



**I. COURSE DESCRIPTION:**

This course is designed to assist the practical nurse to acquire the knowledge and master the mathematical skills required to safely calculate drug dosages.

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

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

1. Utilize basic math skills to accurately calculate drug dosages  
Potential Elements of the Performance:
  - basic mathematical calculations.
  - solve dosage calculation problems using a selected formula for oral and parenteral routes.
  - calculate a safe pediatric dose based on body mass weight

**III. TOPICS:**

1.
  - mathematical calculations
2.
  - oral and parenteral dosage calculation problems
3.
  - pediatric dosages

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

Lilley, L., Harrington, S., Snyder, J. Swart, B. (Ed.). (2007). *Pharmacology and the nursing process in Canada*. (1<sup>st</sup> Canadian ed.). Mosby.

Skidmore-Roth, L. (2009). *Nursing drug reference* (22<sup>nd</sup> ed.). St. Louis, MO: Mosby.

Practice Standard: Medication, Revised 2008 (available at [www.cno.org](http://www.cno.org) )

***Recommended Resources:***

Gray Morris, D. (2006). *Calculate with Confidence*. (4<sup>th</sup> ed.). St. Louis, MO: Mosby.

**V. EVALUATION PROCESS/GRADING SYSTEM:**

Test "Diagnostic Mathematics for Medication Administration" –

Purpose: to determine classroom needs for learning, identify personal areas for improvement and requirements for remedial support

"Mathematics for Medication Administration" - Tests 1, 2, 3 – cumulative pass of 90%

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	
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W	Student has withdrawn from the course without academic penalty.	

**Note:** For such reasons as program certification or program articulation, certain courses require minimums of greater than 50% and/or have mandatory components to achieve a passing grade.

It is also important to note, that the minimum overall GPA required in order to graduate from a Sault College program remains 2.0.

**VI. SPECIAL NOTES:**

Special Needs:

If you are a student with special needs (e.g. physical limitations, visual impairments, hearing impairments, or learning disabilities), you are encouraged to discuss required accommodations with your professor and/or the Special Needs office. Visit Room E1101 or call Extension 703 so that support services can be arranged for you.

Retention of Course Outlines:

It is the responsibility of the student to retain all course outlines for possible future use in acquiring advanced standing at other post-secondary institutions.

Plagiarism:

Students should refer to the definition of “academic dishonesty” in *Student Rights and Responsibilities*. Students who engage in “academic dishonesty” will receive an automatic failure for that submission and/or such other penalty, up to and including expulsion from the course/program, as may be decided by the professor/dean. In order to protect students from inadvertent plagiarism, to protect the copyright of the material referenced, and to credit the author of the material, it is the policy of the department to employ a documentation format for referencing source material.

Course Outline Amendments:

The professor reserves the right to change the information contained in this course outline depending on the needs of the learner and the availability of resources.

Substitute course information is available in the Registrar's office.

**VII. PRIOR LEARNING ASSESSMENT:**

Students who wish to apply for advanced credit in the course should consult the professor. Credit for prior learning will be given upon successful completion of a challenge exam or portfolio.

**VIII. DIRECT CREDIT TRANSFERS:**

Students who wish to apply for direct credit transfer (advanced standing) should obtain a direct credit transfer form from the Dean's secretary. Students will be required to provide a transcript and course outline related to the course in question.