CONNECTICUT COMMUNITY COLLEGE NURSING PROGRAM

Capital Community College, Gateway Community College, Norwalk Community College, Naugatuck Valley Community College, Three Rivers Community College Community College

Three Rivers Community ollege

Course Syllabus for **NUR*204 Spring 2010**

COURSE TITLE: NUR*204 Pharmacology for Individuals and Families Intermediate Health Care Needs II

Course Prerequisite

NUR 102: Family Health Nursing
NUR 103: Pharmacology for Families Across the Lifespan
NUR 201: Nursing Care of Individuals and Families
NUR 202: Pharmacology for Individuals and Families Intermediate Health Care

Course Corequisite

NUR 203: Nursing Care of Individuals and Families Intermediate Health Care II
NUR 205: Nursing Management and Trends

Course Components

Credits	1 credit
Hours	Classroom: 15 hours

COURSE START DATE: August 26, 2010
COURSE END DATE: December 14, 2010

Welcome to Pharmacology for Individuals and Families Intermediate Health Care Needs

We are pleased to have you in Nursing 204 – **Pharmacology for Individuals and Families Intermediate Health Care Needs II.** All your assignments are listed here in the course Syllabus, as well as other essential information about this course. Please refer to the course content outline, for more detailed content information and learning activities. Please refer to this Syllabus as the primary document and schedule for the course. You will need to refer to it often, so we strongly suggest that you **print it** and keep it close to your computer.

Online Course Schedule & Where to Go to Class

To gain access to this course you will access mycommnet.edu as you do for all other nursing courses. If you are not able to gain access to this online course, please contact Claudia Hoskins first. You may also need to contact Blackboard/Vista support accesses on your *My Blackboard* page through the Connecticut Community Colleges online Support Center link.

Course Description

The student will focus on safe use, pharmacologic principles, indications and nursing implications related to drug therapy in the care of individuals, families, and groups with complex health care needs. Emphasis will be placed on medications used for clients who have acute and chronic renal failure, oncology and neurological conditions, and multi-system dysfunction and clients who choose an alternative therapy.

Course Objectives
At the completion of this course, the student will be able to:

1. Integrate pharmacological principles as they relate to holistic and clinical medication application when caring for a client with, renal, oncology, neurological, multisystem organ conditions, and trauma.
2. Apply the nursing process to drug theory as it relates to clients with renal, oncology, neurological, multisystem organ conditions and trauma.
3. Describe safe and competent medication administration as it relates to clients with renal, oncology, neurological, multisystem organ conditions, and trauma.
4. Develop a comprehensive pharmacological teaching plan for clients with renal, oncology, neurological, multisystem organ conditions, and/or trauma.
5. Interpret cultural and individual awareness when tailoring drug therapy to clients with renal, oncology, neurological, multisystem organ conditions, and trauma.
6. Differentiate the roles of the multidisciplinary health team members when implementing a pharmacological plan of care for clients with renal, oncology, neurological, multisystem organ conditions, and trauma.
7. Analyze the legal-ethical implications of medication administration related to clients with renal, oncology, neurological, multisystem organ conditions and trauma.
8. Examine the professional role of the nurse in medication administration for clients with renal, oncology, neurological, multisystem organ disorders, and trauma.

Medications in NUR* 204 related to specific disorders will be reviewed through readings or technology resources and / or discussed in relation to the following seven (7) components:

1. Indications for use
2. Pharmacokinetics
    a. Action
    b. Onset / Peak / Duration
    c. Absorption, Distribution, Metabolism, and Excretion (ADME)
3. Side effects / Adverse effects / Contraindications
4. Administration (route and dose)
5. Nursing Implications Across the Lifespan
6. Client Education
7. Relation to previous learning

FACULTY INFORMATION:
Claudia Hoskins, MSN, RN, CNE
Office: C226
Phone: 860-892-5735
Email: choskins@trcc.commnet.edu

In general, faculty may be contacted for course/lesson concerns via Blackboard/Vista email within the course. Faculty response time may vary, but in general allow up to 72 hours, Monday – Friday for a response ***during the week that the faculty member is teaching course content***.

Should you need to contact any faculty member outside of their teaching time about course concerns please utilize their TRCC email (firstinitiallastname@trcc.commnet.edu) or college phone number as noted above.

Students may accomplish learning activities prior to their assignment on the course calendar, but students must be aware that faculty assigned to content will be responding during the time the content is scheduled to be covered on the course calendar. All students must participate in each lesson during the week within which it is assigned.

Study Groups
Students are encouraged to form study groups which can meet at a mutual agreeable location. Tutors within the nursing lab are available on some campuses also during set office hours. Students are encouraged to be proactive in their learning and seek help independently. The Nursing Lab and Nursing Tutors are in place to promote success and retention. Students are encouraged to utilize these independent opportunities weekly.

Methods of Instruction
This course is taught completely online. Teaching modalities include online lecture, power point, discussion groups and case studies. Computerized programmed instruction and interactive learning tools are also used. Blackboard Vista is used as the learning management tool. If the learner is experiencing computer/ Blackboard related issues please consult the IT department or distance learning specialist on your campus.

Required Textbooks: (textbooks are used in subsequent courses)

1. Deglin, Davis Drug Guide for Nurses (11th edition) F.A. Davis, 2008.

2. Lehne, Pharmacology for Nursing Care, with CD (6th edition) Saunders, 2007.

Evaluation activities reviewed:

Theory: In N203 there will be three 50 minute exams (with 40 questions on each exam). The exams are open book format. Five additional assignments (med sheets) will be graded with a rubric.

Examinations

Exam 1	Week of	9/19-25/10	30%
Exam 2	Week of	10/24-30/10	30%
Exam 3	Week of	12/5-13/10	30%
Additional Assignments	5 med sheets	(2points each)	10%

Drug Classification/ Medication Sheets – A much easier way to learn the actions of medication is to study them by classification instead of by individual drugs. Using the form posted on the home page complete 5 sheets on five different medication classification categories. One from each of the 5 main categories – renal, oncology, neurological, multisystem dysfunction and herbal supplements. Each drug sheet is worth 2 points. All five drug sheets must be submitted in the drop box labeled "Med Sheets". Due dates will be one week after the content has been taught. Renal=9/11/10, Oncology=10/9/10, Neuro=10/30/10, Multisystem Dysfunction=11/20/10, Herbal=12/13/10**.**
All due by 23:59 on the due date, unless otherwise stated.

Grading Policies

To pass Nursing 204 and progress in the nursing program a student must:
Earn at least a 74 average in the course. Test items are drawn from ALL content of the course.

Procedure for Taking Examinations:

All exams will be conducted online through BB/Vista Assessment feature.
Exams are due by 11:59 PM on the final posted date the exam is scheduled.

Late Exams: will be penalized with a ***5 pt per day*** grade deduction for each day late. Exams will be considered late after 12 noon on the Monday following the week of the lesson.

COURSE GRADING

Nur*202 Course Grading Criteria Based Upon a Total of 100 Points			
Item	Maximum Points per item	Total Number of Items	Maximum Possible Points
Three Examinations	30	3	90
Other assessment methods (Med Sheets)	2	5	10
			100 points

Grading Rubric for Medication Sheets

Category for Grading	**Level of Response with Maximum points achievable**	**Level of Response with Maximum points achievable**	**Level of Response with Maximum points achievable**
Quality of information in Medication Sheet	Medication sheet focuses on the drug classification identified and relates all pertinent concepts to the categories listed on the Medication Sheet. Information is clear and concise and includes references to support details and/or examples. Posting consistently uses correct grammar and spelling.	Medication sheet focuses on the drug classification identified but is missing at least 1 pertinent concept of the categories listed on the Medication Sheet. Information is clear and concise but is lacking references to support the details. Postings have one to three errors in grammar and spelling.	Medication Sheet focuses on the drug classification but lacks depth and a clear understanding of the key concepts in the drug classification. Information is not referenced. Postings have greater than three errors in grammar and spelling.
Max. total points	**2**	**1**	**0**

Course Schedule and Sequencing of Content: Please refer to the course content outline attached, for more detailed content information and learning activities.

WEEK 1 hr/wk	**Topic**	**Faculty Assigned and Contact Information**
Week 1	**Overview of Pharmacology**	Claudia Hoskins, MSN, RN choskins@trcc.commnet.edu 860-892-5735
Week 2	**Renal pharmacology**	"
Week 3	**Pharmacology related to multisystem dysfunction: Burns** *Renal medsheet due on 9/11/10*	"
Week 4	**Cancer pharmacology**	"
Week 5	**Exam #1 (4 hours of content)** ***Weight 30% of grade***	"

WEEK 1 hr/wk	Topic	Faculty Assigned and Contact Information
	Due by 11:59pm on 9/25/10	
Week 6	**Cancer pharmacology**	"
Week 7	**Neurologic pharmacology** *Oncology medsheet due 10/9/10*	"
Week 8	**Neurologic pharmacology**	"
Week 9	**Neurologic pharmacology**	"
Week 10	**Exam #2 (4 hours of content)** **Weight 30% of grade** *Due by 11:59pm on 10/30/10* *Neuro medsheet due by 10/30/10*	"
Week 11	**Pharmacology related to multisystem dysfunction: AIDS/HIV**	"
Week 12	**Pharmacology related to multisystem dysfunction: AIDS/HIV**	"
Week 13	**Herbal Supplements: Overview** *Multist medsheet due by 11/20/10*	"
Week 14	**Herbal Supplements: Common Herbal Supplements**	"
Week 15	**Exam #3 (4 hours of content)** **Weight 30% of grade** *Due by 11:59pm on 12/13/10* *Herbal med sheet due by 12/13/10*	"

CLASS PROCEDURES AND POLICIES

Progression through online lessons: Students are expected to adhere to the course schedule as published in this document. The sequence of content in NUR*204 is synchronized with content presented in the clinical companion course NUR*203 and enhances student learning in both courses.

Late Medication Sheets

Late submission of assignments will be penalized with a ***1 pt per day*** grade deduction for each day late.

Nursing Program Policy Handbook

Refer to the Nursing Program Policy Handbook and the Three Rivers Student Handbook for additional information regarding Distance Learning Courses.

Attendance Policy

Students are expected to log on, complete work and participate in the course each week. It is the student's responsibility to notify the instructor if they are not able to log on. Instructor will track student participation in the course.

Testing Policy
For each exam the student will be required to contact the course instructor if an emergency arises and the student cannot take the exam during the scheduled exam week. It is the student's responsibility to contact the course faculty before the due date to make alternate arrangements (follow missed exams as outlined in the Handbook).

Course Grading Formula

Letter Grade	Numerical Equivalent
A	93-100
A-	90-92
B+	87-89
B	83-86
B-	80-82
C+	77-79
C	74-76
C-	70-73
D+	67-69
D	64-66
F	60-63

Please Note: Grades will be computed to the second decimal point and at the end of course will be rounded once to a whole number for the final course grade. A grade at or above .50 will be rounded up to the next whole number; any grade at or below .49 will be rounded down to the whole number. See Nursing Student Handbook, p 15.

Statement on Penalty for Academic Dishonesty or Plagiarism
Plagiarism is the **unacknowledged** use of another person's words or ideas in your writing. Whether conscious or not, plagiarism is a serious offense. Evidence that you did not write material that you submit under your name can result in failure for the entire course. Refer to 2008-2009 College Catalog for policy. Students are expected to: "Demonstrate academic integrity by not engaging in conduct that has as its intent or effect the false representation of a student's academic performance, including but not limited to: (a) cheating on an examination; (b) collaborating with others in work to be presented, contrary to the stated rules of the course; (c) plagiarizing, including the submission of others' ideas or papers (whether purchased, borrowed or otherwise obtained) as one's own; (d) stealing or having unauthorized access to examination or course materials; (e) falsifying records or laboratory or other data; (f) submitting, if contrary to the rules of a course, work previously presented in another course; and (g) knowingly assisting another student in any of the above, including an arrangement whereby any 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." Consequences are delineated in the College Catalog.

WITHDRAWAL POLICY:
Students may withdraw, in writing, at the Registrar's Office for any reason until the end of the 10th week of classes. From the 11th week through the end of the 13th week, a student may withdraw with the signature of the instructor or advisor. Refer to the Nursing and College Student Handbooks and College Catalog. This course does not offer midterm theoretical warning grades. Students with concerns about their course average are encouraged to contact the course faculty. Graduation is contingent on successful completion of this and co-requisite courses.

DISABILITIES STATEMENT:
If you have a hidden or visible disability which may require classroom or test-taking modifications, please see the course faculty as soon as possible. If you have not already done so, please be sure to contact the college Disabilities Coordinator. Also see the College Catalog for additional policies and information.

CH 8/10

NUR 204: PHARMACOLOGY FOR INDIVIDUALS, FAMILIES AND GROUPS WITH COMPLEX HEALTH CARE NEEDS

Course Prerequisite
NUR 202: Pharmacology for Individuals and Families with Intermediate Health Care Needs

Course Co-requisite
NUR 203: Nursing Care of Individuals and Families II; NUR*205 Nursing Management and Trends; Humanities or Fine Arts Elective

Course Components

Credits	1 credits
Hours	Classroom: 15 hours

Course Description
The student will focus on safe use, pharmacologic principles, indications and nursing implications related to drug therapy in the care of individuals, families, and groups with complex health care needs. Emphasis will be placed on medications used for clients who have acute and chronic renal failure, oncology and neurological conditions, and multi-system dysfunction and clients who choose an alternative therapy.

Course Objectives:
At the completion of this course, the student will be able to:

9. Integrate pharmacological principles at they relate to holistic and clinical medication application when caring for a client with, renal, oncology, neurological, multisystem organ conditions, and trauma.
10. Apply the nursing process to drug theory as it relates to clients with renal, oncology, neurological, multisystem organ conditions and trauma.
11. Describe safe and competent medication administration as it relates to clients with renal, oncology, neurological, multisystem organ conditions, and trauma.
12. Develop a comprehensive pharmacological teaching plan for clients with renal, oncology, neurological, multisystem organ conditions, and/or trauma.
13. Interpret cultural and individual awareness when tailoring drug therapy to clients with renal, oncology, neurological, multisystem organ conditions, and trauma.
14. Differentiate the roles of the multidisciplinary health team members when implementing a pharmacological plan of care for clients with renal, oncology, neurological, multisystem organ conditions, and trauma.
15. Analyze the legal-ethical implications of medication administration related to clients with renal, oncology, neurological, multisystem organ conditions and trauma.
16. Examine the professional role of the nurse in medication administration for clients with renal, oncology, neurological, multisystem organ disorders, and trauma

Medications in NUR* 204 related to specific disorders will be reviewed through readings or technology resources and / or discussed in relation to the following seven (7) components:

8. Indications for use
9. Pharmacokinetics
    a. Action
    b. Onset / Peak / Duration
    c. Absorption, Distribution, Metabolism, and Excretion (ADME)
10. Side effects / Adverse effects / Contraindications
11. Administration (route and dose)
12. Nursing Implications Across the Lifespan
13. Client Education
14. Relation to previous learning

HOURS	UNIT OBJECTIVES	CONTENT	SUGGESTED LEARNING EXPERIENCES	EVALUATION
1 hr Week 1	**Unit I: Overview and role of the Nurse in Pharmacology Related to Clients With Complex Health Care Need** A. Examine the nursing assessments / interventions / evaluation related to pharmacologic therapy for clients with complex health care needs B. Differentiate routes and dosages of medications C. Utilize the nursing process when describing the nursing implications of medications D. Analyze the legal-ethical nursing implications of medication administration E. Distinguish the contributions of health care team members to client's pharmacologic teaching plans F. Develop culturally sensitive, comprehensive pharmacologic teaching plans	A. Pharmacologic principles and concepts as they relate to complex health care needs of clients. B. Review the Seven Components C. Role of the Nurse in Pharmacology 1. Development of a teaching plan 2. Integration of cultural and individual differences related to pharmacology 3. Role of the Interdisciplinary Team 4. Legal and Ethical issues	Assigned Readings Lehne 6th edition Ch 1 pp 1-4 Ch 2 pp 5-14 Lehne 7th edition Same Lecture Discussion of key principles through stories	
1 hr Week 2	**Unit II: Pharmacological Manage-ment of the Client Experiencing Complex Renal Disorders** A. Discuss the indications for use of medications with clients who have complex renal disorders B. Examine the pharmacokinetics for medications administered to clients with complex renal disorders across the lifespan C. Compare and contrast the side effects, adverse effects and contraindications of medications administered to clients with complex renal disorders D. Describe the mechanism of action of selected diuretics	A. Overview of pharmacologic principles as they relate to complex renal disorders B. Prototype Medications 1. Diuretics a. High ceiling or loop furosemide (Lasix) b. Thiazide hydrocholorothiazide (HCTZ) c. Potassium sparing (aldosterone antagonists & nonaldosterone antagonists) Spironolactone (Aldactone) d. Osmotic mannitol(Osmitrol) e. Carbonic anhydrase inhibitors 2. Reduce serum K+ levels a. Sodium polystyrene sulfonate (Kayexalate) 3. Dialysate a. 1.5% dextrose with heparin b. 2.5% dextrose with heparin	Assigned Readings Lehne 6th edition Ch 40 pp 436-448 Ch 41 pp 452 Ch 68 pp795-801 Lehne 7th edition Ch 40 pp.443-545 Ch 41 pp 458 Ch 68 pp 814-820 Lecture Discussion Case Study Application	

HOURS	UNIT OBJECTIVES	CONTENT	SUGGESTED LEARNING EXPERIENCES	EVALUATION
	E. Distinguish which diuretic is more appropriate for the different pathophysiologies F. Identify nephrotoxic medications G. Describe the treatments for potassium imbalances H. Discuss the indications for use of heparin with dialysate I. Describe the use of immuno-suppressants in transplantation	c. 4.25% dextrose with heparin 4. Phosphate binding agents a. Aluminum phosphate (Phosphaljel) 5. Immunosuppressant medications used in renal transplantation a. Cyclosporine (Neoral, Sandimmune) b. Mycophenolate mofetil (CellCept)	Student CD (Lehne 6th ed) - VI Drugs that Affect Fluid and Electrolyte Balance Pharmacology Animations Renal "Active Secretion" NCLEX Examination Review Questions Calculators: Creatinine Clearance	
1 hr Week 3	**Unit III: Pharmacological Management of Clients Experiencing Multi-system Dysfunction** A. Discuss the indications for use of medications with clients who have multi-system dysfunction B. Examine the pharmacokinetics for medications administered to clients with multi-system dysfunction across the lifespan C. Compare and contrast the side effects, adverse effects and contraindications of medications administered to clients with multi-system dysfunction D. Discuss the use of topical ointments in the treatment of the burn survivor	A. Overview of pharmacologic 1. principles and concepts as they 2. relate to clients with multisystem dysfunction B. Prototype medications used for clients with multisystem dysfunction 1. Burns a. Topical ointments i. mafenide (Sulfamylon) ii. silver sulfadiazine (Silvadene) iii. silver nitrate (Acticote)	Assigned Readings Lehne 6th edition Ch 1 pp 1-4 Ch 2 pp 5-14 Ch 8 pp 77-84 Ch 87 pp 1002-1005 Lehne 7th edition Ch 1 pp 1-4 Ch 2 pp 5-14 Ch 8 pp 77-84 Ch 87 pp 1025-1027 Web searches Lectures Discussions Case Studies and Concept maps www.aidsinfo.nih.gov	**1 hour Week 3**

HOURS	UNIT OBJECTIVES	CONTENT	SUGGESTED LEARNING EXPERIENCES	EVALUATION
			www.fda.gov/oashi/aids/hiv.html www.aegis.com Student CD: (Lehne 6th ed) – XVI #93 Antiviral Agents II for HIV Infections and Related Opportunistic Infections NCLEX Examination Review Questions Assigned Readings Lecture Discussion Student CD: (Lehne 6th ed) - XX	
1 hr Week 4	**Unit IV: Pharmacologic Management of the Client Experiencing Oncology Conditions.** A. Discuss the indications for use of medications with clients who have oncology conditions B. Examine the pharmacokinetics for medications administered to clients with oncology conditions across the lifespan C. Compare and contrast the side effects, adverse effects and contraindications of medications administered to clients with oncology conditions D. Discuss the indications for use of varying classifications of prototype medications	A. Overview of pharmacologic principles and concepts as they apply to oncology conditions B. Prototype Medications 1. Antimetabolites a. Folic Acid Antagonists methotrexate (Folex, Mexate) b. Purine Antagonists mercaptopurine (Purinethol) c. Pyridamine Antagonists i. flurouracial (Adrucil) ii. capecitabine (Xeloda) 2. Alkalyting agents a. Nitrogen mustard derivatives Cytoxan	Assigned Readings Week 4 Lehne 6th edition Ch 100 pp 1142-1156 Ch 101 pp 1157-1171 Lehne 7th edition Ch 100 pp 1167-1180 Ch 101 pp 1181-1196 Lecture Discussion	**1 hr Week 4**

HOURS	UNIT OBJECTIVES	CONTENT	SUGGESTED LEARNING EXPERIENCES	EVALUATION
	E. Describe how therapy is evaluated F. Identify how nutrition may support or alter therapeutic medication effects G. Identify why the pharmacologic treatment plan may be altered H. Identify adverse effects and actions which require immediate intervention I. Discuss precautions related to drug therapies J. Develop a comprehensive, culturally sensitive, pharmacologic teaching plan for a client who is receiving medications for an oncology condition. Include support systems and organizations which can provide assistance	b. Nitrosoureas carmustine (BCNU, Giladel implantable wafer) c. Platinum compounds cisplantin (Platinol-AQ) 3. Anti-tumor Antibiotics a. doxyrubicin (Adriamycin, Rubex) 4. Plant Alkaloids a. vinicristine (Oncovin, Vincasar) b. paciltaxel (Taxol, Onxol)	Case studies and concept maps Presentation of teaching plans Web Quests: www.cancer.org www.cancer.med.upenn.edu www.nci.nih.gov www.mayoclinic.org www.mdanderson.org Student CD (Lehne 6th ed) – XVIII Cancer Chemotherapy; VII Hematopoietic Growth Factors – remove this Calculators: Absolute Neutrophil Count (ANC) NCLEX Examination Review Questions	
1 hr Week 5	Examination One			**1 hr Week 5**
1 hr Week 6	**Unit IV: Pharmacologic Management of the Client Experiencing Oncology Conditions (cont.)**	1. Gonadotropin-releasing Hormone Agonists a. Leuprolide (Lupron) 2. Hormones a. Androgens	Week 6 Lehne 6th edition Ch 101 pp1161-1163, 1166-1170	**1 hr Week 6**

HOURS	UNIT OBJECTIVES	CONTENT	SUGGESTED LEARNING EXPERIENCES	EVALUATION
		i. fluoxymesterone b. Estrogen / Progesterone i. diethylstilbestrol(Stilphostrol) 3. Monoclonal Antibiodies a. trastuzumab Herceptin) 4. Angiogeniesis Inhibitors a. becacizumab (Avastin) 5. Hormone Inhibitor a. Aromatase Inhibitors amastrozole (Arimidex) b. Antiestrogens tamoxofin, (Nolvadex) 6. Cytoprotective Agents a. amifostine (Ethyol) b. leucovorin (Wellcovorin)	Ch 102 pp1172-1190 Lehne 7th edition Ch 101 pp 1184-1187, 1191-1196 Ch 102 pp 1197-1216	
3hrs Weeks 7, 8, 9	**Unit V: Pharmacologic Management of Clients who are Experiencing Complex Neurological Conditions** A. Discuss the indications for use of medications with clients who are experiencing complex neurological conditions B. Examine the pharmacokinetics for medications administered to clients with complex neurological conditions across the lifespan C. Compare and contrast the side effects, adverse effects and contraindications of medications administered to clients with complex neurological conditions D. Discuss the significance of the blood brain barrier E. Discuss the selection and monitoring of anti-seizure medications F. Describe the mechanisms through which anti-seizure medications work G. Examine reasons for treatment failure H. Compare and contrast how nutrition and other medication significantly affects clients	A. Overview of pharmacologic principles and concepts as they apply to clients with complex Neurological conditions B. Anti-seizure medications 1. Barbiturates a. phenobarbital (Solfoton Luminal) b. primidone (Mysoline) 2. Iminostilbenes a. carbanazepine (Tegretol) b. oxcarbazepine (Trileptal) 3. Benzodiazepine a. clonazepam (Klonopin) 4. Succinimide ethosuximide (Zarontin) 5. Hydantoin fosphenytoin (Cerebyx) 6. phenytoin (Dilantin) 7. Miscellaneous a. valproic acid (Depakene,Depakote) b. gabapentin (Neurontin) c. topiramate (Topamax) d. lamotrigine (Lamictal) C. Antiparkinsonian medications 1. Direct-acting dopamine agonist/replacement a. levodopa (Larodopa) b. levodopa-carbidopa (Sinemet) 2. Direct-acting Dopamine agonists	Assigned Readings Week 7 Lehne 6th edition Ch 20 pp181-183 Ch 24 pp 215-236 Lehne 7th edition Ch 20 pp 179-181 Ch 24 pp 218-239 Week 8 Lehne 6th edition Ch 21 pp 184-197 Ch 15 pp 132-139 Lehne 7th edition Ch 21 pp 182-197 Ch 15 pp 131-138 Week 9 Lehne 6th edition Ch 23 pp 205-214 Ch 25 pp 237-241 Ch 51 p 603 Ch 59 p 700	**3 hrs Weeks 7, 8, 9**

HOURS	UNIT OBJECTIVES	CONTENT	SUGGESTED LEARNING EXPERIENCES	EVALUATION
	taking levodopa I. Differentiate between effects of medications administered to clients with myasthenia gravis and multiple sclerosis J. Discuss medications used to manage symptoms in multiple sclerosis K. Identify the specific timing, therapeutic and adverse effects of TPA administered to clients experiencing Brain attack or Stroke L. Compare and contrast the use of steroids in the client who is experiencing Cerebral edema and the client who has had a Spinal cord injury	a. bromocriptine (Parlodel) b. pergolide (Permax) c. pramipexole (Mirapex) d. ropinirole (Requip) 3. Indirect-acting dopamine agonist a. amantadine (Symmetrel) b. selegiline (Eldepryl) 4. Anticholinergic medications a. benztropine mesylate (Cogentin) b. trihexyphenidyl (Artane) 5. Catechol ortho-Methyltransferase (COMT) Inhibitors a. entacapone (Comtan) D. Myasthenia gravis 1. Indirect acting anticholinesterase: cholinesterase inhibitors a. pyridostigmine bromide (Mestinon) b. neostigmine (Prostigmin) c. edrophonium chloride (Tensilon) E. Multiple sclerosis 1. Disease modifying drugs: a. Immunomodulators i. interferon beta-1a (Avonex) ii. interferon beta-1a (Rebif) iii. glatiramer acetate (Copaxone) b. Immunosuppresants i. mitoxantrone (Novantrone) 2. Symptom management a. Bladder dysfunction i. Detrussor hyperreflexia; tolterodine (Detrol) ii. Detrussor-sphincter dyssynergia: tamsulosin (Flomax) a. Flaccid bladder: bethanechol (Urecholine) b. Bowel dysfunction i. psyllium (Metamucil) ii. mini-enema (Enemeez) c. Fatigue	Ch 40 pp 444-445 Lehne 7th edition Ch 23 pp 206-217 Ch 25 pp 240-244 Ch 51 pp 613-614 Ch 59 pp 716-717 Ch 40 p 451 Lecture Discussion Calculators: Risk Assessment Tool for Falls NCLEX Examination Review Questions Student CD (Lehne 6th ed) - IV Peripheral Nervous System Drugs; V Central Nervous System Drugs # 20-25	

HOURS	UNIT OBJECTIVES	CONTENT	SUGGESTED LEARNING EXPERIENCES	EVALUATION
		i. amantadine (Symmetrel) ii. methylphenidate (Ritalin) d. Depression i. Bupropion (Wellbutrin) ii. Nortriptyline (Pamelor) e. Spasticity i. baclofen (Lioresal) ii. botulinum toxin (Botox) f. Sexual Dysfunction i. sildenafil (Viagra) ii. water-soluble lubricant (KY Jelly) g. Neuropathic pain i. abapentin (Neurontin) ii. imipramine (Tofranil) h. Ataxia and Tremor i. clonazepam (Klonopin) ii. propranolol (Inderal) i. Cognitive Dysfunction i. donepezil (Aricept) ii. memantine (Namenda) j. Dizziness and Vertigo i. meclizine (Antivert) ii. ondansetron (Zofran) F. Brain attack or Stroke. 1. Thrombolytic drugs; tissue plasma activator (tPA): Alteplase (Activase) G. Cerebral edema or Spinal cord injury 1. Steroids		
1 hr Week 10	Examination Two			
2 hrs Weeks 11 & 12	**Pharmacological Management of Clients Experiencing Multi-system Dysfunction (con't)** A. Discuss the indications for use of medications with clients who have multi-system dysfunction	C. Prototype medications used for clients with multisystem dysfunction 1. HIV and / or AIDS:Antiretroviral drugs a. Nucleoside / nucleotide reverse transcriptase inhibitors (NRTIs) i. zidovudine (Retrovir) ii. didanosine (Videx)	Assigned Readings Week 11 Lehne 6th edition Ch 93 pp 1064-1096 Lehne 7th edition Ch 93 pp 1087-1121	**2 hrs Weeks 11 & 12**

HOURS	UNIT OBJECTIVES	CONTENT	SUGGESTED LEARNING EXPERIENCES	EVALUATION
	B. Examine the pharmacokinetics for medications administered to clients with multi-system dysfunction across the lifespan C. Compare and contrast the side effects, adverse effects and contraindications of medications administered to clients with multi-system dysfunction D. Examine the principle of HAART (highly active antiretroviral therapy) as a standard treatment of HIV and AIDS E. Distinguish between therapies for clients who are HIV positive and those with advanced ARC F. Describe the adverse effects related to medication therapies for HIV infected clients Compare and contrast treatment modalities for prophylaxis and treatment of common opportunistic infections in clients with AIDS	b. Non-nucleoside reverse transcriptase inhibitors (NNRTIs) i. efavirenz (Sustiva) ii. nevirapine (Viramune) c. Protease inhibitors (PIs) i. lopinavir / ritonavir (Kaletra) d. HIV fusion inhibitor i. enfuvirtide (Fuzeon) 2. Prophylaxis & treatment of opportunistic infections a. Pneumocystis carinii pneumonia i. trimethoprim plus sulfamethoxazole (Bactrim) ii. pentamidine (Pentam 300) b. Cytomegalovirus Retinitis i. anciclovir (Cytovene) ii. cidofovir (Vistide) c. Mycobacterium tuberculosis i. isoniazid, rifabutin, pyrazinamide & ethambutol d. Mycobacterium avium complex i. clarithromycin e. Toxoplasma Encephalitis i. pyrimethamine plus sulfadiazine f. Cryptococcal Meningitis i. amphotericin B plus flucytosine ii. fluconazole g. Varicella-Zoster and herpes simplex infection i. acyclovir h. Candidiasis i. Nystatin suspension miconazole troches	Week 12 Lehne 6th edition Ch 93 pp 1096-1099 Ch 89 pp 1019-1023, 1025 Ch 91 pp 1035-1039 Ch 92 pp 1048-1053 Lehne 7th edition Ch 93 pp 1121-1124 Ch 89 pp 1042-1046, 1048 Ch 91 pp 1057-1061 Ch 92 pp 1070-1076	
2 hrs Weeks 13 & 14 Plus week of Thanks-giving	**<u>Unit VI: Pharmacological management of clients Utilizing Herbal Supplements</u>** A. Discuss the limited regulation of herbs B. Identify adverse interactions with conventional medications. C. Compare and contrast the various oral	A. Overview of pharmacologic principles and concepts as they relate to clients using herbal supplements. B. Commonly used Medicinal Herbs 1. Aloe 2. Black Cohosh 3. Echinacea	Assigned Readings Week 13 Lehne 6th edition Ch 107 pp 1234-1244 Lehne 7th edition Ch 107 pp 1261-1272	2 hours Weeks 13 & 14

HOURS	UNIT OBJECTIVES	CONTENT	SUGGESTED LEARNING EXPERIENCES	EVALUATION
	formulations and dosage implications. D. Identify accepted and unconventional uses of commonly used medicinal herbs. E. Examine methods that clients acquire information related to herbal medicinesDevelop a teaching plan to promote safe use of herbal medicines in a community setting	4. Feverfew 5. Garlic 6. Ginger Root 7. Gingo Biloba 8. Goldenseal 9. Kava 10. Ma Huang (Ephedra 11. St. John's Wort 12. Saw Palmetto	Week 14 Lehne 6th edition Ch 107 pp 1261-1272 Ch 32 pp 340-341 Lehne 7th edition Ch 107 pp 1234-1244 Lecture Discussion Case Study: Teaching plan for safe use of herbal medicines Web site exploration Student CD: (Lehne 6th ed) - XX Alternative Treatment NCLEX Examination Review Questions	
1 hr Week 15	Examination Three			