

**SEWARD COUNTY COMMUNITY COLLEGE
COURSE SYLLABUS**

I. TITLE OF COURSE: NR1113- IV Therapy for the LPN

**II. COURSE DESCRIPTION: 3 credit hours
2.5 credit hours of lecture and 0.5 credit hours of lab per week.**

Three (3) credit hours. 2.5 credit hours lecture. 0.5 credit hour lab/clinical. An online format classroom with face-to-face clinical and lab component designed to prepare the licensed practical nurse to perform limited and expanded administration of intravenous (IV) therapy under the supervision of a registered nurse. Prerequisites: To be eligible to enroll in the IV therapy course the individual shall be a nurse with a current Kansas license (no later than the first day of the course); maintain continued BLS (CPR) certification during the course; and, present evidence of negative TB testing or chest x-ray within the past year.

For each unit of credit, a minimum of three hours per week with one of the hours for class and two hours for studying/preparation outside of class is expected.

Pre-requisite: Successful completion of Level I or Admission to Level II of the nursing program.

III. PROGRAM AND/OR DEPARTMENT MISSION STATEMENT:

The Nursing Program at Seward County Community College (SCCC) prepares competent practical and associate degree nurses to meet the health care needs of clients by delivering quality wholistic care in a professional manner.

IV. TEXTBOOK AND MATERIALS:

A. Textbooks

1. Gahart, B., and Nazareno, A. (2016). Intravenous medications. (32nd ed.). St. Louis: Mosby.
2. Phillips, L. (2014). Manual of I.V. therapeutics. (6th ed.). F.A. Davis: Philadelphia. Reserve: (at Epworth Allied Health Center)
3. Infusion Nurses Society. (January/February 2011). Infusion nursing standards of practice. Journal of Infusion Nursing, 34(1S).

V. SCCC OUTCOMES

Students who successfully complete this course will demonstrate the ability to do the following SCCC Outcomes.

1: Read with comprehension, be critical of what they read, and apply knowledge gained to real life

4: Demonstrate mathematical skills using a variety of techniques and technologies.

5: Demonstrate the ability to think critically by gathering facts, generating insights, analyzing data, and evaluating information

6: Exhibit skills in information and technological literacy

9: Exhibit workplace skills that include respect for others, teamwork competence, attendance/punctuality, decision making, conflict resolution, truthfulness/honesty, positive attitude, judgment, and responsibility

VI. COURSE OUTCOMES:

Upon completion of this course, participants should be able to:

- A. Review and relate the Kansas Nurse Practice Act to the role of the licensed practical nurse in performing the limited and expanded scope of intravenous therapy.
- B. Discuss and adhere to the rules and regulations of the Kansas Nurse Practice Act, and the infusion nursing standards of practice (Infusion Nurses Society), when performing intravenous therapy.
- C. Recognize responsibility to the patient/client, the clinical facility and the nursing process in the provision of intravenous therapy.
- D. Discuss the relationship between intravenous therapy and the regulation of body fluid homeostasis.
- E. Correlate fluid and electrolyte and acid-base imbalances with patient/client clinical manifestations, and with prescribed intravenous therapy.
- F. Understand the anatomy and physiology of the skin and veins and identify location of veins used in intravenous therapy.
- G. Describe best practices related to infection control and safety measures related to intravenous therapy.
- H. Discuss and demonstrate the correct preparation (including appropriate equipment), correct vein and catheter selection, correct insertion technique and correct maintenance of intravenous therapy (including accurate calculation of flow rate); accurately document all of the same.
- I. Recognize the signs and symptoms of local and systemic complications and describe the appropriate nursing interventions, when performing intravenous therapy; accurately document all of the same.
- J. Discuss and demonstrate the correct procedures for the administration of intravenous medications, verbalize potential side effects, and identify adverse reactions and appropriate nursing interventions when performing intravenous therapy.

VII. COURSE OUTLINE:

- A. Introduction & Orientation to the IV Therapy for the LPN
 1. Course Syllabus
 2. Course Policy
 3. Course Expectations
 4. Course Requirements
 5. Clinical Competencies
- B. Roles & Responsibilities of the IV Certified LPN
 1. Value of Certification
 2. Nursing Process in Relation to IV Therapy
 3. Evidence Based Practice in IV Therapy
 4. Standards of Care and Standards of Practice in IV Therapy
 5. Legal & Ethical Issues in IV Therapy Practice
 6. Safe, Quality Care in the Administration of IV Therapy
 7. Individualized, Collaborative, Culturally Sensitive Care in Various Patient Settings
 8. Role and Responsibility of the Certified IV Therapy LPN vs a Non-Certified LPN in the State of Kansas
- C. Techniques and Procedures for Initiating IV Therapy
 1. Anatomy and Physiology as applied to IV Therapy
 2. Steps for Initiating IV Therapy, Including Stabilization
 3. Demonstrate Initiation of IV Fluids
 4. Education and Safety Considerations for IV Therapy
 5. Safety and Infection Prevention Techniques
 6. Appropriate Documentation related to IV Therapy
 7. Pain Reducing Techniques
 8. Flushing and Locking
 9. Joint Stabilization
- D. Fluid and Electrolyte Fundamentals related to IV Therapy.
 1. Demonstrate Understanding of Fluid and Electrolyte Balance

2. Demonstrate Understanding of Fluid and Electrolyte Imbalances
3. Discuss the Use of Parenteral Fluids
- E. Infusion Equipment for IV Therapy
 1. Various Types of Solution Containers
 2. Use of Vented vs Non-Vented Administration Sets
 3. Types and Characteristics of Peripheral IV Catheters
 4. Use of Electronic Infusion Devices
 5. Use of Filters in the Administration of Solutions
 6. Use of Add-On Devices
 7. INS and CDC Recommendations for Equipment Safety
- F. Care, Maintenance, and Discontinuation of IV Therapy
 1. Maintenance of IV Fluids
 2. IV Site Care and Dressing Changes
 3. Reasons for Discontinuation
 4. Safe and Effective Care
 5. Patient Education
 6. Key Components of Appropriate Documentation
 7. Procedure for Discontinuation
- G. Infusion Medication Safety
 1. Medication Administration as it relates to IV Therapy as Defined by the Kansas Nurse Practice Act
 2. Calculation of IV Therapy Medication and Infusion Rates
- H. Phlebotomy & Infection Control
 1. Tubes for Blood Collection
 2. Risks for Blood Collection Through Venipuncture
 3. Mechanisms of Transmission of Microorganisms
 4. Potential Causes of Blood Stream Infections
 5. Standard and Transmission Based Precautions
 6. Importance of Using Aseptic Technique
 7. Post-Vascular Access Device Care and Maintenance for Infection Prevention
 8. Occupational Risks and Hazards in relation to IV Therapy
- I. Pharmacological Considerations related to IV Therapy
 1. Intravenous piggyback drug administration
 2. Manual IV push drug administration
 3. Introduction to precalculated, prepackaged drug systems
 4. Administration of intravenous drugs via volume control set
- J. Recognition and Prevention of Risks and Complications in IV Therapy
 1. Potential local and systemic complications
 2. Infection control
 3. Management of Complications
- K. Special Consideration & Central Line Care
 1. Blood transfusion therapy
 2. Total parenteral nutrition and nursing practice
 3. Chemotherapy patient considerations

VIII. INSTRUCTIONAL METHODS:

- A. Classroom Lecture - Discussion
- B. Clinical Experiences
- C. Demonstration – Return Demonstration
- D. Clinical Competency Checkoff/Checklist

IX. INSTRUCTIONAL AND RESOURCE MATERIALS:

- A. Handouts
- B. Selected Reference Readings

C. Supplies and Equipment used in Clinical Settings

X. METHODS OF ASSESSMENT:

- A. SCCC Outcome #1 will be assessed and measured by class participation, clinical experiences and course examinations.
- B. SCCC Outcome #4 will be assessed and measured by class participation, course examinations, and clinical experiences.
- C. SCCC Outcome #5 will be assessed and measured by class participation, course examinations, and clinical experiences.
- D. SCCC Outcome #6 will be assessed and measured by students' ability to utilize IV equipment and supplies.
- E. SCCC Outcome #9 will be assessed and measured by students exhibiting classroom and clinical behaviors that include respect for others, teamwork, personal responsibility and accountability, and competence in decision making and judgment.

XI. ADA STATEMENT:

Under the Americans with Disabilities Act, Seward County Community College will make reasonable accommodations for students with documented disabilities. If you need support or assistance because of a disability, you may be eligible for academic accommodations. Students should identify themselves to the Dean of Students at 620-417-1106 or going to the Student Success Center in the Hobble Academic building, room 149 A.

Syllabus Reviewed: 5/20/2021