Course Objectives/Course Outline
Spokane Community College

Course Title: Fundamentals of Respiratory Care II Technical Skills Lab
Prefix and Course Number: RT 252
Course Learning Outcomes:
By the end of this course, a student should be able to:

- Perform respiratory mechanics measurement
- Demonstrate use of Noninvasive monitoring: oxygen analyzers, pulse oximetry, capnography, transcutaneous monitoring)
- Demonstrate Apnea monitoring and continuous oximetry / capnography
- Apply medical gas cylinders, reducing valves and regulators in a patient care setting
- Demonstrate the use of medical gas piping systems
- Apply flow regulating devices in a patient care setting
- Apply active and passive humidification devices in spontaneous breathing applications
- Demonstrate the use of aerosol delivery devices and teach a patient how to use them
- Apply aerosol delivery devices for medication delivery
- Evaluate a patient for use of pMDI and DPI delivery devices
- Design an instruction program for a patient on using pMDI and DPI delivery devices

Course Outline:

I. Perform respiratory mechanics measurement
    A. MIP/MEP
    B. SVC
    C. FVC
    D. PEF
II. Set up non-invasive monitoring
    A. Continuous pulse oximetry
    B. Recording oximetry
    C. Apnea monitoring
    D. Home sleep monitoring
III. Medical gas supply systems
    A. Demonstrate use of cylinders
    B. Demonstrate use of reducing valves and regulators
    C. Demonstrate the use of flow metering devices
    D. Demonstrate the use of air/oxygen blenders
    E. Demonstrate the use of enclosures
    F. Demonstrate helium/oxygen administration
IV. Humidification systems
    A. Demonstrate the use of passive humidification systems
    B. Demonstrate the use of heated active humidification systems
V. Aerosol delivery devices

A. Demonstrate the use of large volume nebulizers
B. Demonstrate the use of small volume nebulizers
C. Demonstrate the use of ultrasonic nebulizers
D. Demonstrate the use of vibrating mesh nebulizers
E. Demonstrate the use of pMDIs and valved holding chambers
F. Demonstrate the use of DPIs