**CONNECTICUT COMMUNITY COLLEGES NURSING PROGRAMS**

*Capital Community College, Gateway Community College, Naugatuck Valley Community College,*

*Northwestern CT Community College, Norwalk Community College, Three Rivers 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 credit

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 Student Learning Outcomes (SLOs)**

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. (as measured by quiz questions, discussion board assignments, case study assignments, and medication teaching plan)
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. (as measured by quiz questions, discussion board assignments, case study assignments, and medication teaching plan)
3. Describe safe and competent medication administration as it relates to clients with obstetrical, pediatric, geriatric, psychiatric, peri- operative, gynecological, genitourinary, and orthopedic conditions. (as measured by quiz questions, discussion board assignments, case study assignments, and medication teaching plan)
4. Develop a comprehensive pharmacological teaching plan for clients with obstetrical, pediatric, geriatric, psychiatric, peri- operative, gynecological, genitourinary, and /or orthopedic conditions. (as measured by quiz questions, discussion board assignments, case study assignments, and medication teaching plan)
5. Interpret cultural and individual awareness when tailoring drug therapy to clients with obstetrical, pediatric, geriatric, psychiatric, peri-operative, gynecological, genitourinary, and orthopedic conditions. (as measured by quiz questions, discussion board assignments, case study assignments, and medication teaching plan)
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. (as measured by quiz questions, discussion board assignments, case study assignments, and medication teaching plan)
7. Analyze the legal-ethical implications of medication administration related to clients with obstetrical, pediatric, geriatric, psychiatric, peri-operative, gynecological, genitourinary, and orthopedic conditions. (as measured by quiz questions, discussion board assignments, case study assignments, and medication teaching plan)
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. (as measured by quiz questions, discussion board assignments, case study assignments, and medication teaching plan)

**Welcome to the course:**

 I hope you will enjoy the freedom of taking a course on line.  All content is delivered in an on-line format. 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. **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 through messaging within the course. For questions other students might be interested in- there is a Course Question section in the Discussion Section. 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 scored as 0.  It is expected all students will submit their assignments responses through the Blackboard.  Work submitted after 23:59 on the due date is late.  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, MSN, RN, Professor

Course Coordinator

alamondy@trcc.commnet.edu

Office: C212

Phone & Voicemail:  860-215-9447

Nursing Lab Tutors:

Karen Amor, MSN, RN Educational Assistant

Office Phone: Nursing Lab

E-mail:  kamor@threerivers.edu

**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 to review module content.

**Methods of Instruction**

 Teaching modalities include on-line modules, power point, and case studies, medication teaching plans. Computerized programmed instruction and interactive learning tools are also used.  Blackboard is used as the learning management tool.

**Required Textbooks: (textbooks are used in subsequent courses)**

1. ATI RN Pharmacology for Nursing (6.0 edition) ATI Nursing 2013- This is available online from ATI.
2. A current drug handbook

**Recommended Text**

1. Buchum, J. & Rosenthal, L. Lehne’s Pharmacology for Nursing Care, with CD (9th edition) Saunders, 2016. ISBN 9780323321907

**Course Schedule and Sequencing of Content:**

Please refer to the course content outline attached for more detailed content information and learning activities. The sequence of content in N103 is synchronized with the content in N102 to enhance learning.

Complete ALL learning activities weekly found in the ATI website and Blackboard.

|  |  |  |
| --- | --- | --- |
| **WEEK** | **DATES** | **TOPIC** |
| 1 | 9/2-9/8/18 | OB/Neonatal Meds |
| 2 | 9/9-9/14/18 | Pain Meds |
| 3 | 9/16-9/22/18 | Meds for Infection |
| 4 | 9/23-10/6/18 | Anesthesia Meds |
| 5 | 10/7-10/13/18 | Meds for Anemia & Hypovolemia |
| 6 | 10/14-10/20/18 | Geriatric Meds |
| 7 | 10/21-10/27/18 | Musculoskeletal Meds |
| 8 | 10/28- 11/10/18 | Pediatrics Meds |
| 9 | 11/11-11/17/18 | Psych Meds |
| 10 | 11/18-11/24/18 | GU Meds |
| 11 | 11/25-12/1/18 | BC & GYN Meds |

**Methods of Evaluation:**

**Evaluation in Nursing 103 is via a one hundred (1000) point grading system.**

 **Introduction 1 x 20= 20**

 **Discussion Boards 5 x 50 pts each = 250**

 **“The Village” activities 6 x 50 pts each=300**

 **Drills/case studies/quizzes 11 x 30 pts each =330**

 **Medication teaching plan 1 x 100 pts = 100**

**See Gradeable activities in each module for assignments for that unit.**

**Discussion boards will be graded based on a rubric, should be about 250 words using APA format.**

**When completing a discussion board please bear in mind quality of the response is of greater importance than quantity. In order to get credit you must complete your post by 23:59 on due date.**

**Note: Questions pertaining to pertinent medications will be on the N102 exams.**

**To pass Nursing 103 a student must earn at least a 740 average in the course and complete the medication teaching plan.**

**Medication Teaching Plan Assignment** Submit the teaching plan found in the “assignment” section. Teaching plans are graded using the rubric listed on Blackboard. **Due date: Friday, 10/12/18 @ 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 740 average in the course and submit a written teaching plan.

-          **The Grading Formula for course:**

-          A    930-1000, A-   900-929

-          B+ 870-899, B    830-869, B- 800-829

-          C+ 770-799, C   740-769, C- 700-739

-          D+ 670-699, D   640-669

-          F     0-639

***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 and the TRCC Student Handbook for additional information.

**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.

**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 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.

**Digication Policy**

As a student, you will maintain an online learning portfolio using a TRCC designed template. Through this electronic tool, you can see your own growth in college-wide learning. It may even help you to find the major that is a match to you. You can keep this Digication account after graduation, too. A Three Rivers General Education Assessment Team will select random works and review them so that we can improve the college experience for all. Your name will not be attached to any of the assessment work; it is private. This tool will also be a “place” where you can connect your learning from the classroom, school, and life. Sometimes when you look at all of the work you have done and think about it, you learn something else. In Digication, you will be able to make other portfolios, too. It’s like a file cabinet with the ability to have multiple but separate files. What is exciting about the electronic tool is when you look inside you will see you are developing in new ways! Look at your class outline to see what assignments to post into the TRCC Template; you may post your own choices, too. Have fun in learning!

**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 disability that may influence your progress in this course, please meet with a Disability Service Provider (DSP) as soon as possible. (Before the course starts is best.) Please note that accommodations cannot be provided until you provide written authorization from a DSP. Contact Advising and Counseling Services at (860) 215-9017 for further information. Table below provides contact information for College Disability Service Providers.

|  |  |
| --- | --- |
| **College Disabilities Service Provider** |   |
| Matt Liscum, Counselor(860) 215-9265, Room A113  |  Learning Disabilities  ADD/ADHD  Autism Spectrum  Mental Health Disabilities  |   |
| Elizabeth Willcox, Advisor(860) 215-9289, Room A113 |  Medical Disabilities  Mobility Disabilities  Sensory Disability |

Please see the Three Rivers Community College Catalog for additional policies and information.

**BOARD OF REGENTS FOR HIGHTER EDUCATION AND CONNECTICUT STATE COLLEGES AND UNIVERSITIES POLICY REGARDING SEXUAL MISCONDUCT REPORTING, SUPPORT SERVICES AND PROCESSES POLICY**

**Statement of Policy for Public Act No. 14-11: An Act Concerning Sexual Assault, Stalking and Intimate Partner Violence on Campus:**

“The Board of Regents for Higher Education (BOR) in conjunction with the Connecticut State Colleges and Universities (CSCU) is committed to insuring that each member of every BOR governed college and university community has the opportunity to participate fully in the process of education free from acts of sexual misconduct, intimate partner violence and stalking. It is the intent of the BOR and each of its colleges or universities to provide safety, privacy and support to victims of sexual misconduct and intimate partner violence.”

**UNITED STATES DEPARTMENT OF EDUCATION AND OFFICE OF CIVIL RIGHTS TITLE IX STATEMENT OF POLICY:**

“Title IX of the Education Amendments of 1972 (Title IX) prohibits discrimination based on sex in education programs and activities in federally funded schools at all levels. If any part of a school district or college receives any Federal funds for any purpose, all of the operations of the district or college are covered by Title IX.

Title IX protects students, employees, applicants for admission and employment, and other persons from all forms of sex discrimination, including discrimination based on gender identity or failure to conform to stereotypical notions of masculinity or femininity. All students (as well as other persons) at recipient institutions are protected by Title IX – regardless of their sex, sexual orientation, gender identity, part-or full-time status, disability, race, or national origin-in all aspects of a recipient’s educational programs and activities.”

If any student experiences sexual misconduct or harassment, and/or racial or ethnic discrimination on Three Rivers Community College Campus, or fears for their safety from a threat while on campus, please contact Marie Krug, Title IX Coordinator:

 MKrug@trcc.commnet.edu

 Office C131

| **HOURS** | **UNIT SLOs** | **CONTENT** | **LEARNING ACTIVITIES** | **EVALUATION** |
| --- | --- | --- | --- | --- |
| **1.5 hour****ATI Module 8: Reproductive & GU Systems (related content)** **The Village: None yet** | **Unit 1: Pharmacological Management of the Obstetrical and Neonatal Patient*****At the completion of this unit, the student will be able to:*** Describe safe and competent medication administration, utilizing healthcare system technology, for the healthy neonate and the perinatal patient.Identify the nursing assessments /interventions/evaluation related to pharmacologic therapy for the healthy neonate and the perinatal patient.Describe the nursing implications related to the safe and competent administration of medications for the healthy neonate and the perinatal patient utilizing healthcare system technology.Utilizing the nursing process, develop a holistic, culturally sensitive medication plan of care for the healthy neonate and the perinatal patient. Include support systems and organizations that can provide assistance.Utilizing the nursing process, develop a medication teaching plan for the healthy neonate and the perinatal patient. Include support systems and organizations that can provide assistance. | 1. Medications that Affect Uterine functioning
2. Uterine Stimulants: Oxytocics
	1. Drug therapy that induces uterine contractions
		1. Oxytocin – oxytocin (Pitocin)
		2. Ergot alkaloids – methylergonovine (Methergine)
		3. Synthetic prostaglandin – dinoprostone (Cervidil)
	2. Drug therapy that stops uterine contractions
		1. Beta2-adrenergic agonists – terbutaline (Brethine)
3. Drug therapy to accelerate fetal lung maturity
4. Betamethasone (Celestone)
5. Routine medications administered to healthy neonates
	1. RhoGAM
	2. Vitamin K
	3. Erythromycin Eye Ointment
	4. Others
6. Drug therapy to prevent and treat seizures
7. Magnesium sulfate
8. Drug Therapy for Hypertension
9. Alpha/Beta Blockers
 | Complete the following ATI Online Modules: 1. **Reproductive & GU Systems**: Related Content in content areas I-IV; Summary; Drills and Case Study(ies)
2. **Cardiovascular:** Drug Therapy for Hypertension, Alpha/Beta Blockers, for content area V.

Complete the following Readings: ATI, RN Pharmacology for Nursing, Ed. 6.0: 1. Unit 7, Chapter 32, Medications Affecting Labor and Delivery
2. Unit 4, Chapter 20:
3. Alpha Adrenergic Blockers
4. Beta Adrenergic Blockers

Complete the related ATI PME Self TestsView YouTube videos on BB Learn addressing the administration of1. Vitamin K
2. Erythromycin ointment
 | ATI Learning Activitis & exam questions |
| **3 hours****ATI Module 11: Pain & Inflammation** **The Village : Sheila Weems: cancer pain** | **Unit 2: Perioperative Nursing, Pharmacological Management of Pain*****At the completion of this unit, the student will be able to:*** Describe safe and competent medication administration, utilizing healthcare system technology, for the patient in pain.Identify the nursing assessments /interventions/evaluation related to pharmacologic therapy for patients in pain.Describe the nursing implications related to the safe and competent administration of medications for patients in pain.Utilizing the nursing process, develop a holistic, culturally sensitive medication plan of care for the patient in pain. Include support systems and organizations that can provide assistance.Utilizing the nursing process, develop a medication teaching plan for patient in pain. Include support systems and organizations that can provide assistance. | 1. Introduction – definitions, A&P, common disorders
2. Drug therapy for pain
	* 1. Nonopioid analgesics
3. NSAIDs (COX-1 and COX-2 inhibitors) – aspirin, ibuprofen (Advil, Motrin)
4. NSAIDs (COX-2 inhibitor) – celecoxib (Celebrex)
5. Acetaminophen – acetaminophen (Tylenol)
6. Centrally acting nonopiods – tramadol (Ultram)
7. Opioid analgesics
8. Opioid agonists – morphine
9. Opioid agonist-antagonists – butorphanol, pentazocine (Talwin)
10. Opioid antagonists – naloxone
11. Drug therapy for inflammation
12. Uricosurics (fout) – allopurinol (Zyloprim)
13. Glucocorticoids – prednisone
 | Complete the following ATI Online Modules: 1. **Pain and Inflammation**: Related Content in content areas I-III; Summary; Drills and Case Study(ies)

Complete the following Readings: ATI, RN Pharmacology for Nursing, Ed. 6.0: 1. Unit 9, Chapters 35-38, Medications for Pain and Inflammation

Complete the related ATI PME Self TestsComplete the following case studies in *The Village:***Sheila Weems: cancer pain** | ATI Learning Activitis & exam questions |
| **1.5 hour****ATI Module 12: Infection** **The Village: none available** | **Unit 3: Perioperative Nursing, Pharmacological Management of Infection*****At the completion of this unit, the student will be able to:*** Describe safe and competent medication administration, utilizing healthcare system technology, for patients requiring prophylaxis or pharmacological management of infection. Identify the nursing assessments /interventions/evaluation for patients requiring prophylaxis or pharmacological management of infection. Describe the nursing implications related to the safe and competent administration of medications for patients requiring prophylaxis or pharmacological management of infection. Utilizing the nursing process, develop a holistic, culturally sensitive medication plan of care for patients requiring prophylaxis or pharmacological management of infection. Include support systems and organizations that can provide assistance.Utilizing the nursing process, develop a medication teaching plan for patients requiring prophylaxis or pharmacological management of infection. Include support systems and organizations that can provide assistance. | 1. Introduction – definitions, A&P, common disorders
2. Drug therapy for bacterial infections
3. Drugs that interfere with cell wall synthesis
	1. Penicillins – amoxicillin (Amoxil), amoxicillin and clavulanic acid (Augmentin)
	2. Cephalosporins – cephalexin (Keflex)
	3. Monobactams – aztreonam (Azactam)
	4. Carbapenem – imipenem and cilastatin (Primaxin)
	5. Vancomycin – vancomycin (Vancocin)
4. Antibiotics that inhibit protein synthesis
	1. Tetracyclines – tetracycline
	2. Macrolides – erythromycin
	3. Aminoglycosides – gentamicin
5. Drugs that inhibit DNA replication or cell division
	1. Fluoroquinolones – ciprofloxacin (Cipro)
6. Drug therapy for urinary tract and other bacterial infections
	1. Drugs that inhibit folic acid synthesis
	2. Sulfonamides – trimethoprim and sulfamethoxazole (Bactrim, Septra)
	3. Urinary tract antiseptics – nitrofurantoin (Macrodantin)
7. Drug therapy for tuberculosis: Antimicobacterials
	1. Isoniazid (INH, Nydrazid-IM form),
	2. Rifampin (Rifadin)
8. Drug therapy for parasitic infections: Antiparasitics
	1. metronidazole (Flagyl)
	2. chloroquine (Aralen)
9. Drug therapy for fungal infections: Antifungals
	1. Polyene antibiotics – amphotericin B (Fungizone)
	2. Azoles – ketoconazole
10. Drug therapy for viral infections: Antivirals
	* + 1. acyclovir (Zovirax)
 | Complete the following ATI Online Modules: 1. **Infection**: complete entire module; Summary; Drills and Case Study(ies)

Complete the following Readings: ATI, RN Pharmacology for Nursing, Ed. 6.0: 1. Unit 12, Mediations for Infection, Chapters 43-48

Complete the related ATI PME Self Tests | ATI Learning Activitis & exam questions |
| **1 hour****ATI Module 3: Musculoskeletal System (related content)****ATI Module 6: Hematology (related content)****ATI Module7: Gastrointestinal (related content)****The Village: Barbara Jameson** | **Unit 4: Perioperative Nursing, Drug Therapy that supports Anesthesia** ***At the completion of this unit, the student will be able to:*** Describe safe and competent medication administration, utilizing healthcare system technology, for patients requiring anesthetic management. Identify the nursing assessments /interventions/evaluation for patients requiring anesthetic management. Describe the nursing implications related to the safe and competent administration of medications for patients requiring anesthetic management. Utilizing the nursing process, develop a holistic, culturally sensitive medication plan of care for patients requiring anesthetic management. Include support systems and organizations that can provide assistance.Utilizing the nursing process, develop a medication teaching plan for patients requiring anesthetic management. Include support systems and organizations that can provide assistance. | I. Drug therapy that supports anesthesia * + 1. Local anesthesia – lidocaine (Xylocaine)
		2. General anesthesia: Intravenous Anesthetics:
1. Barbiturates: sodium thiopental (Pentothal)
2. Others: Diprivan (Propofol)
3. Opioids: Sublimaze (fentanyl)
	* 1. General anesthesia/ benzodiazepine-midazolam (Versed)

II. Drugs with neuromuscular blocking effects1. Neuromuscular blocking agents – succinylcholine (Anectine)

III. Drug therapy for nausea1. Serotonin antagonists – ondansetron (Zofran)
2. Antihistamines – dimenhydrinate
3. Prokinetic – metoclopramide (Reglan)

IV. The Hematologic System: Introduction – definitions, A&P, common disordersV. Drug therapy to prevent and dissolve thrombi* 1. Anticoagulants
1. Factor Xa and thrombin inhibitor – heparin
2. Factor Xa inhibitor – enoxaparin (Lovenox)
3. Vitamin K inhibitor – warfarin (Coumadin)
4. Antiplatelets
5. Salicylics – aspirin (Ecotrin)
6. ADP Inhibitors – clopidogrel (Plavix)
7. Thrombolytics – alteplase (Activase)
 | Complete the following ATI Online Modules: 1. **Neurological System**, Part 1, Drug Therapy that Supports Anesthesia
2. **Musculoskeletal System**, Drugs with Neuromuscular blocking effects
3. **The Gastrointestinal System**, Drug Therapy for Nausea
4. **The Hematologic System**, Introduction, Drug Therapy to Prevent and Dissolve Thrombi

Complete the following Readings: ATI, RN Pharmacology for Nursing, Ed. 6.0: 1. Unit 2, Medications Affecting the Nervous System, Chapter 15, Neuromuscular Blocking Agents
2. Unit 2, Medications Affecting the Nervous System, Chapter 16, Sedative-Hypnotics, Intravenous Anesthetics
3. Unit 6, Medications Affecting the Gastrointestinal System and Nutrition, Chapter 29, Anti Emetics
4. Unit 5, Medications Affecting the Hematologic System, Chapter 25, Medications Affecting Coagulation

Complete the related ATI PME Self TestsComplete the following case studies in *The Village:***Barbara Jameson**  | ATI Learning Activitis & exam questions |
| **2 hours****ATI Module 6: Hematologic System (related content)****ATI Module 1:****Introduction to Pharmacology (related content)****ATI Module 4: Respiratory** **ATI Module 5: Cardiovascular****The Village : none available** | **Unit 5: Perioperative Nursing, Pharmacological Management of Anemia and Hypovolemia** ***At the completion of this unit, the student will be able to:*** Describe safe and competent medication administration, utilizing healthcare system technology, for patients with anemia.Identify the nursing assessments /interventions/evaluation related to pharmacologic therapy for patients with anemia. Describe the nursing implications related to the safe and competent administration of medications for patients with anemia.Utilizing the nursing process, develop a holistic, culturally sensitive medication plan of care for patients with anemia. Include support systems and organizations that can provide assistance.Utilizing the nursing process, develop a medication teaching plan for patients with anemia. Include support systems and organizations that can provide assistance.Describe pharmacological management of patients with hypovolemia, particularly as a result of surgical intervention.  | 1. Introduction – definitions, A&P, common disorders
2. Drug therapy for anemia
3. Iron deficiency anemia – iron preparations – ferrous sulfate (Feosol), iron dextran (INFeD)
4. Pernicious anemia – vitamin B12, cyanocobalamin (Nascobal, Cyanoject)
5. Megaloblastic (macrocytic) anemia – folic acid
6. Drug therapy the supports hematopoiesis
7. Erythropoietic growth factor – epoetin alpha (Epogen, Procrit)
8. Leukopoietic growth factor – filgrastim (Neupogen)
9. Thrombopoietic growth factors – oprelvekin (Neumega)
10. Overview of pharmacologic management of hypovolemic and anaphylactic shock
11. Related nursing implications
12. Interdisciplinary patient management
13. Drug Prototypes used:
	* + 1. Desmopressin
			2. Dopamine
 | Complete the following ATI Online Modules: 1. **The Hematologic System**, Drug Therapy for Anemia; Summary, Drills, Case Study(ies)
2. **Introduction to Pharmacology**, Side Effects and Adverse Reactions, Anaphylactic Shock
3. **Respiratory System,** Sympathomimetics (prototype: Phenylephrine)
4. **Cardiovascular System,** Sympathomimetics, (prototype: Dopamine)
5. **Hematologic System**: Desmopressin

Complete the following Readings: ATI, RN Pharmacology for Nursing, Ed. 6.0: 1. Unit 5, Medications Affecting the Hematologic System, Chapter 26, Growth Factors

Complete the related ATI PME Self Tests | ATI Learning Activitis & exam questions |
| **1 hour****ATI Module 7: The GI System** **(related content)****ATI Module 2: Neuro System Part 1** **(related content)****The Village : Charlotte Weems** | **Unit 6: Pharmacological Management of Geriatric Patients and those with Alzheimers Disease and Constipation** ***At the completion of this unit, the student will be able to:*** Describe safe and competent medication administration, utilizing healthcare system technology, for patients with: 1. Alzheimer’s Disease
2. Constipation

Identify the nursing assessments /interventions/evaluation related to pharmacologic therapy for patients with:1. Alzheimer’s Disease
2. Constipation

 Describe the nursing implications related to the safe and competent administration of medications for patients with:1. Alzheimer’s Disease
2. Constipation

Utilizing the nursing process, develop a holistic, culturally sensitive medication plan of care for patients with:1. Alzheimer’s Disease
2. Constipation

Include support systems and organizations that can provide assistance.Utilizing the nursing process, develop a holistic, culturally sensitive medication plan of care for the geriatric patient, focusing upon those with Alzheimer’s Disease and Constipation. Include support systems and organizations that can provide assistance.Utilizing the nursing process, develop a medication teaching plan for the geriatric patient, focusing upon those with Alzheimer’s Disease and Constipation. Include support systems and organizations that can provide assistance. | 1. Drugs that Treat Alzheimer’s Disease
2. Cholinesterase Inhibitors
	1. Protype/Other Drugs
	2. Expected Pharmacologic Action
	3. Side/Adverse Effects
	4. Interventions
	5. Administration
	6. Patient Instructions
	7. Contraindications/Precautions
	8. Interactions
3. NMDA Receptor Antagonist (**N-methyl-D-aspartate receptor)**
	1. Protype/Other Drugs
	2. Expected Pharmacologic Action
	3. Side/Adverse Effects
	4. Interventions
	5. Administration
	6. Patient Instructions
	7. Contraindications/Precautions
	8. Interactions

II. Drug therapy for constipation* 1. Fiber supplements – psyllium (Metamucil)
	2. Stool softeners – docusate sodium (Colace), docusate sodium and senna (Peri-Colace)
	3. Stimulant laxatives – bisacodyl (Dulcolax)
 | Complete the following ATI Online Modules: 1. **Neurological System, Part 1, Drug Therapy for Alzheimer’s Disease**
2. **The Gastrointestinal System, Introduction and Drug Therapy for Constipation**

Complete the following Readings: ATI, RN Pharmacology for Nursing, Ed. 6.0: 1. Unit 2, Medications Affecting the Nervous System, Chapter 13 Chronic Neurologic Disorders, Cholinesterase Inhibitors
2. Unit 6, Medications Affecting the Gastrointestinal System and Nutrition, Chapter 29, Laxatives

Complete the related ATI PME Self TestsComplete the following case studies in *The Village:***Charlotte Weems** | ATI Learning Activitis & exam questions |
| **1 hour****ATI Module 3: Musculoskeletal System** **(related content)****ATI Module 11: Pain & Inflammation** **(related content)****The Village : The Crosby Family** | **Unit 7: Pharmacological Management of Patients with Musculoskeletal Disorders*****At the completion of this unit, the student will be able to:*** Describe safe and competent medication administration, utilizing healthcare system technology, for patients with musculoskeletal disorders.Identify the nursing assessments /interventions/evaluation related to pharmacologic therapy for patients with musculoskeletal disorders. Describe the nursing implications related to the safe and competent administration of medications for patients with musculoskeletal disorders.Utilizing the nursing process, develop a holistic, culturally sensitive medication plan of care for patients with musculoskeletal disorders. Include support systems and organizations that can provide assistance.Utilizing the nursing process, develop a medication teaching plan for patients with musculoskeletal disorders. Include support systems and organizations that can provide assistance. | 1. Introduction – definitions, A&P, common disorders
2. Drug therapy for rheumatoid arthritis
	1. DMARD I – methotrexate
	2. DMARD II – etanercept (Enbrel)
3. Drug therapy for osteoporosis
	1. SERMs – raloxifene (Evista)
	2. Bisphosphonates – alendronate (Fosamax)
	3. Calcitonin – calcitonin-salmon (Miacalcin)
	4. Calcium supplements – calcium citrate (Citracal), calcium carbonate (Tums)
4. Drug therapy for inflammation
	1. Glucocorticoids – prednisone
 | Complete the following ATI Online Modules: 1. **The Musculoskeletal System:** Drug Therapy for Rheumatoid Arthritis, Osteoporosis
2. **Pain and Inflammation:** Review Drug Therapy for Inflammation, Glucocorticoids

Complete the following Readings: ATI, RN Pharmacology for Nursing, Ed. 6.0: 1. Unit 8, Medications for Joint and Bone Conditions, Chapters 33 and 34

Complete the related ATI PME Self TestsComplete the following case studies in *The Village:***The Crosby Family** | ATI Learning Activitis & exam questions |
| **0.75 hour****ATI Module 10: Immune System****(related content)****ATI Module 4: Respiratory System** **(related content)****The Village: None available** | **Unit 8: Pharmacological Management of the Pediatric Patient*****At the completion of this unit, the student will be able to:*** Describe safe and competent administration of vaccines throughout the lifespan utilizing healthcare system technology focusing upon the pediatric patient population.Identify the nursing assessments /interventions/evaluation related to pharmacologic therapy for patients requiring vaccination focusing upon the pediatric patient population. Describe the nursing implications related to the safe and competent administration of vaccinations, focusing upon the pediatric patient population.Utilizing the nursing process, develop a holistic, culturally sensitive medication plan of care for patients requiring vaccination focusing upon the pediatric patient population. Include support systems and organizations that can provide assistance.Discuss pharmacological management and nursing implications for management of upper respiratory disorders across the lifespan. Utilizing the nursing process, develop a medication teaching plan for patients requiring vaccination focusing upon the pediatric patient population. Include support systems and organizations that can provide assistance.Utilizing the nursing process, develop a medication teaching plan for patients requiring management of upper respiratory disorders across the lifespan. Include support systems and organizations that can provide assistance. | I. Immune System Introduction – definitions, A&P, common disordersII. Drug therapy to prevent disease* + 1. Childhood vaccines
	1. Adult and older adult vaccines

III. Drug therapy for upper respiratory disorders – allergic rhinitisA. H1-receptor antagonists * 1. Sedating antihistamines – diphenhydramine
	2. Non-sedating antihistamines – cetirizine (Zyrtec)
 | Complete the following ATI Online Modules: 1. Vaccinations: **Immune System:** Drug Therapy to Prevent Disease2. Allergic Reactions:**Respiratory System:** Sedating Antihistamines, Prototype: DiphenhydramineComplete the following Readings: ATI, RN Pharmacology for Nursing, Ed. 6.0: 1. Unit 11, Chapter 41
2. Unit 3, Chapter 18, Antihistamines

Complete the related ATI PME Self TestsVisit the Children’s Hospital of Philadelphia Vaccination Education Center at:<http://vec.chop.edu/service/vaccine-education-center/home.html> | ATI Learning Activitis & exam questions |
| **1. 25 hour****ATI Module 8: Reproductive & GU Systems (related content)****ATI Module 12: Infection** **(related content)****The Village: Jessie Weems** | **Unit 10: Pharmacological Management of Patients with Genitourinary Disorders*****At the completion of this unit, the student will be able to:*** Describe safe and competent medication administration, utilizing healthcare system technology, for patients with Genitourinary disorders such as:* 1. Hormone deficiencies
	2. Benign Prostatic Hypertrophy (BPH)
	3. Erectile Dysfunction
	4. Urinary Incontinence
	5. Urinary Retention
	6. Urinary Tract Infection

Identify the nursing assessments /interventions/evaluation related to pharmacologic therapy for patients with Genitourinary disorders such as:* 1. Hormone deficiencies
	2. Benign Prostatic Hypertrophy (BPH)
	3. Erectile Dysfunction
	4. Urinary Incontinence
	5. Urinary Retention
	6. Urinary Tract Infection

Describe the nursing implications related to the safe and competent administration of medications for patients with Genitourinary disorders such as:* 1. Hormone deficiencies
	2. Benign Prostatic Hypertrophy (BPH)
	3. Erectile Dysfunction
	4. Urinary Incontinence
	5. Urinary Retention
	6. Urinary Tract Infection

Utilizing the nursing process, develop a holistic, culturally sensitive medication plan of care for patients with Genitourinary disorders such as:* 1. Hormone deficiencies
	2. Benign Prostatic Hypertrophy (BPH)
	3. Erectile Dysfunction
	4. Urinary Incontinence
	5. Urinary Retention
	6. Urinary Tract Infection

Include support systems and organizations that can provide assistance.Utilizing the nursing process, develop a medication teaching plan for patients with Genitourinary disorders such as:* 1. Hormone deficiencies
	2. Benign Prostatic Hypertrophy (BPH)
	3. Erectile Dysfunction
	4. Urinary Incontinence
	5. Urinary Retention
	6. Urinary Tract Infection

Include support systems and organizations that can provide assistance. | I. Male reproductive drugsA. Drug therapy for replacement of androgens* + 1. Testosterone – testosterone (Androderm, Delatestryl)

B. Drug therapy for benign prostatic hypertrophy and outflow disorders1. 5-alpha reductase inhibitor – finasteride (Propecia, Proscar)
2. Alpha-adrenergic receptor antagonists – tamsulosin (Flomax)

C. Drug therapy for erectile dysfunction1. PDE5 inhibitor – sildenafil (Viagra)

II. Urinary tract drugs1. Drug therapy for urinary incontinence/over-active bladder
2. Anticholinergics – oxybutynin chloride (Ditropan)

B. Drug therapy for urinary retention* + 1. Cholinergics – bethanechol (Urecholine)

III. Drug therapy for urinary tract and other bacterial infections1. Drugs that inhibit folic acid synthesis
	* 1. Sulfonamides – trimethoprim and sulfamethoxazole (Bactrim, Septra)
		2. Urinary tract antiseptics – nitrofurantoin (Macrodantin)
 | Complete the following ATI Online Modules: 1. **The Reproductive & Genitourinary System**: Introduction, The Male Reproductive System and The Urinary Tract
2. **The Reproductive & Genitourinary System:** Male Reproductive Drugs
3. **Infection:** Drug Therapy for Urinary Tract and other bacterial infections

Complete the related ATI PME Self TestsComplete the following Readings: ATI, RN Pharmacology for Nursing, Ed. 6.0: 1. Unit 7, Medications Affecting the Reproductive System, Chapter 31: Androgens, 5-alpha reductase inhibitors; Alpha-adrenergic antagonists; Phosphodiesterase (PDE5) inhibitors 2. Unit 2, Medications Affecting the Nervous System, Chapter 15, Muscarinic Agonists, Muscarinic AntagonistsComplete the following case studies in *The Village:* **Jessie Weems** | ATI Learning Activitis & exam questions |
| **1 hour****ATI Module 8: Reproductive & GU Systems (related content)** **The Village: none** | **Unit 11: Pharmacological Management of Patients Using Contraception and those with Gynecological Disorders*****At the completion of this unit, the student will be able to:*** Describe safe and competent medication administration, utilizing healthcare system technology, for patients seeking contraception and for those with Gynecological disorders such as:* 1. Premenstrual Syndrome
	2. Menopausal Syndrome
	3. Infertility

Identify the nursing assessments /interventions/evaluation related to pharmacologic therapy for patients seeking contraception and for those with Gynecological disorders such as:* 1. Premenstrual Syndrome
	2. Menopausal Syndrome
	3. Infertility

Describe the nursing implications related to the safe and competent administration of medications for patients seeking contraception and for those with Gynecological disorders such as:* 1. Premenstrual Syndrome
	2. Menopausal Syndrome
	3. Infertility

Utilizing the nursing process, develop a holistic, culturally sensitive medication plan of care for patients seeking contraception and for those with Gynecological disorders such as:* 1. Premenstrual Syndrome
	2. Menopausal Syndrome
	3. Infertility

Include support systems and organizations that can provide assistance.Utilizing the nursing process, develop a medication teaching plan for patients seeking contraception and for those with Gynecological disorders such as:* 1. Premenstrual Syndrome
	2. Menopausal Syndrome
	3. Infertility

Include support systems and organizations that can provide assistance.  | 1. Introduction – definitions, A&P, common disorders

II. Female reproductive drugs1. Estrogen and progesterone hormones
	1. Drug therapy for contraception and premenstrual syndrome (PMS)
	2. Drug therapy for premenstrual syndrome (PMS)
	3. Drug therapy for menopause
2. Drug therapy for endometrial hyperplasia and endometriosis
3. Ovulation-related hormones: Drug therapy for infertility
 | Complete the following ATI Online Modules: * 1. **Reproductive & Genitourinary Systems:** content addressing I-II

Complete the following Readings: ATI, RN Pharmacology for Nursing, Ed. 6.0: 1. Unit 7, Chapter 31: Medications Affecting the Reproductive System, Chapter 32, Medications Affecting the Reproductive Tract

Complete the related ATI PME Self Tests |  |
| **1 hour****ATI Module 2: Neurological Pt. 2 (related content)****The Village: none** | **Unit 9: Pharmacological Management for Patients with Anxiety and Mood Disorders*****At the completion of this unit, the student will be able to:*** Describe safe and competent medication administration, utilizing healthcare system technology, for patients with mental health disorders such as:* 1. Anxiety
	2. Depression
	3. Bipolar disorder

Identify the nursing assessments /interventions/evaluation related to pharmacologic therapy for patients with mental health disorders such as:* 1. Anxiety
	2. Depression
	3. Bipolar disorder

Describe the nursing implications related to the safe and competent administration of medications for patients with mental health disorders such as:* 1. Anxiety
	2. Depression
	3. Bipolar disorder

Utilizing the nursing process, develop a holistic, culturally sensitive medication plan of care for patients with mental health disorders such as:* 1. Anxiety
	2. Depression
	3. Bipolar disorder

Include support systems and organizations that can provide assistance.Utilizing the nursing process, develop a medication teaching plan for patients with mental health disorders such as:* 1. Anxiety
	2. Depression
	3. Bipolar disorder

Include support systems and organizations that can provide assistance. | Introduction – definitions, A&P, common disordersPsychotherapeutic drugsDrug therapy for anxiety disordersBenzodiazepines – diazepam (Valium), alprazolam (Xanax)Non-benzodiazepines – buspironeDrug therapy for depressionTricyclic antidepressants – amitriptylineSSRIs – fluoxetine (Prozac)SNRIs – venlafaxineMAOIs – phenelzine (Nardil)Atypical antidepressants – bupropion HCL (Wellbutrin)C. Drug therapy for bipolar disorder Lithium – lithium carbonate (Lithobid)Antiepileptic drugs (AED) – valproic acid (Depakote) | Complete the following ATI Online Modules: 1. **Neurological System Part 2**: Introduction2**. Neurological System Part 2:** Psychotherapeutic Drugs, Drug Therapy for anxiety disorders3. **Neurological System Part 2:** Psychotherapeutic Drugs, Drug Therapy for depression4. **Neurological System Part 2:** Psychotherapeutic Drugs, Drug Therapy for bipolar disorderComplete the following Readings: ATI, RN Pharmacology for Nursing, Ed. 6.0: 1. Unit 2, Medications Affecting the Nervous System:a. Chapter 7, Anxiety Disordersb. Chapter 8, Depressive Disordersc. Chapter 9, Bipolar Disordersd. Chapter 16, Sedative-HypnoticsComplete the related ATI PME Self Tests | ATI Learning Activitis & exam questions |