Wayne County Community College District

COURSE SYLLABUS

HMD 110 Hemdialysis Terms & Principle

CREDIT HOURS: 3:00

CONTACT HOURS: 45.00

COURSE DESCRIPTION:
This course provides students the introduction to the terminology of the Hemodialysis patient care. Usage, definition, pronunciation and spelling of terms common to the renal anatomy and physiology, chronic kidney disease, Hemodialysis devices, vascular access and Hemodialysis procedure and complications will be discussed. Computerized study guide audiocassette tapes are used to enhance students' learning. This course also defines the basic principles of diffusion, filtration, ultra filtration, convection, and osmosis. Explains how diffusion, filtration, ultra filtration, convection and osmosis relate to solute transport and fluid movement during dialysis. Describes the principles of fluid dynamics and how they relate to dialysis.

PREREQUISITES: NONE

EXPECTED COMPETENCIES:
Upon completion of this course, the student will be familiar with:
- Define the basic principles of diffusion, filtration, ultra filtration, convection, and osmosis.
- Explain how diffusion, filtration, ultra filtration, convection, and osmosis relate to solute transport and fluid movement during dialysis.
- Describe the principles of fluid dynamics and how they relate to dialysis.
- 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.
- 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