



## NURP 1110

**Division:** Career and Technical Education

**Department:** Allied Health

**Course:** NURP 1110

**Title:** Intravenous Therapy Certification

**Catalog Description:**

This course is for the Licensed Practical Nurse, the beginning Registered Nurse, or those practitioners wanting a refresher course in intravenous therapy (I.V.) therapy. The course content will include legal aspects, standard precautions, I.V. start skills, and monitoring for complications. Emphasis will be given to complication prevention, use and monitoring of equipment, employers policies and procedures, body fluids, electrolytes, and acid-base balance.

**General Education Requirements:** N/A

**Semesters Offered:** TBA

**Credit/Time Requirement:** Credit: 1; Lecture: 0; Lab: 1

**Clock/Hour Requirements:** 22

**Offered for Non-Credit:** No

**Prerequisites:** The student must be a licensed practical or registered nurse or have the nursing director's permission.

**Justification:**

The nursing advisory committee has stated that many employers now require I.V. certification for nursing employment. Due to the invasiveness of this skill, it is very important that the student be closely supervised. The cognitive components of prevention and assessment skills are mandatory due to the possibility of serious complications.

**Student Learning Outcomes:**

Upon successful completion of this course, the student will be able to:

- demonstrate understanding of the I.V. Therapy Policy and Procedure with emphasis on the importance of compliance
- demonstrate a knowledge of the anatomy and physiology as it is related to I.V. therapy by completion of the student workbook
- perform successful venipunctures using an over-the-needle catheter (angio-cath) and butterfly with dressing technique
- properly instruct recipient patient
- perform proper documentation procedures
- list the rationale for I.V. therapy along with the types of fluids used for specific conditions
- describe signs and symptoms of complications of I.V. therapy as well as prevention of the same in relation to assessment, nursing diagnosis, planning, interventions, and evaluation within the student's scope of practice

- demonstrate basic knowledge of fluid and electrolyte balance
- identify the national standards by CDC and INS for I.V. therapy
- understand the Nurse Practice Act as it relates to I.V. therapy within their scope of practice
- demonstrate proper use of the equipment used for I.V. therapy using precautions
- identify the principles of drug administration in relation to I.V. therapy with understanding of possible complications with assessment, nursing diagnosis, planning, intervention, and evaluation within the student's scope of practice
- have an understanding of the acid-base balance and blood gases with analysis of the human body.

### **Content:**

The students will receive the theory component of the above objectives and then have the opportunity to practice and master the related skills. The lab activities will be supervised with at least one instructor available to facilitate and mentor. The students will be required to rotate the role of patient and nurse. The skills and theory taught will be within the scope of practice as mandated by the State Board of Nursing. The following skills and theory will be covered:

- risk management and quality patient care
- employers policies and procedures of I.V. therapy
- infection control measures
- prevention and assessment of I.V. therapy complications
- assessment and understanding of fluid and electrolyte balance
- parenteral solutions
- equipment of I.V. therapy
- techniques of peripheral intravenous therapy
- pediatric I.V. therapy within the scope of practice
- site selection
- geriatric I.V. therapy
- special problems
- Nurse Practice Act and I.V. therapy
- National standards for I.V. therapy by CDC and INS
- I.V. drug administration within students scope of practice
- acid base balance and blood gases
- venipunctures using an over-the-needle catheter (angio-cath) and butterfly dressing technique
- patient teaching
- documentation of I.V. therapy
- draw blood x1
- butterfly x1
- Heplock x1
- safety and integrity of I.V. therapy

### **General Education Outcomes:**

1) Read effectively, constructively, and critically.

Students acquire key information from the written text. Exercises in an accompanying workbook will assess student understanding of the concepts covered in the written materials. Feedback will be provided.

6) Apply computational skills to a variety of contexts.

Students must compute I.V. drip rates with reference to volume over time.

**Key Performance Indicators:**

**In class:**

- To become certified the student must demonstrate a sound, basic knowledge of the concepts of I.V. therapy with an 80% or higher grade on the final exam, completing the skills pass-offs, class presentations, workbook, and completion of the record of I.V. starts. A Practical Nurse can take the course but will not receive certification until proof of licensure is obtained.
- The student's final grade will be 20% from workbook and class participation and 80% from the final exam.

**Following class:**

- Evaluation of instruction is based on the final, student performance, and student evaluation.
- The Allied Health department also has an Advisory Committee that consists of members from various health care settings and professions that give input, encourage, evaluate, and review for course improvement.

**Representative Text and/or Supplies:**

- Lynn Dianne Phillips RN, MSN, CRNI, *Manual of I.V. Therapeutics*, current edition, F.A. Davis.

**Optimum Class Size:** 10

**Maximum Class Size:** 20

**Signatures:**

I hereby submit this course syllabus:

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Amber Epling, MSN, Associate Professor

I hereby find this course consistent with the goals and resources of the Allied Health Department:

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Amber Epling, MSN, Associate Professor, Chair

I hereby find this course consistent with the goals and resources of the Career and Technical Education Division:

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Michael P. Medley, MBA, Assistant Professor, Dean

I have discussed the need for library resources related to this class with the person submitting the syllabus:

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Lynn Anderson, MLIS, Technical Services Librarian (Main Campus)

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Michelle Olsen, MLS, Campus Librarian (Richfield Campus)