

NURSING 202: Advanced Concepts of Nursing
UNIT III: The Patient Experiencing Acute Respiratory Failure

UNIT OBJECTIVES

AT THE COMPLETION OF THE UNIT, THE STUDENT:

1. Discusses the etiology and pathophysiology of acute respiratory failure, Acute Respiratory Distress Syndrome (ARDS), and pulmonary vascular disorders.
2. Describes specific clinical manifestations of acute respiratory failure, ARDS, and pulmonary vascular disorders.
3. Identifies diagnostic and treatment measures for patients experiencing acute respiratory failure, ARDS, and pulmonary vascular disorders.
4. Applies knowledge of medication management for patients experiencing acute respiratory failure, ARDS, and pulmonary vascular disorders.
5. Identifies nursing responsibilities for the care of patients with acute respiratory failure, ARDS, and pulmonary vascular disorders.
6. Discusses the complications of acute respiratory failure, ARDS, and pulmonary vascular disorders.
7. Identifies collaborative care management modalities for the patient experiencing respiratory disorders.
8. Describes principles of oxygen therapy for both hypercapnic and hypoxemic individuals.
9. Analyzes ABG's for various clinical situations.
10. Discusses the role of the nurse in preparing a patient for intubation.
11. Describes indications for and nursing care for patients with an artificial airway.
12. Describes common ventilator settings and the nursing/collaborative care involved with modes of ventilatory support.
13. Describes standards of care and recognizes typical alarms for the patient on mechanical ventilation.
14. Identify complications/hazards of invasive and non-invasive ventilatory measures.
15. Describes the practice and nursing care of weaning patients from the ventilator.
16. Describes indications for and nursing care of patients with a tracheostomy.
17. Applies evidence-based practice/best practice standards related to the care of the acute respiratory failure patient.

CONTENT/ HOURS	TEACHING STRATEGIES	SUPPORTING ACTIVITIES	EVALUATION METHODS
<p>Unit III: The Patient Experiencing Acute Respiratory Failure Theory Hours- 8.0 Clinical Hours-4.0 SLP- 0</p> <p>I. Assessment of Respiratory Failure A. Review of A & P Terminology i. Respiratory Physiology ii. Ventilation/Perfusion Mismatch iii. Acid-Base Balance 1. ABG interpretation iv. Oxyhemoglobin dissociation curve</p> <p>II. Acute Respiratory Failure A. Hypoxemic Respiratory Failure B. Hypercapnic Respiratory Failure C. Clinical Manifestations i. Specific vs Non-specific D. Nursing and Collaborative Care i. Nursing Interventions ii. Goals of Care iii. Medication Management iv. Supportive Care E. Gerontologic Considerations</p> <p>III. Pulmonary Vascular Disorders A. Pathophysiology, diagnosis, treatment, and medication management of: i. Pulmonary Hypertension ii. Cor-Pulmonale iii. Pulmonary Embolism iv. Venous Air Embolism</p> <p>IV. Acute Respiratory Distress Syndrome A. Etiology and Pathophysiology B. Signs and Symptoms C. Phases</p>	<p>Handouts Interactive Lecture Collaborative Discussion Demonstration and Return-Demonstration</p> <p>Interactive Lecture, Power Points Classroom Assessment Technique: Spot Check slides and “muddiest point” discussion</p> <p>Problem-based learning: Case Study Analysis – using ABG’s to optimize mechanical ventilation</p> <p>Collaborative Learning: Group work, problem solving, clinical judgment</p> <p>Interactive Lecture, Power Points</p> <p>Interactive Lecture, Power Points Video-enhanced learning: Pt story - ECMO</p>	<p>Critical Care Clinical assignments, Observations in the OR, shadowing the Nurse Anesthetist</p> <p>Class Preparation: Voice-over PowerPoints on ABG analysis and interpretation and modes of mechanical ventilation</p> <p>EdPuzzle Classroom: ABG analysis and interpretation</p>	<p>ICU Clinical and ICU Simulation Pre-Post Conferences, Reflective Debriefing</p> <p>Class Preparation Assignments</p>

CONTENT/ HOURS	TEACHING STRATEGIES	SUPPORTING ACTIVITIES	EVALUATION METHODS
<ul style="list-style-type: none"> ii. Indications iii. Nursing Care and considerations iv. Tracheostomy care v. Weaning from tracheostomy <p>L. Respiratory Failure in the ICU – Case Studies</p>	<p>Demonstration of artificial airway devices</p> <p>Interactive Learning: Beebe Healthcare Policy Review</p> <p>Visual-Based learning: YouTube clip -pt experience, tracheostomy</p> <p>Guest Speaker: ICU Nurse Practitioner</p>		<p>Quiz Unit III Exam #4</p>