MOHAWK VALLEY COMMUNITY COLLEGE, UTICA-ROME, NY

Respiratory Care

COURSE OUTLINE

1. COURSE DESCRIPTION:

**RC111 Principles of Respiratory Care I** C-3, P-3, Cr-4

This is the first course in the curriculum sequence to study the theory and practice of respiratory care. Topics include cardiopulmonary anatomy and physiology (including lung and cardiac function, mechanics of breathing, oxygen and carbon dioxide exchange, and control of ventilation), gas administration therapies, humidity and aerosol therapies and bronchial hygiene techniques.

**Prerequisites:** An appropriate Mathematics Placement test results or MA089 Arithmetic (minimum grade of C)

1. STUDENT LEARNING OUTCOMES

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

1. The student will demonstrate an understanding of medical gases, production, storage, and regulation.
2. The student will demonstrate an understanding of the NY State, “Right to Know” Law, NY State HIV Confidentiality Law.
3. The student will demonstrate an understanding of cardio-pulmonary anatomy and basic related physiology.
4. The student will demonstrate an understanding of the forces involved in the process of breathing.
5. The student will demonstrate an understanding of how the body regulates breathing.
6. The student will demonstrate an understanding of the process of oxygen transport.
7. The student will demonstrate an understanding of the purposes, indications, precautions, hazards, and various methods of administration of medical gas therapy.
8. The student will demonstrate an understanding of the techniques involved in conducting a patient’s interview, patient history, assessment of the thorax, observation/inspection, and auscultation of the chest.
9. MAJOR TOPICS:
10. Introduction/Medical Gases
11. Standard Precautions, the Right to Know Law, OSHA, HIV/AIDS
12. Cardiopulmonary Anatomy & Physiology
13. Ventilation and Control of Ventilation
14. The Circulatory System
15. Oxygen Transport
16. Oxygen and Medical Gas Therapy
17. Patient Assessment Techniques