

Department of Practical Nurse and Health Care Aide

COURSE OUTLINE – Winter 2026

NP1480 (2): Medication Administration – 2 (1-2-0) 45 Hours for 15 Weeks

Northwestern Polytechnic acknowledges that our campuses are located on Treaty 8 territory, the ancestral and present-day home to many diverse First Nations, Metis, and Inuit people. We are grateful to work, live and learn on the traditional territory of Duncan's First Nation, Horse Lake First Nation and Sturgeon Lake Cree Nation, who are the original caretakers of this land.

We acknowledge the history of this land and we are thankful for the opportunity to walk together in friendship, where we will encourage and promote positive change for present and future generations.

INSTRUCTOR:

Madison Lovsin RN

PHONE:

780-835-6635

OFFICE: TIB 137**E-MAIL:**

Mlovsin@nwpolytech.ca

OFFICE HOURS:

By Appointment

CALENDAR DESCRIPTION:

Development of mathematics for practical nursing practice. Focus is on calculating dosages for medication administration for clients across the lifespan.

Note: Available only to Practical Nursing students.

PREREQUISITE(S): Mathematics 20-2 or equivalent, NP1205, NP1250, NP1280, NP1500

COREQUISITE(S): NP1400, NP1410, NP1450, NP1600, NP1700

REQUIRED MATERIALS:

Deborah C Gray Morris (2022) Calculate with Confidence Canadian Edition. (2nd ed.). Elsevier.

DELIVERY MODE(S): In-person Lecture and seminar

LEARNING OUTCOMES:

1. Upon successful completion of NP1480 learners will be able to:
2. Accurately calculate medication dosages for clients of diverse ages and complexities.
3. Follow policies and procedures for preparing, administering, and documenting medications.
4. Explain and apply the 10 rights of medication administration.
5. Outline the process for reporting and disclosing medication errors according to legal and ethical standards.
6. Explain the professional responsibility for ongoing development to ensure continuing competence in medication administration.

TRANSFERABILITY:

Please consult the Alberta Transfer Guide for more information. You may check the transferability of this course at the Alberta Transfer Guide main page <http://www.transferralberta.alberta.ca>.

****** For courses with alpha (letter) grading, a grade of D or D+ may not be acceptable for transfer to other post-secondary institutions. Students are cautioned that it is their responsibility to contact the receiving institutions to ensure transferability.

EVALUATIONS:

The final grade is based on the following assessments, and there are no additional assignments or marks provided in the course. All evaluation components must be completed to pass the course.

Assignment	Weight	Date	Related Course Learning Outcome
Weekly Quizzes	25%	Weekly (x10)	1, 2, 3, 4, 5
Exit to Class	20%	Most Weeks (total of 10)	1, 2, 3, 4, 5
Midterm Exam	25%	Week 8	1, 2, 3, 4, 5
Final Exam	30%	In Exam Week	1, 2, 3, 4, 5

1. Weekly Quizzes (2.5% per quiz) – 25% total course grade

The purpose of the weekly quizzes is to ensure students grasp the math skills needed each week before progressing to increasing difficulty in math calculations and problems. Weekly quizzes are done at home. Students must complete by due date posted on D2L, otherwise will be unable to complete and will receive a 0 for that quiz.

2. Exit to Class (2% per Exit to Class for a total of 10) – 20% total course grade Once a week, during either a seminar or lecture, students will complete "Exit to Class" questions at the end of the session. A total of 10 "Exit to Class" activities will be conducted throughout the course. These will be unannounced to ensure consistent attendance and active participation in both lectures and seminars. These questions will be based on the readings and presentations assigned for that week. This activity is designed to encourage students to stay current with class readings, reinforce their understanding of the material, attend classes, and prepare them to actively participate in class discussions. The "Exit to Class" sheets must be submitted during the session within the allotted time; late submissions will not be accepted. Attendance is mandatory to receive the sheet and the associated grade.

3. Midterm Exam (weighted 25% of final grade)

The midterm exam includes all content covered up to and including Week 7. Question format includes a variety of styles including, but not limited to, multiple choice, short answer, long answer, matching, and select all that apply.

4. Final Exam (weighted 30% of final grade)

The final exam is cumulative and includes all content covered throughout the course. Question format includes a variety of styles including, but not limited to, multiple choice, short answer, long answer, matching, and select all that apply. Scheduling of the final exam is set by the Registrar's Office.

GRADING:

Please note that most institutions will not accept your course for transfer credit IF your grade is less than C-.

Alpha Grade	4-point Equivalent	Percentage Guidelines		Alpha Grade	4-point Equivalent	Percentage Guidelines
A+	4.0	95-100		C+	2.3	67-69
A	4.0	85-94		C	2.0	63-66
A-	3.7	80-84		C-	1.7	60-62
B+	3.3	77-79		D+	1.3	55-59
B	3.0	73-76		D	1.0	50-54
B-	2.7	70-72		F	0.0	00-49

COURSE SCHEDULE/TENTATIVE TIMELINE:

Week	Topic	Chapters
1	Medication Administration (10 Rights of Medication Administration)	8
2	Understanding & Interpreting Medication Orders	9
3	Medication Documentation & Reading Medication Labels	10, 11
4	Math Review (Decimals, Ratio & Percentages)	2, 3, 4
5	Systems of Measurement & Conversions	5, 6, 7
6	Dosage Calculation Methods	13
7	*READING WEEK – NO CLASSES *	
8	*MIDTERM EXAM*	
9	Oral and Parenteral Dosage Forms	15, 16, 17
10	Insulin	18
11	Intravenous	19, 20
12	Heparin Calculations	21

13	Calculating Dosage Based on Weight	22
14	Review	
15	FINAL EXAM- TBA	

***Subject to change**

STUDENT RESPONSIBILITIES:

As a student at NWP, you have rights and responsibilities. It is your responsibility to be familiar with the information contained in this Course Outline and the PN student handbook and to clarify any areas of concern with the instructor. Please take the time to familiarize yourself with the policies that might impact you while you are here:

- [NWP Department of Practical Nurse & Health Care Aide: Practical Nurse Handbook](#)

STATEMENT ON ACADEMIC MISCONDUCT:

Academic Misconduct will not be tolerated. For a more precise definition of academic misconduct and its consequences, refer to the Student Rights and Responsibilities policy available <https://www.nwpolytech.ca/about/polytechnicleadership/policies-directory>.

****Note:** all Academic and Administrative policies are available on the same page.

Additional Information:

To obtain credit in the course ALL assignments, examinations, and quizzes must be completed.