Course Objectives/Course Outline Spokane Community College

Course Title: Critical Care I Technical Skills Lab

Prefix and Course Number: RT 311

Course Learning Outcomes:

By the end of this course, a student should be able to:

- Demonstrate how to select an appropriate ventilator for management of an adult patient
- Demonstrate how to establish an airway and select appropriate ventilator settings
- Demonstrate how to perform appropriate ventilator monitoring including compliance, airway resistance and VD/VT determination
- Demonstrate how to modify ventilator settings based upon changes in patient pathology or laboratory results
- Demonstrate how to change a ventilator circuit on a patient receiving continuous mechanical ventilatory support and the use of a bag/valve resuscitator
- Demonstrate how to perform a spontaneous breathing trial
- Demonstrate how to establish appropriate alarm settings and ranges for a patient on mechanical ventilatory support
- Demonstrate how to interpret ventilator graphics
- Demonstrate the management of chest tube drainage systems
- Demonstrate how to obtain an arterial blood sample from an arterial line
- Demonstrate how to transport a patient within the hospital using a bag/valve resuscitator or transport ventilator

Course Outline:

- I. Laboratory exercise and competency checkoff: Initial ventilator settings
- II. Laboratory exercise and competency checkoff: Patient-ventilator system monitoring
- III. Laboratory exercise and competency checkoff: Ventilator parameter change
- IV. Laboratory exercise and competency checkoff: Ventilator circuit change
- V. Laboratory exercise and competency checkoff: Weaning techniques and performance of a Spontaneous Breathing Trial
- VI. Laboratory exercise and competency checkoff: Establish appropriate alarm settings and alarm troubleshooting
- VII. Laboratory exercise and competency checkoff: Ventilator waveform interpretation and corrective action
- VIII. Laboratory exercise and competency checkoff: Management of chest tube
- IX. Laboratory exercise and competency checkoff: Arterial blood sampling from an indwelling arterial catheter
- X. Laboratory exercise and competency checkoff: Intra hospital transport of a patient receiving mechanical ventilation