



**I. COURSE DESCRIPTION:**

This course is comprised of three components: clinical, lab theory and practice and math calculations for drug dosages.

The clinical component will provide the learner with opportunities to examine the role of the practical nurse when caring for individuals experiencing acute or chronic health challenges. The learner will utilize critical thinking skills to plan and implement nursing care in medical, surgical and simulated settings. The learner is expected to safely apply theoretical knowledge from all past and present core nursing course (e.g. lab theory, practice and health assessment). The learner is expected to safely and competently care for two individuals by the end of this clinical experience.

The lab theory and practice component of this course will provide learning to occur through application of theory and practice in the simulation lab setting. The lab component will focus on the following: surgical asepsis, wound care and therapy, pre and postoperative care, medication administration, IV therapy (total parenteral nutrition), blood and blood product administration, nasogastric tube insertion, nasogastric decompression and vacuum assisted wound therapy.

The third component of this course will provide the learner with the opportunity to utilize basic mathematical skills to demonstrate accuracy in calculating drug dosages using a selected formula for non-parenteral, enteral and parenteral routes.

The learner is expected to be successful in all three components of the course.

**II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:**

Upon successful completion of this course, the student will demonstrate the ability to:

**Component #1 – Clinical**

1. Practice in a professional manner in accordance with the College of Nurses of Ontario "Standards of Practice".

**Potential Elements of the Performance:**

- 1.1 Demonstrate accountability for own personal and professional growth.
- 1.2 Maintain a distinction between professional and social roles.
- 1.3 Engage in reflective practice to promote further learning
- 1.4 Accept constructive criticism appropriately to promote change.
- 1.5 Comply with the practice setting established standards and practice expectations by:
- 1.6 Accept accountability for own decisions and actions.
- 1.7 Report and record significant information accurately, confidently and respectfully to appropriate individuals, peers, faculty and agency personnel.

- 1.8 Identify when personal values and beliefs conflict with the ability to maintain commitments to the client\*.
  - 1.9 Demonstrate self-care practices that promote personal health and wellness.
  - 1.10 Demonstrate accountability and responsibility in attending clinical placement according to college policy.
  - 1.11 Recognize the right of the client\* to make own health choices.
  - 1.12 Describe opportunities to improve the level of health care in the community.
  - 1.13 Demonstrate leadership qualities in clinical experiences.
2. Display caring behaviours when interacting with acutely ill clients.

Potential Elements of the Performance:

- 2.1 Create an atmosphere of mutual trust, acceptance and respect.
  - 2.2 Demonstrate a supportive and \*client-centred approach.
  - 2.3 Use a non-judgmental attitude, empathy and genuineness when interacting and advocating with or for clients\*.
  - 2.4 Display sensitivity to beliefs, values and practices of various lifestyles and cultures.
  - 2.5 Establish therapeutic relationships that promote the achievement of expected health outcomes of the client\*.
  - 2.6 Apply appropriate therapeutic communication techniques:
  - 2.7 Demonstrate confidence in promoting the self-care abilities of the client\*.
  - 2.8 Promote and preserve the self-esteem and self-confidence of client\*.
  - 2.9 Balance technical and technological aspects of nursing with a humanistic attitude and holistic approach.
3. Practice interpersonal skills, which promote and maintain caring relationships with individuals, families, peers, faculty and agency personnel through collaboration and collegueship.

Potential Elements of the Performance:

- 3.1 Participate as a contributing member of the team in providing care for the client\*.
- 3.2 Employ basic measures to bring about the resolution of conflict.
- 3.3 Follow verbal and non-verbal directions safely, responsibly and consistently.
- 3.4 Adapt communication strategies to meet the needs of the client\*.
- 3.5 Support the right to privacy and confidentiality of the client\*.
- 3.6 Act in a professional manner when communicating with clients\*, families, peers, faculty and agency personnel.
- 3.7 Support the client\* with informed decision making.
- 3.8 Promote the nurse's role as a client\* advocate

4. Apply the nursing process to organize and provide safe, competent basic nursing care for the client with acute health challenges.

Potential Elements of the Performance:

- 4.1 Demonstrate the ability to conduct purposeful client\* interviews.
  - 4.2 Gather data through history taking, interviewing, consultation, physical examination and review of available records.
  - 4.3 Assess the client\* accurately on an on-going basis.
  - 4.4 Differentiate between relevant and non-relevant observations to be reported and recorded.
  - 4.5 Identify the expected health outcomes (goals) of the client\*.
  - 4.6 Plan individualized care according to assessment, pre-clinical preparation and evidence-based nursing practice.
  - 4.7 Develop daily organizational plans to manage time selected nursing responsibilities.
  - 4.8 Apply nursing knowledge and critical thinking to set priorities in providing comprehensive holistic nursing care.
  - 4.9 Adapt organizational plan to reflect changing priorities based on client\* needs
  - 4.10 Perform selected nursing interventions consistently in a safe competent client\*-centred manner that minimizes risk and maximizes benefits to client\*.
  - 4.11 Apply the concepts of health promotion, health protection, and prevention, (therapeutic treatment), rehabilitation and/or restorative care to the plan of care of the client\*.
  - 4.12 Promote the use of community agencies to assist client\* when appropriate.
  - 4.13 Evaluate achievement of expected outcomes (goals).
  - 4.14 Revise the plan of care as needed.
  - 4.15 Document relevant data in a concise and timely manner, according to "CNO Standards" and agency policy.
  - 4.16 Integrate the concepts of drug calculations.
5. Apply the theories of growth and development and the change process to promote the optimal health and wellness.

Potential Elements of the Performance:

- 5.1 Assess the client\* based stages of life.
- 5.2 Establish expected outcomes (goals) in collaboration with the client\*.
- 5.3 Plan nursing interventions based on the selected stage of growth and development in collaboration with the client\*.
- 5.4 Implement nursing interventions in collaboration with the client\*.
- 5.5 Provide dignified, comfortable care for the dying client\*.
- 5.6 Evaluate the extent to which the desired outcomes (goals) have been met

6. Utilize principles of teaching-learning to promote optimal health, wellness and safety of the client\*.

Potential Elements of the Performance:

- 6.1 Assess the health status of the client\* to determine learning needs.
  - 6.2 Develop a plan in collaboration with the client\*.
  - 6.3 Apply principles of teaching-learning to facilitate client's\* understanding.
  - 6.4 Implement relevant and age-appropriate teaching plan to promote optimal health, wellness and safety of the client\*.
  - 6.5 Examine the effectiveness of the teaching plan for the client\*.
  - 6.6 Modify the teaching plan based on the evaluation of results.
7. Apply research findings to support nursing practice.

Potential Elements of the Performance:

- 7.1 Use evidence-based information to assess client\* health status.
- 7.2 Provide a safe environment for the client\* based on current and relevant research.
- 7.3 Participate in scholarly activities to support nursing practice.

**Component #2 – Lab Theory and Practice**

1. Demonstrate techniques required for pre and post-operative care.

Potential Elements of the Performance:

- 1.1 Competently perform a pre-operative and postoperative assessment.
  - 1.2 Demonstrate health teaching regarding postoperative deep breathing and coughing, using of incentive spirometry and leg exercises.
  - 1.3 Prepare a client for surgery.
  - 1.4 Provide nursing care during early postoperative recovery.
  - 1.5 Demonstrate use of various O<sub>2</sub> administration devices
  - 1.6 Explain the use of sequential compression devices.
  - 1.7 Document according to CNO standards.
2. Employ knowledge of surgical asepsis in caring for clients with a variety of wounds.

Potential Elements of the Performance:

- 2.1 Explain rationale for the use of common types of wound dressings.
- 2.2 Apply principles of surgical asepsis when performing:
  - 2.2.1 Wound care using various wound dressings.
  - 2.2.2 Irrigation and packing of wounds.
  - 2.2.3 Care of Hemovac, Jackson-Pratt and T-Tube drains
  - 2.2.4 Drain shortening and removal
  - 2.2.5 Suture and staple removal
  - 2.2.6 Steri-strip application
  - 2.2.7 Vacuum assisted closure (VAC) therapy
  - 2.2.8 Wound culture
- 2.3 Explain the principles of VAC therapy.
- 2.4 Document according to CNO standards.

3. Apply knowledge of the principles of safe medication administration.

Potential Elements of the Performance:

- 3.1 Pour, prepare and administer a variety of oral medications using the rights of medication administration.
  - 3.2 Document according to CNO standards.
  - 3.3 Identify responsibilities associated with medication errors.
  - 3.4 Identify significant issues related to the administration of narcotics and other high risk medications (e.g. insulin and anticoagulants).
4. Demonstrate appropriate techniques for parenteral injections.

Potential Elements of the Performance:

- 4.1 Discuss rationale for choosing the recommended route and site.
- 4.2 Landmark injection sites correctly.
- 4.3 Identify all equipment necessary for different routes of medication administration.
- 4.4 Prepare and administer parenteral medications by intradermal, subcutaneous and intramuscular routes using aseptic technique.
- 4.5 Apply the rights of medication administration when administering parenteral injections.
- 4.6 Determine the compatibility of medications using a chart.
- 4.7 Mix medications from two vials.
- 4.8 Mix medications from a vial and an ampule.
- 4.9 Withdraw medications from vials and ampules competently.
- 4.10 Discuss precautions required when administering parenteral injections.
- 4.11 Safely dispose of equipment.
- 4.12 Document according to CNO standards.

5. Demonstrate knowledge of the principles of tube feedings and administration of medication via enteral routes.

Potential Elements of the Performance:

- 5.1 Differentiate between tube feedings via Nasogastric, Naso-intestinal tube or Gastrostomy routes.
  - 5.2 Demonstrate safe administration of feedings including verifying tube placement, irrigating tubes and checking for residuals.
  - 5.3 Identify and effectively manage complications.
  - 5.4 Administer medication via Nasogastric or Gastrostomy tubes.
  - 5.5 Document according to CNO standards.
6. Apply appropriate techniques for alternate routes of medication delivery.

Potential Elements of the Performance:

- 6.1 Identify all equipment necessary for different routes of medication administration.
- 6.2 Apply the rights of medication administration to prepare and administer medication using a variety of routes.
- 6.3 Discuss precautions required when administering medications by a variety of routes.
- 6.4 Document according to CNO standards.

7. Demonstrate knowledge of the principles of intravenous (IV) therapy.

Potential Elements of the Performance:

- 7.1 Prepare the equipment for IV administration.
- 7.2 Prepare the client for IV administration.
- 7.3 Maintain, flush and discontinue an IV/saline lock.
- 7.4 Calculate and regulate the rate of IV infusions.
- 7.5 Calculate and regulate IV rate using a pump.
- 7.6 Change the IV tubing and solution bag.
- 7.7 Change the gown of a client with an IV.
- 7.8 Change an IV bag on an established IV set-up.
- 7.9 Convert an IV to a saline lock.
- 7.10 Recognize and intervene if IV complications arise.
- 7.11 Document according to CNO standards.

8. Apply knowledge of the principles of blood and Total Parenteral Nutrition (TPN) (peripheral administration).

Potential Elements of the Performance:

- 8.1 Prepare the equipment for administration.
- 8.2 Prepare the client.
- 8.3 Calculate and regulate flow rates.
- 8.4 Recognize and intervene when problems or complications arise.
- 8.5 Document according to CNO standards.

9. Apply knowledge of the principles of nasogastric decompression.

Potential Elements of the Performance:

- 9.1 Identify equipment required.
- 9.2 Prepare client for nasogastric tube insertion.
- 9.3 Insert a nasogastric tube for decompression and feeding.
- 9.4 Verify tube placement using a variety of methods.
- 9.5 Measure drainage and determine IV replacement needs.
- 9.6 Relieve tube blockages.
- 9.7 Observe for complications.
- 9.8 Remove nasogastric tubes.
- 9.9 Document according to CNO standards.

10. Apply current evidence-based practice knowledge as it relates to learned skills.

**Component #3 – Math for Calculation of Drug Dosages**

1. Demonstrate basic mathematical skills to safely administer medications in the clinical setting to clients across the lifespan.

Potential Elements of the Performance:

- 1.1 Demonstrate skills and accuracy in the following mathematical processes: addition, subtraction and multiplication of whole numbers, fractions, decimals and percentages.
- 1.2 Demonstrate skill and accuracy in the following algebraic process: ration and proportion.

- 1.3 Demonstrate accuracy when converting between the following systems of measurement: apothecary, common household quantities, the metric system and the Imperial system.
- 1.4 Practice dosage calculation problems using a selected formula for oral and parenteral routes.
- 1.5 Accurately solve mathematical problems by applying different calculation techniques in order to provide safe nursing care.
- 1.6 Demonstrate skill and accuracy when calculating a medication dosage using both the formula and ratio/proportion methods.
- 1.7 Demonstrate skill and accuracy when calculating a medication dosage using body height and/or body weight as a factor.

### III. TOPICS:

Students will practice in a variety of settings that include:

1. Hospital (Medical/Surgical Units)
2. Extendicare Health Sciences Learning Centre

Skills/concepts to be learned and practiced in the HSRC include:

1. Pre and Post-Operative Assessment and Care
2. Surgical Wound Care
3. Medication Administration: Non Parenteral/Parenteral/Enteral (Subcutaneous, Intradermal, Intramuscular)
4. Intravenous Therapy/TPN
5. Administration of Blood and Blood Products
6. Enteral Tubes, Enteral Nutrition, Gastric Suction
7. Math Calculations for Medication Administration

### IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

Ackley, B.J. & Ladwig, G.B. (2014). *Nursing diagnosis handbook: An evidence-based guide to planning care*. (10<sup>th</sup> ed.). Elsevier

Berman, A. J. and Snyder, S. (2011). *Skills in clinical nursing* (7<sup>th</sup> ed.). Upper Saddle River, NJ: Pearson.

Burke, K., Eby, L. P., Mohn-Brown, L. (2011). *Medical surgical nursing care* (3<sup>rd</sup> ed.). Upper Saddle River, NJ: Prentice Hall.

College of Nurses of Ontario. (n. d.). *Compendium of standards of practice for nurses in Ontario* (2<sup>nd</sup> ed.) Toronto, ON: Author. (available on-line at [www.cno.org](http://www.cno.org))

Karch, A (2014). *Lippincott's nursing drug guide*. (Canadian ed.). Philadelphia PA: Lippincott, Williams and Wilkins.

Kozier, B. [et al.]. (2014). *Fundamentals of Canadian nursing*. (3<sup>rd</sup> Canadian ed.). Toronto, ON: Pearson Education Canada.

LeFever Kee, J. (2013). *Handbook of lab and diagnostic tests with nursing implications* (9<sup>th</sup> ed.). Pearson Education.

Ogden, S. J. & Fluharty, L. K. (2012). *Calculation of drug dosages: A work text* (9<sup>th</sup> ed.). Toronto ON: Mosby/Elsevier Canada.



Stedman's, Creason, C. (2010). *Stedman's medical terminology: Steps to success in medical language*. Philadelphia, PA: Lippincott, Williams and Wilkins.

Lab Manual

Practical Nursing Student Success Guide

Lab Equipment (as directed by lab teacher/clinical instructor throughout the semester)

**Optional:** *MediQuik Drug Cards Lippincott, Williams and Wilkins*

## V. EVALUATION PROCESS/GRADING SYSTEM:

A final grade of Satisfactory is required to pass PNG236. The student must achieve a satisfactory outcome in all components of the course. Each of the three (3) component are graded separately in the evaluation process.

**Grading will be determined by the following components:**

### Lab Tests

- Achieve 60% **(overall)** on 3 lab tests. Supplemental testing is not available.

### Clinical Placement

- Demonstrate consistently the overriding principles of safety, accountability and responsibility in all practicum components
- Achieve the learning outcomes of PNG236
- Complete and be prepared to discuss self evaluation requirements at scheduled mid rotation and end of rotation evaluations with clinical teacher (supporting grades with comments demonstrating self-reflection).

### Math for Medication Administration Tests

- Achieve a minimum average of 90% (overall) on 4 Drug Calculation Tests to be satisfactory in the Math for Medication Administration component of the course.
- Supplemental testing is not available.

For further information relating to practicum/lab program policies, refer to the Student Success Guide. Clinical makeup is not available for missed clinical hours.

**The following semester grades will be assigned to students in post-secondary courses:**

<u>Grade</u>	<u>Definition</u>	<u>Grade Point Equivalent</u>
A+	90 – 100%	4.00
A	80 – 89%	3.00
B	70 - 79%	2.00
C	60 - 69%	1.00
D	50 – 59%	0.00
F (Fail)	49% and below	0.00

CR (Credit)	Credit for diploma requirements has been awarded.
S	Satisfactory achievement in field /clinical placement or non-graded subject area.
U	Unsatisfactory achievement in field/clinical placement or non-graded subject area.
X	A temporary grade limited to situations with extenuating circumstances giving a student additional time to complete the requirements for a course.
NR	Grade not reported to Registrar's office.
W	Student has withdrawn from the course without academic penalty.

**A minimum of a “C” grade is required to be successful in all PNG coded courses.**

If a faculty member determines that a student is at risk of not being successful in their academic pursuits and has exhausted all strategies available to faculty, student contact information may be confidentially provided to Student Services in an effort to offer even more assistance with options for success. Any student wishing to restrict the sharing of such information should make their wishes known to the coordinator or faculty member.

#### **VI. SPECIAL NOTES:**

Attendance:

Sault College is committed to student success. There is a direct correlation between academic performance and class attendance; therefore, for the benefit of all its constituents, all students are encouraged to attend all of their scheduled learning and evaluation sessions. This implies arriving on time and remaining for the duration of the scheduled session.

#### **VII. COURSE OUTLINE ADDENDUM:**

The provisions contained in the addendum located in D2L and on the portal form part of this course outline.