



**I. COURSE DESCRIPTION:**

This course provides the Registered Nurse/graduate nurse with an opportunity to learn the theory and practical skills necessary to perform safe and competent venipuncture and provide intravenous therapy, both peripherally and centrally. The information provided in this course follows the guidelines established by the Canadian Intravenous Nurses Association (CINA).

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

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

1. State the history and principles of intravenous therapy
2. Identify indications for intravenous therapy
3. Describe anatomy and physiology as it applies to intravenous therapy.
4. Discuss client preparation required prior to venipuncture.
5. Define venipuncture and venous cannulation
6. State the differences between veins and arteries and demonstrate appropriate vein selection for venipuncture/cannulation.
7. State the primary factors to be considered prior to selecting a vein for intravenous therapy.
8. Demonstrate skin asepsis in preparation for cannulation/venipuncture.
9. Identify the various types of intravenous solutions.
10. Identify the various types of devices used in intravenous therapy including angiocaths, tubing and pumps and the nursing considerations for each.
11. Prepare the necessary equipment, initiate and perform venipuncture safely and competently including exit dressing using a demonstration arm.

12. Identify possible complications associated with intravenous therapy including assessment and nursing interventions.
13. Define "Central Venous Catheterization"
14. Describe the types of Central Venous Access Devices (CVAD) and their anatomical placements.
15. Identify possible complications associated with Central Venous Catheterization including assessments and nursing interventions.
16. Prepare the necessary equipment and demonstrate exit site dressing change and maintenance flushing of CVAD.
17. Prepare the necessary equipment and demonstrate blood sampling technique via a CVAD.
18. Document appropriately.

### **III. TOPICS:**

1. History and principles of intravenous therapy
2. Indications for intravenous therapy
3. Anatomy and physiology
4. Appropriate selection of veins and primary factors for vein selection
5. Intravenous solutions and therapies
6. Various devices use in peripheral intravenous therapy (including angiocaths, tubing, pumps)
7. Asepsis, aseptic techniques and safety related to infusion therapy.
8. Initiating and performing venipuncture and exit site dressings.
9. Possible complications associated with intravenous therapy, nursing assessments and interventions.
10. Central Venous Catheterization and Central Venous Access Devices (CVAD)
11. Exit dressings, maintenance and flushing CVAD.
12. Possible complications related to Central Venous Catheterization, nursing assessments and nursing interventions.
13. Blood administration.
14. Chemotherapy.
15. Total Parenteral Nutrition (TPN)
16. Patient teaching
17. Documentation

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

*Weinstein, Sharon. Plumer's Principles of Intravenous Therapy 7<sup>th</sup> edition. Lippincott ISBN 0-7817-1988-7*

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

*Attendance of all classes, lab demonstration and practice is expected for successful completion of this course*

Tests (4)	40% (10% each test)
Lab (attendance & demonstration of skills)	10%
Exam	50%

The following semester grades will be assigned to students in postsecondary courses:

<u>Grade</u>	<u>Definition</u>	<u>Grade Point Equivalent</u>
A+	90 – 100%	4.00
A	80 – 89%	
B	70 - 79%	3.00
C	60 - 69%	2.00
D	50 – 59%	1.00
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.	

**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.

*<include any other special notes appropriate to your course>*

## 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.