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, perioperative, 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, perioperative, 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 e-learning 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 Blackboard Learn specific assignment. 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:

Joan K. Graham, MSN, RN, CMSRN, CNE, Associate Professor

Course Coordinator

jgraham@trcc.commnet.edu

Office: C222

Phone & Voicemail: 860-215-9431

ESL/Culture Facilitator: TBA

Nursing Lab Tutors:

Sue Turner, MSN, RN Educational Assistant

Office Phone: 215-

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 Learn is used as the learning management tool.

Required Textbooks: (textbooks are used in subsequent courses)

1	Daalia	Davis Dav	~ Cuida fa	NI	(11th edition)	T. A	Darria	2000
- 1	. Degiin.	. Davis Dru	g Guide io	r Nurses	(11" eartion) F.A.	Davis.	2008.

2. Lehne, Pharmacology for Nursing Care, with CD (8 th edition) Saunders, 2
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Class Examinations

Evaluation activities reviewed:

Theory:

Evaluation in Nursing 103 is via four on ground exams (with 40 questions on each exam). The exams are open book /collaborative format (Lehne only). Groups for the collaborative format will be assigned by the course leader. In addition there is a teaching plan and one med sheet worth 10% of your total grade. To pass Nursing 103 a student must earn at least a 74 average in the course. Test items are drawn from ALL content in the course.

Exam	Units covered	Date	Time	Percentage
I	1-3	2/19/14	11-12:15 pm	22.5%
II	4-5	3/26/16	11-12:15 pm	22.5%
III	6-8	4/14/14	11-12:15 pm	22.5%
IV	9-12	5/7/14	11-12:15 pm	22.5%

Additional Assignments

see below

10%

2) <u>Teaching Plan Assignment</u> Submit the teaching plan found in the "assignment" section. Teaching plans are graded using the rubric listed on Blackboard. **Due date: 4/6/14** @ **2359.**

The teaching plan will be further explained at the start of the semester.

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. AND complete the two additional assignments.
- The Grading Formula for course:
- 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

Please Note: 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- Be sure to keep 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 the current 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 netetiquette), 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.

Last revised date: 1/14

WEEK HOURS	UNIT OBJECTIVES	CONTENT	SUGGESTED LEARNING EXPERIENCES	EVALUATION
Week 1 1 hr 1/26/14	Unit 1: Overview of Pharmacology Discuss the role of the nurse related to pharmacology.	A Define the seven components related to the general characteristics of pharmacology 1. Indications 2. Pharmacokinetics 3. Side Effects/Adverse	Assigned Readings **All assigned readings for each week are listed within the Unit folder Lecture Discussion	Exam Case Studies
Week 2 1 hour 2/2/14	Unit II: Pharmacological Management of the Obstetrical and Neonatal Client Utilizing the nursing process, develop a holistic, culturally sensitive medication plan of care for the healthy neonate and the perinatal client. Describe safe and competent medication	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 4. Other Maternity Medications a. RhoGAM b. Vitamin K c. Erythromycin Eye Ointment	Assigned Readings *Located in each unit folder Lecture Discussion Develop a pharmacological teaching plan for an obstetrical client	Exam Case Studies

Last revised date: 1/14

WEEK HOURS	UNIT OBJECTIVES	CONTENT	SUGGESTED LEARNING EXPERIENCES	EVALUATION
	administration, utilizing hospital based technology, for the perinatal client.			
Week 3 1 hour 2/9/14	Unit III: Pharmacological Management of Pain Utilizing the nursing process, develop a holistic, culturally sensitive medication plan of care for the client in pain. 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 1) Aspirin 2) Ibuprofen (Mortin, Advil) 3) Naproxen (Aleve) 2. Opioid a. Codeine b. Morphine c. Methodone (Dolophine) d. Meperidine (Demerol) 3. Adjuvant Analgesics	Assigned Readings *Located in each unit folder Lecture Discussion	Exam Case Studies
Week 5 1 hour 2/23/14	Unit IV: Pharmacological Management During the Peri-Operative	A. Anti-Infective Medications 1. Antibiotics a. General Overview of Antibiotic Therapy	Assigned Readings *Located in each unit folder	Exam Case Studies

WEEK HOURS	UNIT OBJECTIVES	CONTENT	SUGGESTED LEARNING	EVALUATION
	Period Utilizing the nursing process, develop a holistic, culturally sensitive medication plan of care for the perioperative client preoperatively, intraoperatively or post-	b. Prototype: penicillin (Amoxicillin) c. Prototype: cephalosporin: cefazolin (Ancef) d. Prototype: sulfonamide: trimethoprim- sulfamethoxazole (Bactrim) e. Prototype: aminoglycoside: gentamycin (Garamycin) 1. Anti-Fungal a. Prototype: amphotericin B (Fungizone)	Discussion Develop a pharmacological teaching plan for a client during the perioperative period	
	operatively. Describe safe and competent medication administration, utilizing hospital based technology, for the perioperative client	Anti-viral a. Prototype: acyclovir (Zovirax)	operative period	
Week 6 1 hour 3/9/14	Unit V: Pharmacological Management During the Peri-Operative Period (con't)	B. Antiemetic 1. Prototype: prochlorperazine (Compazine) 2. Prototype: ondansetron hydrochloride (Zofran) C. Anticholinergic 1. Prototype: atropine D. Anesthetics 1. Types of Anesthesia a. Local Anesthesia b. Epidural Anesthesia c. Spinal Anesthesia	Assigned Readings *Located in each unit folder Lecture Discussion Develop a pharmacological	Exam Case Studies
		d. General Anesthesia 2. Medications used for Anesthesia a. Local/Epidural/ Spinal: Prototype: lidocaine hydrochloride b. Inhaled Anesthesia: Prototype: fluothane	teaching plan for a client during the peri- operative period	

WEEK HOURS	UNIT OBJECTIVES	CONTENT	SUGGESTED LEARNING	EVALUATION
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		(Halothane) c. Gas: Prototype: nitrous oxide d. Barbiturates: Prototype: thiopental sodium (Sodium Pentathol) e. Non-Barbiturate: Prototype: propofol (Diprovan)		
		 3. Conscious Sedation a. Benzodiazepine: Prototype: midazolam (Versed) b. Narcotic: Prototype: fentanyl c. Neuroleptanalgesic: Prototype: fentanyl and droperidol 		
		E. Neuromuscular Blocking Agents 1. Prototype: succinylcholine (Anectine)		
		F. Skeletal Muscle Relaxant 1. Prototype: dantrolene sodium		
		 G. Prevention of Postoperative Complication: Deep Vein Thrombosis (DVT) and Pulmonary Embolism (PE) 1. Prototype: heparin sodium 2. Prototype: enoxaparin (Lovenox) 3. Prototype: warfarin sodium (Coumadin) 		
Week 8	Unit VI: Shock			
1 hour	I Itilizina tha musain -	A Pharmacalogic Management of Sheet		Exam
4/23/14	Utilizing the nursing process, develop a	A. Pharmacologic Management of Shock		Case Studies
	holistic, culturally sensitive medication plan of care for the client in shock.	a. Emergency pharmacologic management of shock considering causative factors and generic approach (hypovolemic, cardiogenic, septic, analphylactic, neurogenic)		
	Describe pharmacologic management and safe and	b. Prototype Drugs: i. Epinephrine		

WEEK HOURS	UNIT OBJECTIVES	CONTENT	SUGGESTED LEARNING EXPERIENCES	EVALUATION
	competent medication administration utilizing hospital based technology for the client in shock	ii. Consult Lehne, NUR 102 for further content development		
Week 8 1 hour 3/23/14	Unit VII: Pharmacological Management of Geriatric Clients Utilizing the nursing process, develop a holistic, culturally sensitive medication plan of care for the geriatric client. Utilize the nursing process, develop a holistic, culturally sensitive medication plan of care for the client with dementia, delirium, Alzheimer's or ADHD. Describe safe and competent medication administration, utilizing hospital based technology, for the geriatric client.	 A. Medications used for Cognitive Disorders Cholinesterase Inhibitors Prototype: donepezil hydrochloride (Aricept) 2. NMDA Receptor Antagonist Prototype: memantine hydrochloride (Namenda) B. Medications that Effect Bowel Functioning Laxatives Bulk Forming Laxatives: Prototype: psyllium (Metamucil) Surfactant Laxatives: Prototype: docusate sodium (Colace) Stimulant Laxatives: Prototype: bisacodyl sodium (Dulcolax) Osmotic Laxatives: Prototype: magnesium hydrochloride (Milk of Magnesia) Other Laxatives: Prototype: Lactulose 	Assigned Readings *Located in each unit folder Lecture Discussion Develop a pharmacological teaching plan for a geriatric client	Exam Case Studies
Week 9 1 hour 3/30/14	Unit VIII: Pharmacological Management of Clients with Orthopedic	A. Glucocorticoids 1. General Overview of Steroid Therapy 2. Types of Glucocorticoids	Assigned Readings *Located in each unit folder	Exam Case Studies

WEEK HOURS	UNIT OBJECTIVES	CONTENT	SUGGESTED LEARNING	EVALUATION
			EXPERIENCES	
	Disorders Utilizing the nursing process, develop a holistic, culturally sensitive medication plan of care for the pediatric client with THA, TKA, osteoarthritis, rheumatoid arthritis, PE or compartment syndrome. Describe safe and competent medication administration, utilizing hospital based technology, for the orthopedic client.	a. Short Acting 1). Prototype: hydrocortisone b. Intermediate Acting 1). Prototype: prednisone c. Long Acting 1) Prototype: betamethasone 2) Prototype: dexamethasone B. Non-Steroidal Anti-Inflammatory Drugs (NSAIDs) 1. First Generation NSAIDs a. Prototype: ibuprofen (Motrin b. Prototype: naproxen (Naprosyn) 2. Second Generation NSAIDs: COX-2 Inhibitors a. Prototype: celecoxib (Celebrex) C. Disease Modifying Antirheumatic Drugs (DMARDs) 1. Prototype: methotrexate (Rheumatrex) 2. Prototype: hydroxychloroquine (Plaquenil) 3. Prototype: cyclosporine (Neoral) 4. Prototype: gold salt 5. Prototype: etanercept (Enebrel)	Discussion	
Week 11 1 hour 4/13/14	Unit IX: Pharmacological Management of the Pediatric Client	A. Vaccinations across the Lifespan 1. Schedule of pediatric immunizations 2. Hepatitis B 3. Human Papilloma Virus (HPV) Pneumococcal Vaccine Haemophilus Influenzae Vaccine	Assigned Readings *Located in each unit folder Lecture Discussion	Exam Case Studies
	Utilizing the nursing process, develop a	(HIB) B. Medications used for Allergic Reactions	Discussion	

WEEK HOURS	UNIT OBJECTIVES	CONTENT	SUGGESTED LEARNING EXPERIENCES	EVALUATION
	holistic, culturally sensitive medication plan of care for the pediatric client. Describe safe and competent medication administration, utilizing hospital based technology, for the pediatric client.	Antihistamines a. 1 st generation: Prototype: diphenhydramine (Benedryl) b. 2 nd generation: Prototype: loratadine (Claritin) c. 3 rd generation: Prototype: fexofenadine hydrochloride (Allegra) 2. Epinephrine		
Week 12 1 hour 4/20/14	Unit X: Pharmacological Management of Clients with Genito-Urinary Disorders Utilizing the nursing process, develop a holistic, culturally sensitive medication plan of care for the client with UTIs, kidney surgery or BPH. Describe safe and competent medication administration, utilizing hospital based technology, for the GU client.	 A. Medications used for Urinary Incontinence 1. Prototype: oxybutynin B. Medications used for Benign Prostatic Hypertrophy 2. Prototype: tamulosin (Flomax) (Ditropan) 	Assigned Readings *Located in each unit folder Lecture Discussion	Exam Case Studies
Week 12 1 hour 4/20/14	Unit XI: Pharmacological Management of Clients Using Contraception and Gynecological	A. Contraception: Compare and Contrast non-pharmacological and pharmacological methods of contraception 1. Pharmacologic Methods: Medications used for	Assigned Readings *Located in each unit folder Lecture	Exam Case Studies

WEEK	UNIT OBJECTIVES	CONTENT	SUGGESTED	EVALUATION
HOURS			LEARNING	
	Digardorg	Contragantian	EXPERIENCES	
	Disorders 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).	Contraception a) Combination Oral Contraceptive	Develop a pharmacological teaching plan for a gynecological client	
	Describe safe and competent medication administration, utilizing hospital based technology, for the gynecological client	Non-Pharmacologic Methods (1) Social, cultural and spiritual influences (2) abstinence, rhythm (3) Use of Non-oxynol 9 with condoms/diaphragm (4) Intrauterine Devices (IUD)		
		B. Hormone Replacement Therapy 1. Oral and Intravaginal Estrogens a. Prototype: conjugated estrogens, equine (Premarin) 2. Oral Combination Estrogen/Progesterone 3. Conjugated estrogens, equine/ medroxyprogesterone acetate (Prempro)		
Week 13 1 hour 4/28/14	Unit XII: Pharmacological Management for Clients with Anxiety and Child Psychiatric Disorders	A. Stimulant Medications 1. Prototype: methylphenidate (Ritalin) B. Anti-Anxiety Medications 1. Benzodiazepine a. Prototype: lorazepam	Assigned Readings *Located in each unit folder Lecture Discussion	Exam Case Studies

WEEK HOURS	UNIT OBJECTIVES	CONTENT	SUGGESTED LEARNING EXPERIENCES	EVALUATION
	Utilizing the nursing process, develop a holistic, culturally sensitive medication plan of care for the client with anxiety, development, attention deficit and eating disorders or substance abuse. Describe safe and competent medication administration, utilizing hospital based technology, for the child/ adolescent psychiatric client	(Ativan) 2. Atypical Anti-Anxiety a. Prototype: buspirone (BuSpar)		