</li> </ol> </li> </ol> </li> <li>C. Anticonvulsant Agents</li> <li>D. Antidepressant Agents           <ol style="list-style-type: none"> <li>1. Tricyclics</li> <li>2. Monoamine Oxidase Inhibitor (MAO)</li> <li>3. Selective Serotonin Reuptake Inhibitors (SSRIs)</li> <li>4. Amphetamine agents</li> </ol> </li> <li>E. Psychotherapeutic Agents           <ol style="list-style-type: none"> <li>1. Antipsychotic agents</li> <li>2. Antimanic Therapy</li> </ol> </li> <li>F. Analgesics &amp; Pain Management           <ol style="list-style-type: none"> <li>1. Opioid Antagonists</li> <li>2. Opioid Agonist-Antagonist agents</li> <li>3. Nonopioid Analgesics</li> <li>4. Nonsteroidal Anti-inflammatory Agents (NSAID)</li> </ol> </li> </ol>	<p>Required reading: Adams, Holland and Urban text Chapters 13-18</p> <p>Recommended Activities: <a href="http://www.MyNursingKit.com">www.MyNursingKit.com</a> exercises for corresponding chapters</p> <p>Text companion CD-ROM exercises: Dosage and Calculations Case Study Audio Glossary Toolbox</p>

**Course Syllabus – Classroom Courses**

**UNITS II & III: SENSORY PERCEPTION COGNITION - DRUGS AFFECTING THE NERVOUS SYSTEM**

<b>OBJECTIVES</b>	<b>CONTENT</b>	<b>RELATED LEARNING ACTIVITIES</b>
<ul style="list-style-type: none"> <li>B. stimulants</li> <li>C. antidepressants</li> <li>D. antianxiety agents                             <ul style="list-style-type: none"> <li>1. sedatives</li> <li>2. hypnotics</li> </ul> </li> <li>E. antipsychotics</li> <li>F. analgesics, narcotic &amp; non-narcotic</li> <li>G. anticonvulsants</li> </ul>		

## Course Syllabus – Classroom Courses

### UNIT IV: REGULATION & CELLULAR INTEGRITY - DRUGS AFFECTING THE CARDIOVASCULAR, CIRCULATORY & RENAL SYSTEMS

OBJECTIVES	CONTENT	RELATED LEARNING ACTIVITIES
<p>The student will:</p> <ol style="list-style-type: none"> <li>1. Apply anatomy and physiology principles to aid in the understanding the pharmacotherapeutic management of cardiovascular and blood disorders.</li> <li>2. List the basic action, common uses, common side effects, prototype drug and nursing implications of the following drug classifications:               <ol style="list-style-type: none"> <li>a. Anti-anginals                   <ol style="list-style-type: none"> <li>1) Cardiac glycoside agents</li> </ol> </li> <li>b. Antihypertensive and Failure agents                   <ol style="list-style-type: none"> <li>1) Diuretics</li> <li>2) Beta Blockers</li> <li>3) Calcium Channel Blockers</li> <li>4) Angiotensin Converting Enzyme Inhibitors</li> <li>5) Alpha Blockers</li> <li>6) CNS Inhibitors</li> <li>7) Peripheral Vasodilators</li> <li>8) Ganglionic Blockers</li> <li>9) Neuroeffector Blockers</li> <li>10) Direct-Acting Vasodilators</li> <li>11) Angiotensin II Blocker</li> </ol> </li> <li>c. Antidysrhythmic agents</li> <li>d. Antilimpemics</li> <li>e. Thrombolytics</li> <li>f. Antiplatelets</li> <li>g. Shock agents</li> </ol> </li> </ol>	<ol style="list-style-type: none"> <li>A. Antilipemics           <ol style="list-style-type: none"> <li>1. Nonpharmacologic Methods</li> <li>2. Statins</li> <li>3. Bile Acid Resins</li> <li>4. Nicotinic Acid</li> <li>5. Fibric Acid Agent</li> </ol> </li> <li>B. AntihypertensiveSPACEAgents           <ol style="list-style-type: none"> <li>1. Factors of Blood Pressure</li> <li>2. Nonpharmacologic Methods</li> <li>3. Diuretics (Check spelling)</li> <li>4. Calcium Channel Blockers</li> <li>5. Angiotensin Converting Enzyme Inhibitors</li> <li>6. Angiotensin II Antagonist</li> <li>7. Alpha-Adrenergic Blockers</li> <li>8. Alpha-Beta Blockers – Combination Agent</li> <li>9. Direct-Acting Vasodilators</li> </ol> </li> <li>C. Congestive Heart Failure           <ol style="list-style-type: none"> <li>1. Diuretics</li> <li>2. ACE Inhibitors</li> <li>3. Cardiac Glycosides</li> <li>4. Beta Blockers</li> <li>5. Vasodilators</li> <li>6. Phosphodiesterase Inhibitors</li> </ol> </li> <li>D. Anti-anginals           <ol style="list-style-type: none"> <li>1. Organic Nitrates</li> <li>2. Beta Blockers</li> <li>3. Calcium Channel Blockers</li> <li>4. Peripheral vasodilators</li> </ol> </li> <li>E. Myocardial Infarction           <ol style="list-style-type: none"> <li>1. Thrombolytics</li> <li>2. Antiplatelet/Anticoagulant</li> <li>3. Nitrates</li> <li>4. Beta-Adrenergic Blockers</li> <li>5. ACE Inhibitors</li> </ol> </li> </ol>	<p>Required reading: Adams, Holland and Urban text Chapters 22-26, 29</p> <p>Recommended Activities: <a href="http://www.MyNursingKit.com">www.MyNursingKit.com</a> exercises for corresponding chapters</p> <p>Text companion CD-ROM exercises: Dosage and Calculations Case Study Audio Glossary Toolbox</p>

## Course Syllabus – Classroom Courses

	<ul style="list-style-type: none"><li>6. Pain Management</li><li>F. Antidysrhythmic Agents<ul style="list-style-type: none"><li>1. Class I – Sodium Channel Blockers<ul style="list-style-type: none"><li>a. Class IA</li><li>b. Class IB</li></ul></li><li>2. Class II – Beta Blockers</li><li>3. Class III – Potassium Channel Blockers</li><li>4. Class IV – Calcium Channel Blockers</li></ul></li><li>G. Shock Treatment<ul style="list-style-type: none"><li>1. Treatment Priorities</li><li>2. IV Fluid Replacement</li><li>3. Vasopressors</li><li>4. Inotropics</li><li>5. Anaphylaxis</li></ul></li></ul>	
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## Course Syllabus – Classroom Courses

### UNIT IV: REGULATION & CELLULAR INTEGRITY: DRUGS AFFECTING THE CARDIOVASCULAR, CIRCULATORY & RENAL SYSTEMS

OBJECTIVES	CONTENT	RELATED LEARNING ACTIVITIES
<p>The student will:</p> <ol style="list-style-type: none"> <li>1. Identify the agents used to treat or prevent most Circulatory Disorders:               <ol style="list-style-type: none"> <li>a. Anticoagulants</li> <li>b. Thrombolytics</li> <li>c. Antilipemics</li> </ol> </li> <li>2. List the basic action, common uses, common side effects, antidotes for prototype drugs and nursing implications.</li> <li>3. Identify normal anatomy and physiology of the respiratory tract.</li> <li>4. Discuss action of common respiratory agents.</li> <li>5. Identify appropriate uses for common respiratory agents.</li> <li>6. Define the importance of patient education in safe OTC use of respiratory agents.</li> <li>7. Discuss appropriate nursing management related to administering respiratory agents.</li> <li>8. Apply anatomy and physiology principles to aid in the understanding of the pharmacotherapeutic management of urologic disorders.</li> <li>9. List the basic action, common uses, common, side effects and prototype drug classifications for:               <ol style="list-style-type: none"> <li>a. Diuretics</li> </ol> </li> </ol>	<ol style="list-style-type: none"> <li>A. Drugs for Circulatory Disorders           <ol style="list-style-type: none"> <li>1. Anticoagulants               <ol style="list-style-type: none"> <li>a. Heparin</li> <li>b. LMWHs</li> <li>c. Oral Anticoagulants</li> <li>d. Oral Anticoagulant antagonists</li> <li>e. Antiplatelet agents</li> </ol> </li> <li>2. Thrombolytic agents</li> <li>3. Hemostatic agents</li> </ol> </li> <li>B. Diuretic Agents           <ol style="list-style-type: none"> <li>1. Thiazide and Thiazide-like Diuretics</li> <li>2. Loop Diuretics</li> <li>3. Potassium-Sparing Diuretics</li> <li>4. Miscellaneous Diuretics</li> </ol> </li> <li>C. Fluid &amp; Electrolytes           <ol style="list-style-type: none"> <li>1. Tonicity</li> <li>2. Crystalloids</li> <li>3. Colloids</li> <li>4. Hypotonic, Hypertonic, Isotonic Solutions</li> <li>5. Electrolytes               <ol style="list-style-type: none"> <li>a. Sodium Imbalance</li> <li>b. Potassium imbalance</li> </ol> </li> </ol> </li> <li>D. Acid-Base Balance           <ol style="list-style-type: none"> <li>1. pH               <ol style="list-style-type: none"> <li>a. Acidosis</li> <li>b. Alkylosis</li> </ol> </li> </ol> </li> <li>E. Respiratory System:           <ol style="list-style-type: none"> <li>1. H1 Receptor Blockers</li> <li>2. Intranasal Glucocorticoids</li> <li>3. Decongestants</li> <li>4. Antitussives</li> <li>5. Expectorants and Mucolytics</li> </ol> </li> </ol>	<p>Required reading: Adams, Holland and Urban text Chapters: 27, 30-31, 38-39</p> <p>Recommended Activities: <a href="http://www.MyNursingKit.com">www.MyNursingKit.com</a> exercises for corresponding chapters</p> <p>Text companion CD-ROM exercises: Dosage and Calculations Case Study Audio Glossary Toolbox</p>

### Course Syllabus – Classroom Courses

OBJECTIVES	CONTENT	RELATED LEARNING ACTIVITIES
	<p>F. Asthma and COPD</p> <ol style="list-style-type: none"><li>1. Inhalation and Oral Routes</li><li>2. Beta Adrenergic Agents</li><li>3. Anticholinergics</li><li>4. Methylxanthines</li><li>5. Corticosteroids</li><li>6. Leukotriene Modifiers</li><li>7. Mast Cell Stabilizers</li></ol>	

## Course Syllabus – Classroom Courses

### UNIT V: CELLULAR INTEGRITY - DRUGS AFFECTING THE IMMUNE & RESPIRATORY SYSTEMS

OBJECTIVES	CONTENT	RELATED LEARNING ACTIVITIES
<p>The student will:</p> <ol style="list-style-type: none"> <li>1. Identify the function of the immune system.</li> <li>2. Describe the impact of a suppressed immune system on a client.</li> <li>3. Discuss the importance of scheduled immunization for children and adults on overall world health.</li> <li>4. Describe a typical schedule of vaccines for the person across the life span.</li> <li>5. Identify the major classifications of antimicrobials.</li> <li>6. Differentiate bacteriostatic and bacteriocidal properties of antibiotics.</li> <li>7. Define the concept of broad-spectrum activity as it relates to antibiotic therapy.</li> <li>8. Discuss the structural impact of penicillin agents on drug resistance.</li> <li>9. Compare and contrast the drug characteristics of the four generations of cephalosporins.</li> <li>10. Identify cross-sensitivity issues with regard to penicillins and cephalosporins.</li> <li>11. Discuss indications reserved for the aminoglycosides.</li> <li>12. Identify indications for fluoroquinolones.</li> <li>13. Identify disadvantages to the use of tetracycline in children and pregnant women.</li> </ol>	<ol style="list-style-type: none"> <li>A. Immune System Agents               <ol style="list-style-type: none"> <li>1. The immunosuppressed client</li> <li>2. Immunizing Agents                   <ol style="list-style-type: none"> <li>a. Vaccinations</li> <li>b. Immunostimulants</li> </ol> </li> <li>3. Immunosuppressants</li> </ol> </li> <li>B. Anti-inflammatory Agents               <ol style="list-style-type: none"> <li>1. NSAIDS</li> <li>2. Steroids</li> </ol> </li> <li>C. Antimicrobial Agents               <ol style="list-style-type: none"> <li>1. Virulence and Resistance</li> <li>2. Antibiotics                   <ol style="list-style-type: none"> <li>a. Penicillins</li> <li>b. Cephalosporins</li> <li>c. Tetracyclines</li> <li>d. Macrolides</li> <li>e. Aminoglycoside</li> <li>f. Fluoroquinolones</li> <li>g. Sulfonamides</li> </ol> </li> <li>3. Antituberculars</li> </ol> </li> <li>D. Antifungal, Protozoal and Helminthic agents               <ol style="list-style-type: none"> <li>1. Superficial or Systemic Fungal Infections</li> <li>2. Malarial or Nonmalarial Infections</li> <li>3. Helminthic agents</li> </ol> </li> <li>E. Antivirals and Antiretrovirals               <ol style="list-style-type: none"> <li>1. HIV-AIDS</li> <li>2. Herpes Virus</li> <li>3. Influenza</li> <li>4. Viral Hepatitis</li> </ol> </li> <li>F. Neoplasia               <ol style="list-style-type: none"> <li>1. Nonpharmacological treatments</li> <li>2. Antineoplastics</li> </ol> </li> </ol>	<p>Required reading: Adams, Holland and Urban text Chapters 33-37</p> <p>Recommended Activities: <a href="http://www.MyNursingKit.com">www.MyNursingKit.com</a> exercises for corresponding chapters</p> <p>Text companion CD-ROM exercises: Dosage and Calculations Case Study Audio Glossary Toolbox</p>

## Course Syllabus – Classroom Courses

### UNIT V: CELLULAR INTEGRITY - DRUGS AFFECTING THE IMMUNE & RESPIRATORY SYSTEMS

OBJECTIVES	CONTENT	RELATED LEARNING ACTIVITIES
<ul style="list-style-type: none"> <li>14. Identify common side effects of antibiotics</li> <li>15. Differentiate symptoms of allergic response in clients receiving antibiotics.</li> <li>16. Describe the possible mechanisms of drug interactions.</li> <li>17. Discuss rationale for resistance for each classification of antimicrobials.</li> <li>18. List one commonly used group of antifungals.</li> <li>19. Compare and contrast action of antibiotic and antiviral therapies.</li> <li>20. Discuss the impact of viral replication of HIV on the development of effective treatment therapies.</li> <li>21. Discuss indications for antiparasitic agents.</li> <li>22. Identify the action, indication and administration guidelines for the antituberculosis agent isoniazid (INH).</li> <li>23. Identify the action, indications, common side and adverse effects of NSAIDs and steroids.</li> <li>24. Discuss administration guidelines for NSAIDs and steroids.</li> <li>25. Identify the general action and common side effects of antineoplastic agents.</li> <li>26. Compare and contrast the action and indication for immunosuppressants and immunomodulators..</li> </ul>		

## Course Syllabus – Classroom Courses

### UNIT VI: REGULATION & CELLULAR INTEGRITY - DRUGS AFFECTING THE GASTROINTESTINAL, ENDOCRINE & REPRODUCTIVE SYSTEMS

OBJECTIVES	CONTENT	RELATED LEARNING ACTIVITIES
<p>The student will:</p> <ol style="list-style-type: none"> <li>1. Identify normal function of the endocrine system.</li> <li>2. Describe the action of pituitary hormone agents.</li> <li>3. Differentiate action and indications for use of agents affecting the thyroid.</li> <li>4. Discuss action and common uses for gluco-corticoids and antiadrenals.</li> <li>5. Describe action and rationale for use of agents affecting the pancreas.</li> <li>6. Discuss appropriate nursing management related to administration of endocrine agents.</li> <li>7. Identify normal anatomy and physiology of the male and female reproductive systems.</li> <li>8. Discuss the action and indications for agents affecting the male reproductive system.</li> <li>9. Discuss the action and indications for agents affecting the female reproductive system.</li> <li>10. Discuss action and indications for drugs commonly used in childbearing women.</li> <li>11. Recognize impact of common drugs on sexual behavior.</li> </ol>	<ol style="list-style-type: none"> <li>A. Pituitary               <ol style="list-style-type: none"> <li>1. Growth Hormone</li> <li>2. Antidiuretic Hormone</li> </ol> </li> <li>B. Thyroid               <ol style="list-style-type: none"> <li>1. Hypothyroidism Agents</li> <li>2. Hyperthyroidism (Antithyroid) Therapies</li> </ol> </li> <li>C. Adrenal cortex               <ol style="list-style-type: none"> <li>1. Glucocorticosteroids</li> <li>2. Mineral corticosteroids</li> </ol> </li> <li>D. Pancreas/Agents for Diabetes               <ol style="list-style-type: none"> <li>1. Hypoglycemic agents</li> <li>2. Hyperglycemic agents                   <ol style="list-style-type: none"> <li>a. Type I</li> <li>b. Type II</li> </ol> </li> </ol> </li> <li>E. Male &amp; Female Hormones and functions of the Reproductive System               <ol style="list-style-type: none"> <li>1. Male Reproductive System Therapies                   <ol style="list-style-type: none"> <li>a. Infertility</li> <li>b. Benign Prostatic Hyperplasia</li> </ol> </li> <li>2. Female Reproductive System Therapies                   <ol style="list-style-type: none"> <li>a. Contraception</li> <li>b. Labor, Delivery, &amp; Lactation</li> <li>c. Menopause</li> </ol> </li> </ol> </li> </ol>	<p>Required reading: Adams, Holland and Urban text Chapters 43-46</p> <p>Recommended Activities: <a href="http://www.MyNursingKit.com">www.MyNursingKit.com</a> exercises for corresponding chapters</p> <p>Text companion CD-ROM exercises: Dosage and Calculations Case Study Audio Glossary Toolbox</p>

## Course Syllabus – Classroom Courses

### UNIT VI: REGULATION & CELLULAR INTEGRITY - DRUGS AFFECTING THE GASTROINTESTINAL SYSTEM, ENDOCRINE & REPRODUCTIVE SYSTEMS

OBJECTIVES	CONTENT	RELATED LEARNING ACTIVITIES
<p>The student will:</p> <ol style="list-style-type: none"> <li>1. Apply anatomy and physiology principles to aid in the understanding of the pharmacotherapeutic management of gastrointestinal disorders.</li> <li>2. List the basic action, common uses, common side effects, prototype drug, and nursing implications of the following drug classifications:               <ol style="list-style-type: none"> <li>A. Antacids</li> <li>B. Digestants</li> <li>C. Antiemetics</li> <li>D. Emetics</li> <li>E. Antiulcer agents</li> <li>F. Antidiarrheals</li> <li>G. Laxatives</li> <li>H. Antifungal agents</li> </ol> </li> <li>3. Apply anatomy and physiology principle to aid in the understanding of pharmacotherapeutic management of patients with nutritional, fluid and electrolyte, vitamin and mineral deficiencies.</li> <li>4. List the basic action, common uses, common side effects, prototype drug and nursing implications of the following drug classifications:</li> </ol>	<ol style="list-style-type: none"> <li>A. Peptic Ulcer Disease and GERD               <ol style="list-style-type: none"> <li>1. Proton Pump Inhibitors</li> <li>2. H2 Receptor Blockers</li> <li>3. Antacids</li> <li>4. Antibiotics</li> </ol> </li> <li>B. Digestion               <ol style="list-style-type: none"> <li>1. Constipation: Laxatives                   <ol style="list-style-type: none"> <li>a. Bulk Forming</li> <li>b. Saline and Osmotic</li> <li>c. Stimulant</li> <li>d. Stool Softeners/Surfactant</li> <li>e. Herbals and Miscellaneous</li> </ol> </li> <li>2. Diarrhea: Antidiarrheals</li> <li>3. Antiemetics</li> <li>4. Anorexiant</li> <li>5. Pancreatic Enzymes</li> </ol> </li> </ol>	<p>Required reading: Adams, Holland and Urban text Chapters 40-44</p> <p>Recommended Activities: <a href="http://www.MyNursingKit.com">www.MyNursingKit.com</a> exercises for corresponding chapters</p> <p>Text companion CD-ROM exercises: Dosage and Calculations Case Study Audio Glossary Toolbox</p>

**Course Syllabus – Classroom Courses**

**UNIT VI: REGULATION & CELLULAR INTEGRITY - DRUGS AFFECTING THE GASTROINTESTINAL SYSTEM, ENDOCRINE & REPRODUCTIVE SYSTEMS**

OBJECTIVES	CONTENT	RELATED LEARNING ACTIVITIES
<ul style="list-style-type: none"> <li>A. Vitamins</li> <li>B. Minerals</li> <li>C. Nutritional Suppléments</li> </ul> <ol style="list-style-type: none"> <li>5. Define malnutrition</li> <li>6. Define enteral feeding</li> <li>7. Describe the common methods of administering enteral feedings</li> <li>8. Explain the rationale for special enteral formulas.</li> <li>9. List the nursing responsibilities for the client receiving enteral feedings.</li> <li>10. Define hyperalimentation/ Total Parenteral Nutrition</li> <li>11. Describe two methods of administering TPN</li> <li>12. List the nursing responsibilities for the client receiving TPN.</li> </ol>		

## Course Syllabus – Classroom Courses

### UNIT VII: MOBILITY & CELLULAR INTEGRITY - DRUGS AFFECTING THE MUSCULOSKELETAL SYSTEM; INTEGUMENT; EYE & EAR

OBJECTIVES	CONTENT	RELATED LEARNING ACTIVITIES
<p>The student will:</p> <ol style="list-style-type: none"> <li>1. Explain the underlying physiology of muscle Spasticity and relaxation.</li> <li>2. Compare and contrast the roles of centrally acting and peripherally acting antispasmodics.</li> <li>3. Discuss the role of calcium loss and replacement related to the Musculoskeletal system.</li> <li>4. Know representative drugs used in the treatment of the following disorders: <ul style="list-style-type: none"> <li>• Rheumatoid Arthritis</li> <li>• Osteoarthritis</li> <li>• Gout</li> </ul> </li> </ol>	<ol style="list-style-type: none"> <li>A. Drugs used for CNS-Peripheral Dysfunctions <ol style="list-style-type: none"> <li>1. Antiparkinson <ol style="list-style-type: none"> <li>a. Dopaminergics</li> <li>b. Anticholinergics</li> </ol> </li> <li>2. Alzheimer’s Disease Agents <ol style="list-style-type: none"> <li>a. Cholinesterase Inhibitors</li> </ol> </li> </ol> </li> <li>B. Skeletal Muscle Relaxants</li> <li>C. Drugs for Bone and Joint Disorders <ol style="list-style-type: none"> <li>1. Hypocalcemia <ol style="list-style-type: none"> <li>a. Calcium and Vitamin D Supplements</li> </ol> </li> <li>2. Osteoporosis <ol style="list-style-type: none"> <li>a. Biphosphonates</li> <li>b. SERMS</li> </ol> </li> <li>3. Arthritis <ol style="list-style-type: none"> <li>a. RA agents</li> <li>b. Osteoarthritis therapy</li> </ol> </li> <li>4. Gout <ol style="list-style-type: none"> <li>a. Uric-acid inhibitors</li> </ol> </li> </ol> </li> </ol>	<p>Required reading: Adams, Holland and Urban text Chapters 20-21, 47</p> <p>Recommended Activities: <a href="http://www.MyNursingKit.com">www.MyNursingKit.com</a> exercises for corresponding chapters</p> <p>Text companion CD-ROM exercises: Dosage and Calculations Case Study Audio Glossary Toolbox</p>

## Course Syllabus – Classroom Courses

### UNIT VII: MOBILITY & CELLULAR INTEGRITY - DRUGS AFFECTING THE MUSCULOSKELETAL SYSTEM; INTEGUMENT; EYE & EAR

OBJECTIVES	CONTENT	RELATED LEARNING ACTIVITIES
<p>The student will:</p> <ol style="list-style-type: none"> <li>1. Identify anatomy and physiology of the Integumentary system.</li> <li>2. Discuss common dermatologic agents, and indications for use.</li> <li>3. Describe appropriate guidelines for administering topical agents.</li> <li>4. Identify anatomy and physiology of the eye and ear.</li> <li>5. Discuss common groups of ophthalmic and otic drugs including action.</li> <li>6. Define ototoxicity and discuss contributory factors to its development.</li> <li>7. Described the appropriate procedure for administering ophthalmic and otic agents.</li> </ol>	<ol style="list-style-type: none"> <li>A. Commonly Administered Topical Agents               <ol style="list-style-type: none"> <li>1. Infection Agents</li> <li>2. Parasites</li> <li>3. Burns</li> <li>4. Acne and Rosacea</li> <li>5. Dermatitis</li> <li>6. Psoriasis</li> </ol> </li> <li>B. Ophthalmic Drugs               <ol style="list-style-type: none"> <li>1. Miotics</li> <li>2. Mydriatics</li> <li>3. Anti-glaucoma agents</li> <li>4. Antibiotics</li> </ol> </li> <li>C. Otic Agents               <ol style="list-style-type: none"> <li>1. Anti-infectives/antifungals</li> <li>2. Ceruminolytics</li> </ol> </li> </ol>	<p>Required reading: Adams, Holland and Urban text Chapters 48-49</p> <p>Recommended Activities: <a href="http://www.MyNursingKit.com">www.MyNursingKit.com</a> exercises for corresponding chapters</p> <p>Text companion CD-ROM exercises: Dosage and Calculations Case Study Audio Glossary Toolbox</p>