CONNECTICUT COMMUNITY COLLEGES NURSING PROGRAMS

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

NUR 103: PHARMACOLOGY FOR FAMILIES ACROSS THE LIFESPAN

Course Prerequisite

NUR*101: Introduction to Nursing Practice; BIO*235: Microbiology; PSY 111: General Psychology

Course Corequisite

NUR*102: Family Health Nursing; PSY*201: Life Span; SOC* 101: Principles of Sociology

Course Components

Credits 1 credits

Hours Classroom: 15 hours

Course Description

The student will focus on the safe use, pharmacological principles, indications and nursing implications related to drug therapy when caring for individuals and families. Emphasis will be placed on medications used with perinatal, neonatal, pediatric, geriatric and peri-operative clients. The course will stress the general characteristics of selected medications and will include indications, pharmacokinetics, side effects, adverse effects, contraindications, administration, nursing implications across the lifespan, client education and relationship to prior learning.

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 obstetrical, geriatric, pediatric, psychiatric, peri-operative, gynecological, genitourinary, and orthopedic conditions.
- 2. Apply the nursing process to drug theory as it relates to clients with obstetrical, geriatric, pediatric, psychiatric, peri-operative, gynecological, genitourinary, and orthopedic conditions.
- 3. Describe safe and competent medication administration as it relates to clients with obstetrical, pediatric, geriatric, psychiatric, peri- operative, gynecological, genitourinary, and orthopedic conditions.
- 4. Develop a comprehensive pharmacological teaching plan for clients with obstetrical, pediatric, geriatric, psychiatric, peri- operative, gynecological, genitourinary, and /or orthopedic conditions.
- 5. Interpret cultural and individual awareness when tailoring drug therapy to clients with obstetrical, pediatric, geriatric, psychiatric, peri-operative, gynecological, genitourinary, and orthopedic conditions.
- 6. Differentiate the roles of the multidisciplinary health team members when implementing a pharmacological plan of care for clients with obstetrical, pediatric, geriatric, psychiatric, peri-operative, gynecological, genitourinary, and orthopedic conditions
- 7. Analyze the legal-ethical implications of medication administration related to clients with obstetrical, pediatric, geriatric, psychiatric, peri-operative, gynecological, genitourinary, and orthopedic conditions.

8. Examine the professional role of the nurse in medication administration for clients with obstetrical, pediatric, child/adolescence psychiatric, pre-post operative, gynecological, genitourinary, or orthopedic conditions.

Welcome to the course:

Hope you will enjoy the freedom of taking a course on line. While online classes free you from the schedule of the classroom, it requires self-discipline to complete the readings and learning activities. It is imperative that you keep up with the weekly modules and medication sheets. **Please take some time to thoroughly read the syllabus.** Another secret to success in elearning is to keep in touch with the instructor. Do not hesitate to contact the course coordinator with questions. For this course, communicating through Blackboard will work best. If it is felt other students might have the same question, the answer will be forwarded to all students.

I am also available to you on campus during posted office hours. Please feel free to contact me at any time via email. It will be checked frequently, and will make every effort to respond within 48 hours, but, would like to reserve Sunday as a day off.

Please note any late assignments will not accept. If the assignment is late, you will get a 0. It is expected all students will submit their assignments responses through the course BlackBoard drop boxes. The assignment section of the site has been set up to allow you to submit right through the site. It is also set not to accept any papers after 23:59 hours on the due date. ALL PAPERS MUST BE SUBMITTED PRIOR TO THE DEADLINE. Don't wait until the last minute only to find that your email isn't working or your computer has crashed!

We hope this will be a valuable and enjoyable learning experience for you.

Faculty:

Anne Lamondy, M.S.N., R.N.C. Assistant Professor

Course Coordinator

alamondy@trccc.commnet.edu

Office: C212

Phone & Voicemail: 383-5218

ESL /Culture Facilitator: Judy Snayd, M.S.N. CNE, R.N., Professor

Nursing Lab Tutors:

Sue Turner, MSN, RN Educational Assistant

Office Phone: 383-5236

E-mail: sturner@trcc.commnet.edu and Blackboard Vista

Faculty / Staff Availability

Students are encouraged to seek clarification with the course coordinator as needed. Students are also encouraged to seek advisement with faculty as needed. Scheduled faculty office hours are posted outside faculty offices. Students may also meet with faculty by appointment. All faculty look forward to your success. Please utilize your time wisely.

Study Groups

Students are encouraged to form study groups which can meet in the lab or at the groups' mutual location choice. Tutors within the nursing lab are available also during posted hours of the Nursing Laboratory. 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

Teaching modalities include lecture, power point, and case studies, medication cards. Computerized programmed instruction and interactive learning tools are also used. Blackboard Vista is used as the learning management tool.

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.

Class Examinations

Exam I	Week of 2/14 – 2/20	22.50%
Exam II	Week of $3/14 - 3/20$	22.50%
Exam III	Week of 4/18 – 4/24	22.50%
Exam IV	Week of $5/13 - 5/19$	22.50%
Additional Assignments	see below	10%

1) <u>Teach Plan-</u> Submit to drop box set up and labeled teaching plan. Teaching plan are graded on rubric listed in this syllabus. The teaching plan is worth 4 pts. **Due date- 2/28** @ 2359.

2) <u>Drug Classification Sheets</u> 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 2 sheets on the assigned drugs classification categories (med sheets). Each med sheet is worth 3 points. The med sheets are graded on rubric listed in this syllabus The drug sheets must be submitted in the drop box labeled "Med Sheet 1" for the anti-infective, and "Med Sheet 2", for the anti-anxiety, respectively. **Med sheet 1 is due 3/30@ 2359, Med Sheet 2 is due 5/8@2359.**

Grading Policies

To pass Nursing 103 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.

Grading Rubric for Teaching Plan:

Category for Grading				
Quality of information in Posting	Posting consistently focuses on the concepts assigned in the teaching plan. The teaching plan is thorough and relates to the underlying concepts in the readings. Postings consistently use correct grammar and spelling. No errors in APA formatting	Posting focuses on the concepts assigned in the teaching plan. The teaching plan broadly covers the underlying concepts in the readings. Postings have occasional errors in grammar and spelling. One error in APA formatting.	Posting focuses somewhat on the concepts assigned in the teaching plan. The teaching plan losely covers the underlying concepts in the readings Postings have numerous grammar and spelling errors. Two or three errors in APA formatting.	Posting focuses little on the concepts in the unit and do not relate to the underlying concepts in the readings to the case study. Postings have numerous grammar and spelling errors. Three or more errors in APA formatting.
Max. total points	4	3	2	1

Grading Rubric for Medication Sheets:

	Needs Improvement	Developing	Meets Expectations
Quality of Information	Medication Sheet focuses	Medication Sheet focuses	Medication Sheet focuses on
on Medication Sheet	on the drug classification	on the drug classification	the drug classification
	but lacks depth and a clear	but lacks depth and a clear	identified and relates all
	understanding of the key	understanding of the key	pertinent concepts to the
	concepts in the drug	concepts in the drug	categories listed on the
	classification. It is missing	classification. It is missing	Medication Sheet.
	pertinent concept of the	pertinent concept of the	Information is clear, concise
	categories listed on the	categories listed on the	and includes references to
	Medication Sheet.	Medication Sheet.	support details and/or
	Information is not	Information is not	examples. Postings
	referenced. Postings have	referenced. Postings have	consistently use correct
	greater that 3 errors in	greater that 3 errors in	grammar and spelling.
	grammar and spelling.	grammar and spelling.	One to no errors in APA
	Errors in APA formatting	Errors in APA formatting	formatting
	1 point	2 points	3 points

- The Grading Formula:

- A 93-100
- A- 90-92
- B+ 87-89
- B 83-86
- B- 80-82
- C+ 77-79
- C 74-76

- D+ 67-69
- D 64-66
- F 0-63

<u>Please Note:</u> Grades will be computed to the second decimal point and at the end of the course will be rounded once to a whole number for the 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 CT-CCNP handbook.

Nursing Program Policy Handbook

Refer to the Nursing Program Policy Handbook for information regarding:

- Missed Exams
- Attendance- may sure your are keeping up with the content-weekly!

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 miss exams as outlined in the Handbook).

Statement on Penalty for Academic Dishonesty or Plagiarism

Plagiarism is the <u>unacknowledged</u> 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.

Additional Expected Activity Requirements

Students are expected to participate in class discussions board (please be mindful of net-etiquette), material review and lab practice. Participation enhances the learning experience and allows students and instructors the opportunity to learn from each other.

Students are reminded that classroom demeanor is a vital part of participation. Students should behave appropriately at all times and are asked to practice common courtesy, recognizing each person's right to learn in an atmosphere conducive to the learning experience. Students who violate the rules of courtesy and/or professional demeanor will be asked to leave.

Students are required to attend all class "meetings". Lack of participation will have a direct impact on student learning.

WITHDRAWAL POLICY:

Students may withdraw, in writing, at the Registrar's Office for any reason. Refer to the Nursing and College Student Handbooks and College Catalog. Students who receive an overall unsatisfactory clinical grade at any time in the rotation will fail this course and receive a grade of F. This course does not offer midterm theoretical warning grades. Students with concerns about their course average are encouraged to contact the course coordinator.

DISABILITIES STATEMENT:

If you have a hidden or visible disability which may require classroom or test-taking modifications, please see the course coordinator as soon as possible. If you have not already done so, please be sure to register with Chris Scarborough if you have a learning disability, ADD or ADHD, or Student Services for other physical disabilities. Please see the Three Rivers Community College Catalog for additional policies and information.

CLASS OUTLINES AND READINGS ARE PROVIDED IN COURSE OUTLINE

HOURS	UNIT OBJECTIVES	CONTENT	SUGGESTED LEARNING EXPERIENCES	EVALUATION
1 hr 1/24- 1/30	A. Discuss the role of the nurse related to pharmacology.	 A. Define the seven components related to general characteristics of pharmacology Indications Pharmacokinetics Side Effects/Adverse Effects/Contraindications Administration Nursing Implications Across the Lifespan Client Education Relation to Prior Learning B. Role of the Nurse in Pharmacology Development of a Teaching Plan Integrating Cultural and Individual Differences related to Pharmacology Role of the Interdisciplinary Team Legal and Ethical Issues 	A. Assigned Readings Lenhe 7th Chapter 1 - pages 1-4 Chapter 2 - pages 5-14 Chapter 3 - pages 15-24 Chapter 6 - pages 57-63 Chapter 7 - pages 64-76 Chapter 8 - pages 77-84 B. Discussion	Exam Case Study Med
1 hour 1/31- 2/6	A. Utilizing the nursing process, develop a holistic, culturally sensitive medication plan of care for the healthy neonate and the perinatal client. B. Describe safe and competent medication administration, utilizing hospital based technology, for the perinatal client.	A. Medications that Affect Uterine functioning 1. Uterine Relaxants a) Prototype: terbutaline b) Prototype: magnesium sulfate 2. Uterine Stimulants a) Prototype: Pitocin b) Prototype: Methergine 3. Drugs Used to Promote Cervical Ripening a) Prototype: Dinoprostone b) Prototype: Misoprostol B. Other Maternity Medications 1. RhoGAM 2. Vitamin K 3. Erythromycin Eye Ointment	 A. Assigned Readings: Lehne 7th, Chapter 9 - pages 85-91 Chapter 63 - pp.760 - 768 B. Lecture C. Discussion Chapter 68 p. 819 Chapter 80 pp. 953 - 957 Chapter 94 p.1136 	

HOURS	UNIT OBJECTIVES	CONTENT	SUGGESTED LEARNING EXPERIENCES	EVALUATION
1 hour 2/7- 2/13	Unit III: Pharmacological Management of Pain A. Utilizing the nursing process, develop a holistic, culturally sensitive medication plan of care for the client in pain. B. Describe safe and competent medication administration, utilizing hospital based technology, for the client in pain	A. Pathophysiology of Pain B. Management Strategy C. Assessment 1. Comprehensive Initial Assessment 2. Ongoing Evaluation 3. Barriers to Assessment D. Analgesics 1. Nonopioid a) Nonsteroidal Anti-Inflammatory i) 1st generation 1) Aspirin 2) ibuprofen (Motrin) 3) naproxen (Naprosyn) i) 2nd generation: celecoxib (Celebrex) 2. Opioid a) Codeine b) Morphine c) Methodone (Dolophine) d) Meperidine (Demerol) 3. Adjuvant Analgesics	A. Assigned Readings: Lehne 7th Chapter 28 – pages 261-285	
1 hour 2/14- 2/20	Weight 22.5% of grade	Examination One		Examination One
1 hour 2/21- 2/27	Unit IV: Pharmacological Management During the Peri-Operative Period A. Utilizing the nursing process, develop a holistic, culturally sensitive medication plan of care for the peri-operative client pre-operatively, intra-operatively or post-operatively. B. Describe safe and competent medication administration, utilizing hospital based technology, for the peri-operative client	A. Anti-Infective Medications 1. Antibiotics a) General Overview of Antibiotic Therapy b) Prototype: penicillin (Amoxicillin) c) Prototype: cephalosporin: cefazolin (Ancef) d) Prototype: sulfonamide: trimethoprim- sulfamethoxazole (Bactrim) e) Prototype: aminoglycoside: gentamycin (Garamycin) f) Tetracyclines, Macrolides, and others 2. Anti-Fungal: Prototype: amphotericin B (Fungizone) B. Anti-viral: Prototype: acyclovir (Zovirax)	A. Assigned Readings: Lehne 7 th Chapters 82 – 87 pps. 970 - 1031 Chapters 91 – 92 pp. 1057 - 1085 Med sheet	
1 hour 2/28- 3/6	Unit IV: Pharmacological Management During the Peri-Operative Period (con't) A. Utilizing the nursing process, develop a holistic, culturally sensitive medication plan of care for the peri-operative client pre- operatively, intra-operatively or post-	A. Antiemetic 1. Prototype: prochlorperazine (Compazine) 2. Prototype: ondansetron hydrochloride (Zofran) B. Anticholinergic: Prototype: atropine C. Anesthetics 1. Types of Anesthesia	A. Assigned Readings: Lehne 7th Chapter 79 937 - 938 Chapter 14 pp. 123-125	

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HOURS	UNIT OBJECTIVES	CONTENT	SUGGESTED LEARNING EXPERIENCES	EVALUATION
		Shock: a) Epinephrine		
1 hour 3/14- 3/20	Weight 22.5% of grade	Examination Two		Examination Two
1 hour 3/28- 4/3	Unit VI: Pharmacological Management of Geriatric Clients A. Utilizing the nursing process, develop a holistic, culturally sensitive medication plan of care for the geriatric client.	 A. Medications used for Cognitive Disorders Cholinesterase Inhibitors: Prototype: donepezil hydrochloride (Aricept) NMDA Receptor Antagonist: Prototype: memantine hydrochloride (Namenda) B. Medications that Effect Bowel Functioning 	A. Assigned Readings: Lehne 7th Chapter 22 – pages 198-205	
	 B. Utilize the nursing process, develop a holistic, culturally sensitive medication plan of care for the client with dementia, delirium, Alzheimer's or ADHD. C. Describe safe and competent medication administration, utilizing hospital based technology, for the geriatric client. 	1. Laxatives a) Bulk Forming Laxatives: Prototype: psyllium (Metamucil) b) Surfactant Laxatives:Prototype: docusate sodium (Colace) c) Stimulant Laxatives: bisacodyl sodium (Dulcolax) d) Osmotic Laxatives: magnesium hydrochloride (Milk of Magnesia) e) Other Laxatives: Lactulose	Chapter 78- pages 929 - 935	
1 hour 4/4- 4/10	Unit VII: Pharmacological Management of Clients with Orthopedic Disorders A. Utilizing the nursing process, develop a holistic, culturally sensitive medication plan of care for the client with THA, TKA, osteoarthritis, rheumatoid arthritis, PE or compartment syndrome. B. Describe safe and competent medication administration, utilizing hospital based technology, for the orthopedic client.	,	A. Assigned Readings: Lehne 7th 1. Glucocorticoids Chapter 71 – pages 846-855 2. NSAIDS & DMARDs Chapter 70 – pages 828-845 Chapter 72 – pages 858-863	
1 hour 4/11- 4/17	Unit VIII: Pharmacological Management of the Pediatric Client A. Utilizing the nursing process, develop a holistic, culturally sensitive medication plan of care for the pediatric client. B. Describe safe and competent medication administration, utilizing hospital based technology, for the pediatric client.	A. Vaccinations across the Lifespan 1. Schedule of pediatric immunizations 2. Hepatitis B 3. Human Papilloma Virus (HPV) Pneumococcal Vaccine 4. Haemophilus Influenzae Vaccine (HIB) B. Medications used for Allergic Reactions 1. Antihistamines a) 1 st generation: Prototype: diphenhydramine (Benedryl) b) 2 nd generation: Prototype: loratadine (Claritin) c) 3 rd generation: Prototype: fexofenadine hydrochloride	Lehne 7th 1. Chapter 10 – pages 92-95 2. Chapter 67 – pages 796-813 3. Chapter 69 – pages 821-827 4. Appendix A	

HOURS	UNIT OBJECTIVES	CONTENT	SUGGESTED LEARNING EXPERIENCES	EVALUATION
		(Allegra)		
1 hour 4/18- 4/24	Weight 22.50% of grade	Examination Three		Exam 3
4/25- 5/1	Unit IX: Pharmacological Management of Clients with Genito-Urinary Disorders A. Utilizing the nursing process, develop a holistic, culturally sensitive medication plan of care for the client with UTIs, kidney surgery or BPH. B. Describe safe and competent medication administration, utilizing hospital based technology, for the GU client.	A. Medications used for Urinary Incontinence: Prototype: oxybutynin C. Medications used for Benign Prostatic Hypertrophy: Prototype: tamulosin (Flomax, Ditropan)	 A. Assigned Readings: Lehne 7th Chapter 14 – pages 125 - 128 Chapter 65 – pages 781-784 Chapter 88 – pages 1032- 1036 	B. Assigned Readings:
1 hour 5/2-5/8	Clients Using Contraception and Gynecological Disorders A. Utilizing the nursing process, develop a holistic, culturally sensitive medication plan of care for the client with Premenstrual Syndrome (PMS), menopause, endometriosis, toxic shock syndrome, or Sexually Transmitted Diseases (STDs). B. Describe safe and competent medication administration, utilizing hospital based technology, for the gynecological client	A. Contraception: Compare and Contrast non-pharmacological and pharmacological methods of contraception 1. Pharmacologic Methods: Medications for Contraception a) Combination Oral: Prototype: estrogen & progestin (Alesse) b) Morning after Pill/Plan B: Prototype: RU-486 c) Mini-Pill: Protype: progestin only (Micronor) d) Transdermal Patch: Prototype: Ortho Evra e) Vaginal Contraceptive Ring: Prototype: NuvaRing f) Long-Acting: Prototype: depot medroxyprogesterone acetate (Depo-Provera) 2. Non-Pharmacologic Methods a) Social, cultural and spiritual influences b) Abstinence, rhythm c) Use of Non-oxynol 9 with condoms/diaphragm d) Intrauterine Devices (IUD) B. Hormone Replacement Therapy 1. Oral & Intravaginal Estrogens: Prototype: conjugated estrogens, equine (Premarin) 2. Oral Combination Estrogen/Progesterone 3. Conjugated estrogens, equine/ medroxyprogesterone acetate (Prempro)	 G. Assigned Readings: Lehne 7th Chapter 60 – pages 718-735 Chapter 61 – pages 736-753 Chapter 62 – pages 756-759 	A. Assigned Readings:
1 hour	Unit XI: Pharmacological Management for	`	C. Assigned Readings:	A. Assigned

HOURS	UNIT OBJECTIVES	CONTENT	SUGGESTED LEARNING EXPERIENCES	EVALUATION
5/9- 15	A. Examine the nursing assessments/ interventions/evaluation related to pharmacologic therapy for clients with psychiatric-mental health conditions B. Utilizing the nursing process, develop a holistic, culturally sensitive medication plan of care for the client with anxiety. C. Compare and contrast the medications utilized in the treatment of depression. D. Discuss the nursing implications related to the administration of drugs for the treatment of depression E. Compare and contrast the medications utilized in the treatment of bipolar conditions. F. Discuss the nursing implications related to the administration of drugs for the treatment of bipolar disorder	1. Benzodiazepine: Prototype: lorazepam (Ativan) 2. Atypical Anti-Anxiety: Prototype: buspirone (BuSpar) B. Prototype medications for Mood Conditions: 1. Depression: a) Tricyclic Antidepressants: imipramine hydrochloride (Tofranil) b) Selective Serotonin Reuptake Iinhibitors: fluoxitine (Prozac) c) Serotonin /Norepinephrine Reuptake Inhibitors: venlafaxine (Effexor) d) Monomine Oxidase Inhibitors: isocarboxazid (Marplan) e) Atypical Antidepressants: bupropion (Wellbutrin) 2. Bipolar Disorder: a) Mood stabilizing drugs: lithium carbonate (Eskalith) a) Antiepileptic drugs: valproic acid (Depakote) b) Antipsychotic drug olanzapin (Zyprexa)	Lehne 7 th Chapter 32 – pages 336-358 Chapter 34 – pages 369-382 Chapter 35 – pages 383-390 Chapter 33 – pages 359-367	Readings:
1 hour	Additional Assignments	Teaching Plan due 2/28 @ 2359 Med Sheet 1 is due 3/30@ 2359 Med Sheet 2 is due 5/8 @2359		
1 hour 5/13 – 5/19	Weight 22.50% of grade	Examination Four (non-comprehensive)		Examination Four