



A POLYTECHNIC INSTITUTION

School of Health Sciences  
Bachelor of Science in Nursing

**NURS 1063**  
**Pharmacology 1**

<b>Start Date:</b>	October 2, 2009	<b>End Date:</b>	December 11, 2009
<b>Total Hours:</b>	18	<b>Total Weeks:</b>	9
<b>Hours/Week:</b>	2	<b>On-line:</b>	2
		<b>Term/Level:</b>	1
		<b>Course Credits:</b>	1

**Co requisites:**

Course No.	Course Name
NURS 1030	Nursing Practicum 1

**NURS 1063 is a prerequisite for:**

Course No.	Course Name
NURS 1064	Pharmacology 2

■ **Course Description**

This course presents introductory concepts and principles related to pharmacology. Drug classifications will be presented to assist the learners to appreciate the scope of pharmacological treatment and to sort, categorize and retrieve information about selected drugs. This course presents a rationale for understanding current drug therapy by focusing on the principles of nursing management in drug therapy along with the basics of core drug knowledge and patient related variables. This course also introduces students to on-line learning and interaction and assists students to improve computer literacy skills required for clinical practice. Course content reviews professional nursing and medication administration, adverse effects and drug interactions, geriatric pharmacotherapeutics, autonomic nervous system drugs, renal drugs and cardiac drugs.

■ **Evaluation**

On-line Participation	20 %
On-line Quizzes	10 %
Case Study	20 %
Final Exam	50 %
<b>Total</b>	<b>100 %</b>

**Comments:**

To successfully complete this course, the student must:

1. Actively participate in on-line discussions.
2. Complete all assignments and exams.
3. Achieve a final grade of 50 %.
4. Students must meet the participation requirement in order to receive a Satisfactory standing in this course.

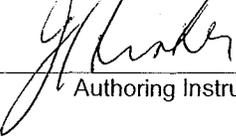
■ **Course Learning Outcomes/Competencies**

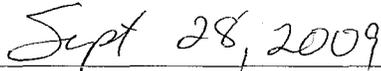
At the end of this course the student will be able to:

1. Apply knowledge of pharmacokinetics and pharmacodynamics to selected drug categories.
2. Use a drug classification system as an information source for selected drugs.
3. Explain assessments required when administering medications and monitoring patients for therapeutic drug effects, adverse reactions, toxicity, and drug interactions.
4. Apply selected pharmacological concepts and principles to patient situations.
5. Demonstrate on-line learning skills including accessing course materials and resources, and effective on-line interaction and communication.

■ Verification

I verify that the content of this course outline is current.

  
\_\_\_\_\_  
Authoring Instructor

  
\_\_\_\_\_  
Date

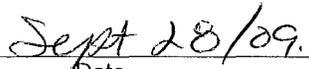
I verify that this course outline has been reviewed.

  
\_\_\_\_\_  
Program Head

  
\_\_\_\_\_  
Date

I verify that this course outline complies with BCIT policy.

  
\_\_\_\_\_  
Dean/Associate Dean

  
\_\_\_\_\_  
Date

Note: Should changes be required to the content of this course outline, students will be given reasonable notice.

■ **Instructor:**

Glynda Doyle            Office Location: SE12-418            Office Phone:  
                                 Office Hours: By appointment            e-Mail Address: Glynda\_Doyle@bcit.ca

■ **Learning Resources**

*Required:*

1. Aschenbrenner, D. S. & Venable, S.J. (2008). *Drug therapy in nursing (3<sup>rd</sup> ed)*. New York: Lippincott.
2. Spratto, R.G. & Woods, A. L. (2008). *PDR nurse's drug handbook*. Thompson Delmar Learning: New York.

■ **Information for Students**

The following statements are in accordance with BCIT Student Regulations Policy 5101, BCIT Student Code of Conduct (non-academic) Policy 5102, BCIT Student Evaluation Policy 5103, and BCIT Academic Integrity and Appeals Policy 5104. To review the full policies, please refer to <http://www.bcit.ca/about/administration/policies.shtml>.

**Attendance/Illness:**

In case of illness or other unavoidable cause of absence, the student must communicate as soon as possible with his/her instructor or Program Head or Chief Instructor, indicating the reason for the absence. Prolonged illness of three or more consecutive days must have a BCIT medical certificate sent to the department. Excessive absence may result in failure or immediate withdrawal from the course or program.

**Cheating, Fabrication, Plagiarism, and/or Dishonesty:**

**First Offense:** Any student in the School of Health Sciences involved in an initial act of academic misconduct - cheating, fabrication, plagiarism, and/or dishonesty will receive a Zero (0) or Unsatisfactory (U) on the particular assignment and may receive a Zero (0) or Unsatisfactory (U) in the course, at the discretion of the Associate Dean.

**Second Offense:** Any student in the School of Health Sciences involved in a second act of academic misconduct - cheating, fabrication, plagiarism, and/or dishonesty will receive a Zero (0) or Unsatisfactory (U) on the particular assignment and may receive a Zero (0) or Unsatisfactory (U) in the course, and the Associate Dean will recommend to the BCIT Vice-President, Education and/or President, that the student be expelled from the program.

**Attempts:**

BCIT Nursing Program Student Guidelines, Policies and Procedures which are located online at <http://www.bcit.ca/health/nursing/> state: Applicants who have any combination of two instances of withdrawal or failure in a Nursing Theory course will be readmitted to the program "with written permission from the Associate Dean, who will detail any special considerations". Applicants, who have any combination of two instances of withdrawal or failure in any Nursing Practicum course for academic or performance reasons, will not be readmitted to the program.

### Accommodation:

Any student who may require accommodation from BCIT because of a physical or mental disability should refer to BCIT's Policy on Accommodation for Students with Disabilities (Policy #4501), and contact BCIT's Disability Resource Centre (SW1-2300, 604-451-6963) at the earliest possible time. Requests for accommodation must be made to the Disability Resource Centre, and should not be made to a course instructor or Program area.

Any student who needs special assistance in the event of a medical emergency or building evacuation (either because of a disability or for any other reason) should also promptly inform their course instructor(s) and the Disability Resource Centre of their personal circumstances.

### ■ Learning Process Threads

- **Professionalism:** Professionalism is a process that evolves throughout professional life. It develops when there is a learning partnership between nurses, nursing students and nursing instructors and they commit to using reasoning and reflection in the pursuit of professional nursing attitudes, judgments, knowledge and skills. Professionalism means making the client the primary focus of nursing and committing to providing a service in the public interest. Professionalism contributes to independent and interdependent nursing practice. Students in this course develop a knowledge base regarding pharmacology and the role of the professional nurse. They anticipate and prepare for potential clinical decision making situations. They explore cases and respond with sound clinical judgement.
- **Communication:** Professional communication in nursing establishes shared meaning and partnership to develop human being's capacities for healing and/or growth. Students in this course improve computer literacy by using Internet course materials and resources and by communicating through asynchronous discussion forums. Students thoughtfully discuss course content on-line. Students facilitate on-line group functioning to achieve course goals.
- **Systematic Inquiry:** Systematic inquiry includes three processes: critical thinking, decision making, and research. These processes evolve so that speed and complexity of connections increase.
  - Critical thinking is an "emotive [and] rational" (Brookfield, 1987, p. 7) process of inquiry that includes challenging assumptions, considering the importance of context, imagining alternative perspectives, and remaining reflectively sceptical (Brookfield). Reflection within the individual or through dialogue with others facilitates critical thinking. The reflective questioning, consideration and evidence search is a continual cyclic process that is aimed at reconciling paradox, dilemmas or practice that lacks definitive answers.
  - Decision making is a reasoning process that uses thinking to make connections and judge information (Johnson & Webber, 2005; Boychuk Duchscher, 1999) to achieve answers. Clinical judgement for nursing students is a decision making process that necessarily includes critical thinking and research that allows nursing students to make the best decision possible with the information they have at the time.
  - Research is diligent, systematic investigation of theory or events (Johnson & Webber, 2005). For nursing students it involves investigating appropriate and relevant literature to expand their body of

knowledge; critiquing research studies to assess evidence for practice, identifying researchable questions and participating in clinically focused research projects.

- Students in this course use questioning and feedback to help them think critically. Students discuss their own work with others and take action to improve own clinical decision making. Students develop independent clinical reasoning.
- **Professional Growth:** Professional growth is a process of self-inquiry and self-direction that facilitates lifelong learning. Assessment of learning gaps, evaluation of self and others, reflection, information management, critical thinking and critical appraisal are the skills required to achieve professional growth (Patterson, Crooks, & Lunyk-Child, 2002). Nurses are committed to professional growth as a way of enhancing the knowledge, skills, attitudes, and judgements of professional nursing. Students in this course focus on participating in group learning by sharing accurate, relevant information in a professional manner. Students are responsible and accountable for their learning. Students value continually updating pharmacology knowledge.
- **Creative Leadership:** Creative leadership is an evolving process that can be learned and implemented in all clinical settings or roles. Creative leadership enhances and supports the creative potential within followers by nourishing a common vision and focusing activity towards the common goal (Grossman & Valiga, 2000). Creative leadership is based on achieving self-knowledge to transcend self-interest (Cameron, 2002), establishing meaningful and genuine connections with stakeholders (Cameron), challenging the status quo, incorporating nursing ethics into practice, implementing systems thinking, supporting self-direction and risk-taking, and recognizing the contribution of others. Students in this course develop on-line facilitation skills within groups. They demonstrate credibility, accountability, assertiveness, problem solving, judgement and initiative within the on-line groups.
- **Technology-in-Practice:** In Nursing, technology-in-practice is the ways of knowing, being and doing (Franklin, 1990) in the health care context that enhances patient care. As technology-in-practice evolves, nurses critically analyze the impact of it on patients, health-care workers and the health care system. Technology-in-practice is influenced by culture, socially accepted practices and values and it influences culture, socially accepted practices and values. Students in this course discuss rationales and nursing responsibilities related to administration of medications and to the assessment of patients who receive medications. Students develop skills in using electronic educational technology.

#### ■ Assignment Details

- All assignments must be completed to pass the course.
- Students must participate and interact at least weekly in on-line discussion forums. Refer to the assignments section in the course for specific expectations regarding on-line postings. Be sure you post every week.
- All on-line quizzes/self-tests associated with each module must be completed within the specific module timeframe. Self-tests are graded .
- The case-study assignment is a group assignment. It is discussed in a post-conference, and a written report is submitted by each on-line group.

- The final exam is open book and will be completed on-line. The final exam consists of multiple choice questions. You are permitted to use your pharmacology textbook, and a nurses' drug guide.



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Schedule by Week

Week Number	Material Covered	Reference/Reading	Assignment and Due Date
<p>This course is numbered by weeks to coincide as close as possible with the Week # in your other courses. Please note that each “week” starts on a Saturday, and ends on a Friday. For example, Week 8 will start on Saturday October 2<sup>nd</sup> and end on Friday October 9<sup>th</sup> at midnight. You are expected to participate in the discussions each week.</p>			
8	<p><b>Introduction to Course &amp; Module 1</b></p> <ul style="list-style-type: none"> <li>Text-based communication technologies</li> </ul>	<p><b>NURS 1064 Student Orientation Manual Module</b> — Orientation to NURS 1064 (online)</p> <p>Read Desire-2-Learn documents posted on the course website to familiarize yourselves with the new electronic learning environment.</p>	<ul style="list-style-type: none"> <li>Access course and become familiar with Desire-2-Learn environment</li> <li>Read course outline and orientation module</li> <li>Access course content module</li> <li>Read Discussion message — student introduction</li> <li><b>Post own student introduction for the group by the end of Week 8</b></li> <li>Begin working on Module 1</li> </ul>

Week Number	Material Covered	Reference/Reading	Assignment and Due Date
9	<b>Module 1 (continued)</b> Nursing and Medication Administration	Clinical Nursing Skills and Techniques (6th ed.) <ul style="list-style-type: none"> <li>• Ch. 20, Oral and Topical Medications, 647 - 689.</li> </ul> Aschenbrenner, D. S. & Venable, S. J. <i>Drug therapy in nursing.</i> <ul style="list-style-type: none"> <li>• Ch. 2, 13 - 16, 25-27.</li> <li>• Ch. 3, 28 - 32, 36 - 37.</li> </ul> CRNBC Website: <ul style="list-style-type: none"> <li>• Pre-pouring Medication,</li> <li>• Pre-printed Orders,</li> <li>• Orders and Delegation</li> </ul>	<ul style="list-style-type: none"> <li>• Continue with Module 1 and complete readings</li> <li>• Participate in on-line discussions for this module</li> <li>• Complete self-test for Module 1</li> </ul>
10	<b>Module 2</b> Drug Classifications, Pharmacokinetics & Pharmacodynamics	Aschenbrenner, D. S. & Venable, S. J. <i>Drug therapy in nursing.</i> <ul style="list-style-type: none"> <li>• Chapter 4: Pharmacotherapeutics and pharmacokinetics, &amp; pharmacodynamics</li> </ul>	Required activities: <ul style="list-style-type: none"> <li>• Participate a minimum of once weekly during on-line discussions</li> <li>• Complete self-test for module 2</li> </ul>
11	<b>Module 2 (continued)</b> Adverse Effects and Drug Interactions	Aschenbrenner, D. S. & Venable, S. J. <i>Drug therapy in nursing.</i> <ul style="list-style-type: none"> <li>• Chapter 5: Adverse effects and drug interactions</li> </ul>	Required activities: <ul style="list-style-type: none"> <li>• Participate a minimum of once weekly during on-line discussions</li> <li>• Complete self-test for module 2</li> </ul>

Week Number	Material Covered	Reference/Reading	Assignment and Due Date
12	<b>Module 3</b> Life span: Older adults.	Aschenbrenner, D. S. & Venable, S. J. Drug therapy in nursing. <ul style="list-style-type: none"> <li>• Chapter 8: Life span: Older adults.</li> </ul>	Required activities: <ul style="list-style-type: none"> <li>• Participate a minimum of once weekly during on-line discussions.</li> <li>• Complete self-test for module 3</li> </ul>
13	<b>Module 3 (continued)</b> Autonomic Nervous System Drugs	Aschenbrenner, D. S. & Venable, S. J. Drug therapy in nursing. <ul style="list-style-type: none"> <li>• Chapter 13: Drugs affecting adrenergic function. Pages 151 – 159, 169 – 180</li> <li>• Chapter 14: Drugs affecting cholinergic function.</li> </ul>	Required activities: <ul style="list-style-type: none"> <li>• Participate a minimum of once weekly during on-line discussions.</li> <li>• Review Tutorial</li> <li>• Complete self-test for module 3</li> </ul>
14	<b>Module 4</b> Renal Drugs	Aschenbrenner, D. S. & Venable, S. J. <i>Drug therapy in nursing</i> . <ul style="list-style-type: none"> <li>• Chapter 27: Drugs affecting urinary output.</li> </ul>	Required activities: <ul style="list-style-type: none"> <li>• Preparation for Case Study Assignment  <b>Due: Monday Dec 7th</b></li> <li>• Participate a minimum of once weekly during on-line discussions.</li> <li>• Complete self-test for module 4</li> </ul>

Week Number	Material Covered	Reference/Reading	Assignment and Due Date
15	<b>Module 4 (continued)</b>  Cardiac Drugs	Aschenbrenner, D. S. & Venable, S. J. <i>Drug therapy in nursing</i> . <ul style="list-style-type: none"> <li>• Chapter 28: Drugs affecting blood pressure. Pages 494 – 512, 519 - 522</li> <li>• Chapter 29: Drugs treating heart failure. Pages 536 - 549</li> <li>• Chapter 30: Drugs treating angina</li> </ul>	Required activities: <ul style="list-style-type: none"> <li>• <b>Case Study Assignment Due: Monday Dec 7th</b></li> <li>• Participate a minimum of once weekly during on-line discussions.</li> <li>• Complete self-test for module 4</li> </ul>
17 (Exam Week)	Final Exam (Open Book)	<ul style="list-style-type: none"> <li>• Aschenbrenner, D. S. &amp; Venable, S.J. (2008). <i>Drug therapy in nursing (3<sup>rd</sup> ed)</i>. New York: Lippincott.</li> <li>• Spratto, R.G. &amp; Woods, A. L. (2008). <i>PDR nurse's drug handbook</i>. Thompson Delmar Learning: New York.</li> </ul>	<b>On line Participation Self Evaluation DUE:</b> Prior to completion of Exam <b>Final Exam:</b> Date/Time TBA