

CAREER TECHNOLOGY CENTER OF LACKAWANNA COUNTY PRACTICAL NURSING PROGRAM

<u>Course Title:</u>	Pharmacology
<u>Description:</u>	Pharmacology will be introduced in Level II & integrated in every Medical-Surgical Nursing, Family Life & Nutrition course. In addition, special topics will be covered as part of planned clinical conferences
<u>Placements:</u>	Level II, III and IV
<u>Parallel Courses:</u>	Medical Surgical Nursing I, II, III, Family Life Cycle I, II, Nutrition, Nursing Skills II
<u>Total Hours:</u>	60.5
<u>Objectives:</u>	At the end of the level, the student will: <ol style="list-style-type: none">1. Utilize the nursing process in providing pharmacotherapy for the patient2. Demonstrate skills necessary to provide safe, effective nursing care when administering medications3. Effectively apply critical thinking & problem solving skills in making decisions about the plan of care for the patient receiving pharmacotherapy4. Communicate effectively with clients, families, faculty, & members of the healthcare team with regard to the patient receiving pharmacotherapy5. Demonstrate accountability when caring for the patient receiving pharmacotherapy6. Utilize educational opportunities for personal & professional growth in provision of care & health promotion of the patient receiving pharmacotherapy7. Demonstrate values, attitudes, & personal qualities reflecting a commitment to respect human dignity & individual rights
<u>Unit Outline:</u>	<p>Unit 1-Level II</p> <ol style="list-style-type: none">A. Medications used to combat infectionB. Analgesic medicationsC. Medications used in the treatment of disorders of the musculoskeletal systemD. Medications used in the treatment of disorders of the gastrointestinal systemE. Medications used in the treatment of disorders of the cardiovascular systemF. Medications related to nutrition <p>Unit 2-Level III</p> <ol style="list-style-type: none">A. Antineoplastic medicationsB. Psychotropic medicationsC. Medications used in the treatment of disorders of the neurological systemD. Medications used in the treatment of disorders of the urinary systemE. Anesthetic medicationsF. Medications for contraceptionG. Medications used for labor and birth <p>Unit 3-Level IV</p> <ol style="list-style-type: none">A. Medications related to chemical dependencyB. Childhood immunizationsC. Medications used in the treatment of disorders of the female reproductive systemD. Medications used in the treatment of disorders of the male reproductive systemE. Medicating the pediatric patientF. Medications used in the treatment of HIV/AIDSG. Medications used in the treatment of disorders of the respiratory systemH. Medications used in the treatment of disorders of the integumentary systemI. Medications used in the treatment of disorders of the endocrine systemJ. Medications used in the treatment of disorders of the sensory system
<u>Requirements:</u>	Brown/Mulholland , <u>Drug Calculations</u> Deglin, <u>Davis Drug Guide for Nurses</u> Williams, <u>Understanding Medical Surgical Nursing</u> Leifer Thompsons, <u>Introduction to Maternity & Pediatric Nursing</u> NCLEX Review Book

Evaluation Final average of 80% is the minimum passing grade. A satisfactory clinical evaluation is also required.
Students are responsible to bring a calculator to each test. The use of a cell phone calculator is not allowed. Each student must have his/her own calculator. No sharing will be allowed. The Drug Guide book is required when taking the Level III and Level IV final exams

Date: 9/16

PHARMACOLOGY CLINICAL CONFERENCES

Level II

- | | |
|---|---------|
| 1. Analgesic medications | 3 hours |
| 2. Medications used to combat infection | 3 hours |

Level III and Level IV

- | | |
|---|---------|
| 1. Anesthetic medications | 3 hours |
| 2. Medications related to chemical dependency | 4 hours |

Total 13 hours

Final Pharmacology Grade

Level II Grade:	Average of written quizzes and Final Exam
Level III Grade:	Average of written quizzes and Final Exam
Level IV Grade:	Average of written quizzes and Final Exam

Final Pharmacology Grade: Average of Level II, Level III & Level IV grades

Total Pharmacology Hours 60.5 hours

COURSE TITLE: Pharmacology

STUDENT OBJECTIVE	HR	CONTENT	LEARNING RESOURCE AND ACTIVITY	SETTING	EVALUATION
<p>The student will:</p> <p>Discuss indications, action, side effects & nursing implications for medications used to combat infection</p> <p>Discuss indications, action, side effects & nursing implications for analgesic medications</p> <p>Discuss indications, action, side effects & nursing implications for medications used in the treatment of disorders of the musculoskeletal system</p>	<p>3</p> <p>3</p> <p>2.5</p>	<p>Unit 1 Level II</p> <p>A. Medications used to combat infection:</p> <ul style="list-style-type: none"> • Antiseptics • Disinfectants • Antibacterials • Antivirals • Antifungals <p>B. Analgesic medications:</p> <ul style="list-style-type: none"> • Non-narcotic analgesics • Narcotic analgesics • NSAIDs • Patient-controlled analgesia • Epidural analgesia <p>C. Medications used in the treatment of disorders of the musculoskeletal system</p> <ul style="list-style-type: none"> • ASA • Non-narcotic analgesics • Narcotic analgesics • NSAIDs • Cox-2 inhibitors • Corticosteroids • Gold Salts/Anti-malarials • Disease modifying anti-rheumatics 	<p>Deglin Brown/Mulholland Williams</p> <p>Lecture Discussion Handouts</p> <p>Integrated</p>	<p>Classroom</p> <p>Conference</p> <p>Conference</p>	<p>Written Quiz</p> <p>Written Quiz</p>

COURSE TITLE: Pharmacology

STUDENT OBJECTIVE	HR	CONTENT	LEARNING RESOURCE AND ACTIVITY	SETTING	EVALUATION
Discuss indications, action, side effects & nursing implications for medications used in the treatment of disorders of the cardiovascular system	4.5	D. Medications used in the treatment of disorders of the cardiovascular system <ul style="list-style-type: none"> • Inotropics • Anti-dysrhythmics • Vasopressors • Vasodilators • Antihypertensives • Anticoagulants • Antiplatelets • Thrombolytics • Hematinics • Antilipids 	Deglin Brown/Mulholland Williams <ul style="list-style-type: none"> • Lecture • Discussion • Handouts Integrated	Clinical Conference Classroom	
Discuss indications, action, side effects & nursing implications for medications used in the treatment of disorders of the gastrointestinal system	2.5	E. Medications used in the treatment of disorders of the gastrointestinal system <ul style="list-style-type: none"> • Antacids • Antiemetics • Laxatives • Antidiarrheals • Antiulcers 	Integrated		
Discuss indications, action, side effects & nursing implications for medications related to nutrition	2.5	F. Medications related to nutrition <ul style="list-style-type: none"> • Water soluble vitamins • Fat soluble vitamins • Macrominerals • Microminerals 	Integrated		Final Exam Unit 1 End of Level II

COURSE TITLE: Pharmacology

STUDENT OBJECTIVE	HR	CONTENT	LEARNING RESOURCE AND ACTIVITY	SETTING	EVALUATION
<p>The student will:</p> <p>Discuss indications, action, side effects & nursing implications for antineoplastic medications</p> <p>Discuss indications, action, side effects & nursing implications for psychotropic medications</p> <p>Discuss indications, action, side effects & nursing implications for medications used in the treatment of disorders of the neurological system</p>	<p>3.5</p> <p>3</p> <p>4</p>	<p>Unit 2 Level III</p> <p>A. Antineoplastic medications</p> <ul style="list-style-type: none"> • Alkylating agents • Antibiotics • Antimetabolites • Enzymes • Enzyme inhibitors • Estrogen blockers • Hormones • Hormone-aromatase inhibitors • Immune modifiers • Vinca alkaloids • Miscellaneous <p>B. Psychotropic medications</p> <ul style="list-style-type: none"> • Anti-anxiety • Anti-depressant • Anti-manic • Anti-psychotic <p>C. Medications used in the treatment of disorders of the neurological system</p> <ul style="list-style-type: none"> • Anti-seizure agents • Anti-Parkinson agents • Cholinergics • Corticosteroids • Osmotic diuretics • Thrombolytics • Vascular headache suppressants • Anti-platelet agents • Anticoagulants • Immunosuppressants • Immunomodulators • Antispasmodics 	<p>Deglin Brown/Mulholland Williams</p> <p>Lecture Discussion Handouts</p> <p>Integrated</p> <p>Integrated</p> <p>Integrated</p>	<p>Classroom</p>	<p>Written Quiz (Neuro meds)</p>

COURSE TITLE: Pharmacology

STUDENT OBJECTIVE	HR	CONTENT	LEARNING RESOURCE AND ACTIVITY	SETTING	EVALUATION
Discuss indications, action, side effects & nursing implications for medications used in the treatment of disorders of the urinary system	2	D. Medications used in the treatment of disorders of the urinary system <ul style="list-style-type: none"> • Diuretics • Electrolytes • Urinary Tract analgesics • Antiseptics • Anti-infectives 	Deglin Brown/Mulholland Williams Lecture Discussion Handouts Integrated	Classroom	Written Quiz (Uro meds)
Discuss indications, action, side effects & nursing implications for anesthetic medications	3.5	E. Anesthetic medications <ul style="list-style-type: none"> • Pre-operative medications • Intra-operative medications <ol style="list-style-type: none"> a. regional anesthesia b. general anesthesia 	Integrated		
Discuss indications, action, side effects & nursing implications for medications that affect the reproductive cycle	1.5	F. Medications used for contraception <ul style="list-style-type: none"> • Hormonal • Spermicides 	Integrated		
Discuss indications, action, side effects & nursing implications for medications used during labor & birth	2.5	G. Medications used for labor & birth <ul style="list-style-type: none"> • Tocolytics • Oxytocics • Prostaglandins 	Integrated		
					Final Exam Unit 2 End of Level III

COURSE TITLE: Pharmacology

STUDENT OBJECTIVE	HR	CONTENT	LEARNING RESOURCE AND ACTIVITY	SETTING	EVALUATION
<p>The student will:</p> <p>Discuss medications related to chemical dependency</p> <p>Discuss indications, action, side effects & nursing implications for childhood immunizations</p> <p>Discuss indications, action, side effects & nursing implications for medications used in the treatment of disorders of the female reproductive system</p>	<p>4.5</p> <p>1.5</p> <p>2</p>	<p>Unit 3 Level IV</p> <p>A. Medications related to chemical dependency</p> <ul style="list-style-type: none"> • dependency on prescription medications • dependency on illegal drugs • dependency on alcohol <p>B. Childhood Immunizations</p> <p>C. Medications used in the treatment of disorders of the female reproductive system</p> <ul style="list-style-type: none"> • Ovulation inducing agents • Anti- infectives • Hormones • Corticosteroids • Abortofacients • Emetics • Clotting factors 	<p>Deglin Brown/Mulholland Williams</p> <p>Lecture Discussion Handouts</p> <p>Integrated</p> <p>Integrated</p> <p>Integrated</p>	<p>Conference</p> <p>Tour Marworth Chemical Dependency Treatment Facility</p>	<p>Written Quiz (Chemical Dependency)</p>

COURSE TITLE: Pharmacology

STUDENT OBJECTIVE	HR	CONTENT	LEARNING RESOURCE AND ACTIVITY	SETTING	EVALUATION
Discuss indications, action, side effects & nursing implications for medications used in the treatment of disorders of the male reproductive system	2	D. Medications used in the treatment of disorders of the male reproductive system <ul style="list-style-type: none"> • Anti-infectives • Meds used to treat cancer of the male reproductive system • Meds used to treat Benign Prostatic Hypertrophy • Meds used to treat Erectile Dysfunction 	Deglin Brown/Mulholland Williams Lecture Discussion Integrated	Classroom	
Discuss guidelines for medicating the pediatric patient	3	E. Medicating the pediatric patient <ul style="list-style-type: none"> • Special considerations, physiological differences • Appropriate dosage & calculations • Guidelines 	Integrated		
Discuss indications, action, side effects & nursing implications for medications used in the treatment of HIV/AIDS	1.5	F. Medications used to treat the patient with HIV/AIDS <ul style="list-style-type: none"> • Nonnucleoside reverse transcriptase inhibitors • Nucleoside/nucleotide reverse transcriptase inhibits • Highly active antiretroviral therapy • Protease inhibitors • Fusion inhibitos • Integase inhibitors 	Integrated		

COURSE TITLE: Pharmacology

STUDENT OBJECTIVE	HR	CONTENT	LEARNING RESOURCE AND ACTIVITY	SETTING	EVALUATION
Discuss indications, action, side effects & nursing implications for medications used in the treatment of disorders of the respiratory system	2.5	G. Medications used in the treatment of disorders of the respiratory system <ul style="list-style-type: none"> • Oxygen • Antihistamines • Decongestants • Antitussives • Expectorants/Mucolytics • Bronchodilators • Anti-infectives • Anti-inflammatory agents • Antileukotrine agents • Corticosteroids 	Deglin Brown/Mulholland Williams Lecture Discussion Handout Integrated	Classroom	Written Quiz (Resp meds)

COURSE TITLE: Pharmacology

STUDENT OBJECTIVE	HR	CONTENT	LEARNING RESOURCE AND ACTIVITY	SETTING	EVALUATION
Discuss indications, action, side effects & nursing implications for medications used in the treatment of disorders of the integumentary system	1.5	H. Medications used in the treatment of disorders of the integumentary system <ul style="list-style-type: none"> • Corticosteroids • Keratolytics • Coal Tar Agents • Topical Anti-infectives • Pediculicides • Anti-fungals 	Deglin Brown/Mulholland Williams Lecture Discussion Handouts Self Study Integrated	Classroom	
Discuss indications, action, side effects & nursing implications for medications used in the treatment of disorders of the endocrine system	2.5	I. Medications used in the treatment of disorders of the endocrine system <ul style="list-style-type: none"> • Hormones • Anti-thyroid agents • Corticosteroids • Anti-diabetic agents 	Integrated		Written Quiz (Endo meds)
Discuss indications, action, side effects & nursing implications for medications used in the treatment of disorders of the sensory system	1.5	J. Medications used in the treatment of disorders of the sensory system <ul style="list-style-type: none"> • Anticholinergics • Cholinergics • Anti-glaucoma agents • Ophthalmic corticosteroids • Ophthalmic anti-infectives • Ophthalmic beta-andrenergic blockers • Miotics • Mydriatics 	Integrated		Written Quiz (Sensory meds) Final Exam Unit 3 End of Level IV

Bibliography

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