Wayne County Community College District



COURSE SYLLABUS

HMD 150 Hemodialysis Machine Set-Up

CREDIT HOURS: 3.00

CONTACT HOURS: 45.00

COURSE DESCRIPTION:

This course will identify the purpose and characteristics of dialyzers; describe the purpose and chemical composition of dialysate; describe dialysate preparation and the three monitoring functions of the dialysate delivery subsystem and the extracorporeal blood circuit functions and monitoring systems. Students will discuss the purpose of water treatment for dialysis, the advantages and disadvantages of water softeners, carbon tanks, reverse osmosis, deionization, and ultraviolet irradiation in the treatment of water for dialysis. The method for microbiological testing of the water treatment system will be examined in the HMD Lab. The course also will identify the dialyzer reprocessing: history, reasons, and step-by-step procedures.

PREREQUISITES:

None

EXPECTED COMPETENCIES:

Upon completion of this course, the student will be familiar with:

- 1. Identify the purpose and characteristics of dialyzers
- 2. Describe the purpose and chemical composition of dialysate
- 3. Describe dialysate preparation and the three monitoring functions of the dialysate delivery subsystems
- 4. Describe the extracorporeal blood circuit functions and monitoring systems

ASSESSMENT METHODS:

Student performance may be assessed by examination, quizzes, case studies, oral conversation, group discussion, oral presentations. The instructor reserves the option to employ one or more of these assessment methods during the course.

GRADING SCALE:

90%-100% = A 80%-89.9%= B 70%-79.9%= C 60%-69.9%= D <60% = E