Department:

Nursing

Course Description:

This course is designed to prepare the LPN to start, maintain, troubleshoot, and discontinue intravenous infusions safely and in accordance with Kansas statute and regulations. The course consists of online learning, 10 hours on-site clinical experience, and 2 hours on site for the final written exam. The course is also appropriate for RNs wanting to learn basic IV therapy or to refresh their skills.

Highland Community College Technical Center is approved as a provider of continuing nursing education by the Kansas State Board of Nursing. This course offering is approved for 32 contact hours applicable for LPN relicensure or 20 contact hours for RNs. Kansas State Board of Nursing Provider: available upon request.

Course Competencies:

Upon completion of the course, the student should be able to:

1. Identify the role of the LPN during intravenous therapy.
2. Identify the policies and procedures for intravenous therapy at the Atchison Hospital.
3. Identify the structure of the circulatory system with specific attention to the peripheral venous system.
4. Explain the relationship between intravenous fluid therapy and homeostasis.
5. Identify and define major fluid and electrolyte imbalances.
6. Identify and utilize principles of aseptic technique and standard precautions during IV therapy.
7. Select, assemble, disassemble, and troubleshoot IV equipment.
8. Identify the properties and uses of major IV solutions.
9. Incorporate principles of compatibility and incompatibility of IV drugs and solutions using appropriate references.
10. Explain and demonstrate IV medication reconstitution, delivery, and admixture.
11. Identify and demonstrate management of special IV infusion devices such as heparin and saline locks, and tunneled and non-tunneled venous access devices.
12. Perform peripheral venipuncture, incorporating psychological preparation.
13. Demonstrate techniques designed to maintain IV fluid therapy, such as monitoring the infusion, changing the fluid or tubing, and site care.
14. List local and systemic complications of IV therapy, their signs and symptoms, and appropriate nursing interventions.
15. Compare Intravenous Nurse Society (INS) standards for prevention of IV therapy-related infections with Atchison Hospital policies.
Course Content:

A. Review of the Kansas Nurse Practice Act for current statute and regulations regarding intravenous therapy and the LPN.
B. Intravenous Nurses Society (INS) standards and Atchison Hospital policies for infection control and standard precautions.
C. Review of the anatomy and physiology of the circulatory system with focus on the venous system for IV site selection and IV complications.
D. IV solutions, electrolytes, and their function in restoration of homeostasis.
E. Clinical signs and symptoms of fluid and electrolyte imbalance and appropriate nursing intervention.
F. IV drug preparation and administration including incompatibility of IV solutions and drugs.
G. References for exercises in drug preparation.
H. Initiating, monitoring, and maintaining an IV.
   1. Site selection
   2. Rate calculation
   3. Site monitoring
   4. Site rotation
   5. Tubing and dressing changes
   6. Complications and proper intervention
   7. Maintenance of venous access devices using heparin or saline
   8. Documentation of all aspects of IV therapy
I. IV equipment and intravenous devices currently in use.
J. IV starts, medication administration, patient monitoring, infection control, IV maintenance, and documentation in several patient areas of the Atchison Hospital.
K. Computer assisted programs and manikin and partner practice.

Learning Assessments:

Course competencies will be assessed by final competency examinations and by meeting attendance requirements.

Instructional Materials:

References:
   Infusion Nursing Standards of Practice 2011, Journal of Infusion Nursing
   Policies and Procedures for Infusion Nursing, 4th edition, Infusion Nurses Society
Guidelines for Requesting Accommodations Based on Documented Disability or Medical Condition

It is the intention of Highland Community College to work toward full compliance with the Americans with Disabilities Act, to make instructional programs accessible to all people, and to provide reasonable accommodations according to the law.

Students should understand that it is their responsibility to self-identify their need(s) for accommodation and that they must provide current, comprehensive diagnosis of a specific disability or medical condition from a qualified professional in order to receive services. Documentation must include specific recommendations for accommodation(s). Documentation should be provided in a timely manner prior to or early in the semester so that the requested accommodation can be considered and, if warranted, arranged.

On-Campus Students: At enrollment, any on campus student may complete a form that will allow them to self-identify any disability.

Off-Campus Regional Students: Self-identify your disability and accommodation needs with the Regional Coordinator and/or instructor, preferably prior to the first class meeting.

Online Students: Self-identify your disability and accommodation needs by contacting the Disabilities Coordinator. Students must provide their own programs to allow accessibility on their home computer.

Any student may also identify their disability by completing an online form located on the HCC homepage under Students Services/Resources/Disabilities. Questions should be directed to the Disabilities Coordinator.