

# **NURSING 101: FOUNDATIONS OF NURSING**

## **UNIT VI: NURSING CARE OF PATIENTS WITH DISORDERS OF THE RESPIRATORY SYSTEM**

### **UNIT OBJECTIVES**

#### **AT THE COMPLETION OF THE UNIT, THE STUDENT:**

1. Relates the normal anatomy and physiology of the respiratory system.
2. Explains the importance of normal functioning of the respiratory system to the maintenance of life.
3. Explains the interrelationships of the respiratory system to other body systems.
4. Discusses the effects of aging on the respiratory system.
5. Differentiates normal from abnormal characteristics of nursing assessment for the respiratory system.
6. Explains the purpose, significance, results, and nursing responsibilities of diagnostic studies for the respiratory system.
7. Describes the etiology, clinical manifestations, complications, and nursing responsibilities for the patient with disorders of the upper and lower respiratory systems.
8. Describes the physiology of the acid-base system in regulating respiratory status and explains the implications of alterations in acid-base balance.
9. Describes the process and purpose of arterial blood gas and demonstrates basic understanding of ABG interpretation.
10. Discusses risk factors and nursing care of patients with upper respiratory problems.
11. Discusses risk factors and nursing care of patients with lower respiratory problems.
12. Describes the impact of smoking and tobacco products on the respiratory and related systems.
13. Relates the principles of nicotine addiction to the care of patients with respiratory disorders.
14. Identifies medications used in the management of respiratory disorders
15. Describes nursing care and education for patients receiving respiratory care medications.
16. Discusses risk factors and nursing care of patients with chronic obstructive pulmonary disease.
17. Discusses risk factors and nursing care of patients with asthma.
18. Relates principles of oxygen therapy devices and delivery methods.

19. Discusses risk factors and nursing care of patients with interstitial lung diseases.
20. Discusses risk factors and nursing care of patients with lung cancer.
21. Incorporates aspects of collaborative care with nursing management of patients with respiratory disorders.
22. Describes surgical interventions for disorders of the respiratory system.
23. Demonstrates knowledge of perioperative care and risk assessment for patients with surgical intervention for respiratory disorders.
24. Explains physiology of chest drainage devices.
25. Demonstrates nursing care and assessment of patients with chest drainage devices.

CONTENT/ HOURS	TEACHING STRATEGIES	SUPPORTING ACTIVITIES	EVALUATION METHODS
<p><b>Unit VI: Respiratory Unit</b>  <b>Theory Hours- 16.0</b>  <b>Clinical Hours- 7.0</b></p> <p>I. The Respiratory Tract</p> <ul style="list-style-type: none"> <li>A. Review of the Anatomy and Physiology of the Respiratory Tract</li> <li>B. Review of Assessment</li> <li>C. Diagnostic Studies</li> <li>D. Acid Base Imbalances <ul style="list-style-type: none"> <li>i. Alterations in Acid-Base Balance</li> <li>ii. Respiratory Alkalosis</li> <li>iii. Respiratory Acidosis</li> <li>iv. Oxygenation</li> <li>v. Clinical Findings</li> <li>vi. ABG Interpretation</li> </ul> </li> </ul> <p>II. Upper Respiratory Tract</p> <ul style="list-style-type: none"> <li>A. Problems of Nose and Paranasal Sinuses <ul style="list-style-type: none"> <li>i. Deviated Septum</li> <li>ii. Nasal Fracture</li> <li>iii. Nasal Surgery</li> <li>iv. Epistaxis</li> <li>v. Obstruction of Nose and Sinuses</li> <li>vi. Sleep Apnea</li> <li>vii. Allergic Rhinitis</li> <li>viii. Acute Viral Rhinopharyngitis</li> <li>ix. Influenza</li> <li>x. COVID</li> <li>xi. Sinusitis</li> </ul> </li> <li>B. Problems of the Pharynx <ul style="list-style-type: none"> <li>i. Acute Pharyngitis</li> </ul> </li> <li>C. Problems of the Larynx and Tracheal <ul style="list-style-type: none"> <li>i. Laryngeal Polyps</li> <li>ii. Acute Laryngitis</li> <li>iii. Airway Obstruction</li> </ul> </li> <li>D. Upper Respiratory Medications</li> <li>E. Head and Neck Cancer</li> </ul>	<p>Interactive Lectures</p> <p>Collaborative Learning:  ABG interpretation</p> <p>Collaborative Learning: In-class case study</p> <p>Visual-based Learning: Head and Neck Cancer Survivor Video</p>	<p>Clinical assignments of patients with disorders of the respiratory system, as available</p> <p>Class Preparation:  Respiratory A&amp; P Review</p> <p>Class Preparation:  Respiratory Medications</p>	<p>Pre &amp; Post-Conference:  Care of the patient with respiratory disorders</p> <p>Class Preparation</p> <p>Anecdotes</p> <p>Care Plans</p>

CONTENT/ HOURS	TEACHING STRATEGIES	SUPPORTING ACTIVITIES	EVALUATION METHODS
<p>III. Lower Respiratory Tract</p> <p>A. Lower Respiratory Tract Infections</p> <ol style="list-style-type: none"> <li>i. Acute Bronchitis</li> <li>ii. Pertussis</li> <li>iii. Pneumonia</li> <li>iv. Tuberculosis</li> <li>v. Bronchiectasis</li> <li>vi. Pulmonary Fungal Infection</li> <li>vii. Lung Abscess</li> <li>viii. Pleurisy</li> <li>ix. Pleural Effusion</li> </ol>	<p>Collaborative Learning: Unfolding case studies: Pneumonia/TB/Pleural Effusion</p>	<p>Class Preparation: Khan Academy Pneumonia Video</p>	<p>Quiz <b>Unit Exam</b></p>
<p><b>Exam 1</b></p>			
<p>IV. Effects of Smoking</p>	<p>Visual-based Learning: Smoking Cessation Documentary</p>	<p>ATI: Pharmacology, Made Easy 4.0, 131-144</p>	<p>Class Preparation</p>
<p>V. Respiratory Medications</p> <ol style="list-style-type: none"> <li>A. Bronchodilators</li> <li>B. Anti-inflammatory agents</li> <li>C. Leukotriene modifiers</li> <li>D. Mucolytics</li> <li>E. Immunomodulators</li> <li>F. Combination therapy</li> <li>G. Patient Teaching</li> <li>H. Medication delivery methods <ol style="list-style-type: none"> <li>i. HHN</li> <li>ii. MDI</li> <li>iii. DPI</li> </ol> </li> </ol>	<p>Interactive Learning: In-class review and application of ATI Medication Templates</p> <p>Psychomotor Learning: “Show and Tell” in class medication delivery devices</p>	<p>ATI: Adult Med-surg textbook/ebook resources COPD 136-141, Asthma 133-136 ATI: Adult Med-surg textbook/ebook resources Lung CA 618-620</p>	
<p>VI. Obstructive Airway Disorders</p> <ol style="list-style-type: none"> <li>A. COPD</li> <li>B. Asthma</li> <li>C. Interstitial Lung Disease</li> <li>D. Lung Cancer</li> </ol>		<p>ATI: Adult Med-surg textbook/ebook resources Oxygen devices 115-119</p>	<p>Class Preparation</p>
<p>VII. Oxygen Therapy</p> <ol style="list-style-type: none"> <li>A. Principles of oxygen therapy</li> <li>B. Oxygen delivery devices <ol style="list-style-type: none"> <li>i. Cannulas</li> </ol> </li> </ol>	<p>Psychomotor Learning: “Show and Tell” in class oxygen delivery cannulas and masks with O<sub>2</sub> tanks</p>		

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<p>ii. Masks iii. Other C. Supportive care i. Breathing techniques ii. Chest percussion and vibration iii. Postural drainage iv. Airway clearance devices 1. Incentive Spirometry 2. Flutter Device 3. Acapella D. Nursing care of respiratory patients i. Patient education</p> <p>VIII. Surgical Procedures of the Chest and A. Thoracotomy i. VATS ii. Wedge Resection iii. Lobectomy iv. Wedge resection v. Bullectomy vi. LVRS vii. Transplant viii. Pleurodesis B. Nursing care of the respiratory surgical patient i. Pre-op teaching ii. Post-op care iii. Prevention of complications iv. Patient education C. Chest Drainage Systems i. Principles of chest drainage systems ii. Nursing care of patients with a chest tube</p> <p><b>Exam 2</b></p>	<p>Visual Learning: YouTube video “huff” breathing</p> <p>Classroom Assessment Technique: O-△-□ ATI resource</p> <p>Psychomotor Learning: “Show and Tell” in class Atrium and Sahara dry-drainage systems</p> <p>Collaborative Learning – Concept Maps/Jigsaw</p>	<p>ATI: Adult Med-surg textbook/ebook resources Chest tubes 105-114</p>	<p>Class Preparation</p> <p>Quiz</p> <p><b>Unit Exam</b></p>