Course Name: Pharmacology A
Effective Date: September 2019
School/Centre: Health Sciences
Department: Access to Practical Nursing(5017)
Banner Course Name: Pharmacology A
Subject Code: NURS - Nursing
Course Number 2105
Year of Study 1st Year Post-secondary
Credits: 2
Course Description: This course examines the principles of pharmacology required to administer medications in a safe and professional manner. Medication administration requires the application of the nursing process for clinical decision-making. The various routes of medication administration are introduced. Complementary, Indigenous, alternative remedies, and polypharmacy across the lifespan are explored. The learners will gain an understanding of pharmacology and medication administration across the lifespan. Also included are the topics of substance abuse and addiction.

Course Pre-Requisites (if applicable): Admission to the Access to Practical Nursing Program

Course Co-requisites (if applicable): NURS 2101 - Professional Communication A; NURS 2102 - Professional Practice A; NURS 2103 - Health Promotion A; NURS 2104 - Variations in Health A; NURS 2106 - Integrated Nursing Practice A

PLAR (Prior Learning Assessment & Recognition) No
Course Learning Outcomes (CLO):

Upon successful completion of this course, students will be able to:

CLO #1 Describe the responsibility of the Practical Nurse (PN) in administration of medication.

CLO #2 Explain how drug standards and the drug legislation affect drug regulation in Canada.

CLO #3 Explain the purpose of the Canadian drug laws and their application to nursing practice.

CLO #4 Describe the concepts of pharmacodynamics and pharmacokinetics.

CLO #5 Identify basic terminology used in pharmacology.

CLO #6 Describe the principles of pharmacology as related to common drug actions and interactions.

CLO #7 Demonstrate competency with basic mathematical drug calculations.

CLO #8 Identify commonly used drug classification systems in Canada.

CLO #9 Explain the principles of medication administration.

CLO #10 Describe the routes of medication administration.

CLO #11 Apply the nursing process as it relates to medication administration.

CLO #12 Identify classes of medications used to treat specific disorders/illness.

CLO #13 Identify complementary, Indigenous and alternative therapies.

CLO #14 Describe medication classifications, actions, interactions and nursing implications relative to body systems including: endocrine, neurological, cardiovascular, respiratory, gastrointestinal, genitourinary, musculoskeletal systems, and miscellaneous drug classifications.

CLO #15 Describe the effects, uses and indications for antimicrobials, and the relationship to drug resistance.

CLO #16 Relate drug interactions, polypharmacy, and food/drug affects to medication used across the lifespan, particularly the older adult.

CLO #17 Relate theoretical understanding of narcotic side effects, indications for use and legal responsibilities.

CLO #18 Describe the potential interaction of complementary, Indigenous and herbal preparations with prescription medications.
Upon successful completion of this course, students will be able to:

Consider the roles of other health care providers in determining one’s own professional and interprofessional roles related to complementary and prescription medication ordering, processing, dispensing, administration and monitoring.

Instructional Strategies:
Course guides provide direction of learning in preparation, in course activities and reflection of the content. The instructor acts as facilitator and expert to promote an environment conducive for learning through activities such as guided discussion, debate, audio-visual presentation, group activities, online activities, skill building exercises and simulation.

Evaluation and Grading

Grading System:
Satisfactory/Unsatisfactory
Passing grade:
Satisfactory Math S=100% Theory S=80%

Evaluation Plan:

<table>
<thead>
<tr>
<th>Type</th>
<th>Percentage</th>
<th>Brief description of assessment activity</th>
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</thead>
<tbody>
<tr>
<td>Quizzes/Tests</td>
<td>65%</td>
<td>Quizzes x 3</td>
</tr>
<tr>
<td>Exam</td>
<td></td>
<td>Math skills assessment- 100% required, 3 attempts given, different exam each attempt</td>
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<tr>
<td>Final Exam</td>
<td>35%</td>
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Hours by Learning Environment Type

Lecture, Seminar, Online
60
Lab, Clinical, Shop, Kitchen, Studio, Simulation

Practicum

Self Paced / Individual Learning

Course Topics

Course Topics:
Introduction to Pharmacology: The PN role and legal responsibilities of medication administration; Pharmacodynamics; Pharmacokinetics; Drug actions and interactions; Drug classifications according to body systems; Principles of medication administration; Drug distribution systems; Basic terminology used in pharmacology
Nursing Process and Pharmacology
Routes of Medication Administration: Oral; Rectal; Topical; Parenteral; Percutaneous
Course Topics:
Introduction to complementary, Indigenous and traditional healing alternatives: Vitamin Supplements; Herbal Preparations; Homeopathy;
Basic medication dosage calculations
Polypharmacy across the lifespan
Drug Classifications according to body systems: Endocrine, Nervous, Cardiovascular, Respiratory, Gastrointestinal, Genitourinary, Musculoskeletal and Sensory systems
Miscellaneous drug classifications (antineoplastics); Antimicrobial agents; drug resistance
Interactions of complementary and alternative healing remedies with prescription medications

Program and course contents and descriptions, offerings and schedules are subject to change without notice.

Resource Material(s):
Resources are items in addition to tuition that the student is responsible for purchasing. Course resource information will be supplied by the department/instructor.

VCC Education and Education Support Policies
There are a number of Education and Education Support policies that govern your educational experience at VCC, please familiarize yourself with them.
The policies are located on the VCC web site at https://www.vcc.ca/about/governance--policies/policies.

To find out how this course transfers, visit the BC Transfer Guide at https://www.bctransferguide.ca.

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Downtown campus
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