

# **NURSING 101: FOUNDATIONS OF NURSING**

## **UNIT VII: NURSING CARE OF PATIENTS WITH DISORDERS OF THE MUSCULOSKELETAL SYSTEM**

### **UNIT OBJECTIVES**

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

1. Relates the normal anatomy and physiology of the musculoskeletal system.
2. Explains the importance of normal functioning of the musculoskeletal system to the maintenance of life.
3. Explains the interrelationships of the musculoskeletal system to other body systems.
4. Differentiates normal from abnormal characteristics of nursing assessment for the musculoskeletal system.
5. Explains the purpose, significance, results, and nursing responsibilities of diagnostic studies for the musculoskeletal system.
6. Describes the etiology, clinical manifestations, complications, and nursing responsibilities for the patient with disorders of the musculoskeletal system.
7. Discusses the usual medical, surgical, and nursing management of patients with disorders of the musculoskeletal system.
8. Implements therapeutic nursing care, using the nursing process, for patients with disorders of the musculoskeletal system.
9. Utilizes communication skills when delivering nursing care to patients with disorders of the musculoskeletal system.
10. Identifies the psychosocial needs of the patient with a disorder of the musculoskeletal system.
11. Teaches patients about their musculoskeletal disorders.
12. Relates knowledge of community resources available to assist the patient with disorders of the musculoskeletal system.
13. Describes methods to assist the patient with impaired physical mobility.
14. Demonstrates accountability when providing nursing care for patients with disorders of the musculoskeletal system.
15. Discusses clinical manifestations related to specific age-related physiologic changes in the musculoskeletal system.
16. Describes common musculoskeletal problems of older adults and the role of the nurse in assisting them with selected care problems.
17. Identifies evidence-based practice/best practice standards related to nursing care for patients with disorders of the musculoskeletal system.
18. Exhibits accountability when delivering nursing care to patients with disorders of the musculoskeletal system.

CONTENT	HOURS	TEACHING METHOD	RELATED LEARNING EXPERIENCE OR SUPPORTING ACTIVITY	EVALUATION METHOD
<p>Unit VI. Nursing Care of Patients with Disorders of the Musculoskeletal System.</p> <p>I. Review of Anatomy and Physiology</p> <p>A. Bone</p> <p>B. Joints</p> <p>C. Cartilage</p> <p>D. Muscle</p> <p>E. Ligaments</p> <p>F. Tendons</p> <p>G. Fascia</p> <p>H. Bursae</p> <p>II. Assessment</p> <p>A. History</p> <p>B. Physical Examination</p> <p>C. Geriatric Consideration</p> <p>D. Diagnostic Studies</p> <p>1. Noninvasive Radiology</p> <p>2. Invasive Procedures</p> <p>E. Nursing Diagnoses</p>	<p>15 T</p> <p>4.5 C</p>	<p>Lecture</p> <p>Power Point</p> <p>Discussion</p> <p>Handouts</p> <p>Demonstrations</p> <p>Videos</p> <p>You Tube Clips</p> <p>Read &amp; Review A &amp; P Text</p> <p>3 Crash Course You Tube Videos</p> <p>Poll Everywhere</p> <p>ATI: Learning System RN Textbook resource</p> <p>Case Study Group Work</p>	<p>Classroom Participation</p> <p>Required Readings</p> <p>Clinical Pre &amp; Post Conferences</p> <p>Plan &amp; give care to patients with Musculoskeletal disorders as available.</p> <p>Observe orthopedic surgery.</p> <p>Observe the role of the Physical Therapist.</p> <p>Observe in an orthopedic surgeon's office.</p>	<p>Nursing Care Plans</p> <p>Clinical Evaluations</p> <p>Unit Exams</p> <p>Final Exam</p>

CONTENT	HOURS	TEACHING METHOD	RELATED LEARNING EXPERIENCE OR SUPPORTING ACTIVITY	EVALUATION METHOD
<p>III. Nursing Care of the Patient with a Fracture</p> <ul style="list-style-type: none"> <li>A. Classification and Etiology</li> <li>B. Clinical Manifestations</li> <li>C. Bone Healing</li> <li>D. Diagnosis</li> <li>E. Medical Management of the Patient with a Fracture <ul style="list-style-type: none"> <li>1. Immediate Fracture Management</li> <li>2. Fracture Reduction <ul style="list-style-type: none"> <li>a. Closed</li> <li>b. Open</li> <li>c. Traction</li> </ul> </li> <li>3. Fracture Immobilization <ul style="list-style-type: none"> <li>a. Casts</li> <li>b. External Fixation</li> <li>c. Internal Fixation</li> <li>d. Traction</li> </ul> </li> <li>4. Secondary Management for Compound Fractures</li> <li>5. Drug Therapy</li> </ul> </li> <li>F. Nursing Management of the Patient with a Fracture <ul style="list-style-type: none"> <li>1. Assessment</li> <li>2. Nursing Diagnoses</li> <li>3. Planning</li> </ul> </li> </ul>		PowerPoint, Lecture		

CONTENT	HOURS	TEACHING METHOD	RELATED LEARNING EXPERIENCE OR SUPPORTING ACTIVITY	EVALUATION METHOD
<ul style="list-style-type: none"> <li>4. Implementation               <ul style="list-style-type: none"> <li>a. Surgical Management                   <ul style="list-style-type: none"> <li>1) Pre-op</li> <li>2) Post-op</li> </ul> </li> <li>b. Nursing Care of the Patient with a Cast</li> <li>c. Nursing Care of the Patient in Traction</li> <li>d. Nursing Care of the Patient with an External Fixator Device</li> </ul> </li> <li>G. Medical and Nursing Management of Specific Fractures               <ul style="list-style-type: none"> <li>1. Facial</li> <li>2. Hip</li> <li>3. Colles</li> </ul> </li> <li>H. Complications               <ul style="list-style-type: none"> <li>1. Compartment Syndrome                   <ul style="list-style-type: none"> <li>a. Volkmann's Contracture</li> </ul> </li> <li>2. Crush Syndrome</li> <li>3. Artery Damage</li> <li>4. Peripheral Nerve Injuries</li> <li>5. Fat Embolism</li> <li>6. Venous Thrombosis</li> <li>7. Shock</li> <li>8. Infections</li> <li>9. Avascular Necrosis</li> <li>10. Kidney Stones</li> <li>11. Complications of Bone Union</li> </ul> </li> </ul>		<p>In-class group work and evolving case study; fracture and complications</p>		

CONTENT		HOURS	TEACHING METHOD	RELATED LEARNING EXPERIENCE OR SUPPORTING ACTIVITY	EVALUATION METHOD
IV.	Nursing Care of the Patient with Joint and Soft Tissue Injuries and Disorders		YouTube Video: In-class activity, Ace wrap partner lower extremity		
A.	Trauma				
1.	Strain				
2.	Sprain				
3.	Dislocation and Subluxation				
4.	Peripheral Nerve Injury				
5.	Muscle Spasm				
6.	Contusion				
B.	Inflammation		Lecture, PowerPoint with Images		
1.	Bursitis				
2.	Tendonitis				
C.	Common Disorders of Specific Body Parts				
1.	Jaw (TMJ syndrome)				
2.	Shoulder				
3.	Elbow				
4.	Wrist and Hand				
5.	Knee				
6.	Ankle				
7.	Feet				
V.	Osteomyelitis		Lecture, PowerPoint		
VI.	Amputation				
VII.	Bone Cancer		Amputation: Kahoot review and ATI stump wrapping video with demonstration and practice		
VIII.	Metabolic Bone Disorders			ATI:	
A.	Osteoporosis		Bone Cancer: Independent study	Osteoporosis ALT	
B.	Osteomalacia		PowerPoint and outline		
C.	Paget's Disease				

Exam I

CONTENT		HOURS	TEACHING METHOD	RELATED LEARNING EXPERIENCE OR SUPPORTING ACTIVITY	EVALUATION METHOD
IX.	Nursing Care of Patients with Arthritis and related Rheumatic Problems A. Osteoarthritis B. Rheumatoid Arthritis C. Ankylosing Spondylitis D. Reiter's Syndrome E. Bacterial Arthritis F. Gout G. Systemic Sclerosis/ Scleroderma H. Systemic Lupus Erythematosus I. Polymyositis and Dermatomyositis J. Sjogren's Syndrome K. Fibromyalgia Syndrome		OA: Kahoot Review  OA: Independent study PowerPoint  Lecture, PowerPoint	Class Preparation – OA vs. RA Table  In-class activity of completing RA Drug Reference Table  Living with Scleroderma Guest Speaker	
X.	Assisting the Patient with Impaired Physical Mobility A. Assisting with Ambulation (canes, crutches, walkers, etc.) B. Assisting with Exercises to Improve or Maintain Function C. Application of Heat and Other Therapies to Improve Function		Physical Therapy Interactive Demonstration – Guest Speaker	Observe physical and Occupational therapy with assigned patients	
XI.	Nursing Care of the Patient Having Joint Surgery		TJR Videos Group work – Care of the Total Joint Client		

Exam II