

**CAREER TECHNOLOGY CENTER OF LACKAWANNA COUNTY  
PRACTICAL NURSING PROGRAM**

Course Title: Medical Surgical Nursing I

Unit Title: Musculoskeletal Disorders

Description: This unit presents disorders of the musculoskeletal system and their management

Placement: Level II

Parallel Courses Nursing Skills II/Nutrition/Medical Surgical Units of Cardiovascular Disorders and Gastrointestinal Disorders

Total Hours: 15

Course Outcomes: At the end of the course, the student will:

1. Discuss etiology, incidence, diagnosis, symptoms, medical management and nursing management of the patient with a Musculoskeletal Disorder
2. Utilize the nursing process to prepare and execute a care plan for the patient with a Musculoskeletal Disorder

Unit Outline:

1. Orientation
2. Anatomy and Physiology Review
3. Diagnostic Evaluation
4. Common Disorders
5. The patient with a Fracture
6. The patient with Bone and Joint Disease
7. The patient with an Amputation

Requirements:

Ford, S. (2018). *Roach's introductory: Clinical pharmacology* (11th ed). Philadelphia, PA: Wolters Kluwer.  
Herlihy, B. (2018). *The human body in health and illness* (6th ed). St. Louis, MO: Elsevier.  
Van Leeuwen, A., & Bladh, M. (2017). *Davis's comprehensive handbook of laboratory and diagnostic tests with nursing implications* (7th ed). Philadelphia, PA: F.A. Davis.  
Williams, L., & Hopper, P. (2019). *Understanding medical-surgical nursing* (6th ed). Philadelphia, PA: F.A. Davis.

Evaluation:

Test # 1 50%  
Test # 2 50%

Students are responsible to bring a calculator to each test. Cellphone calculators are not prohibited in class.

Instructor: Jill Mathewson, BSN, RN

Date: 8/19

**COURSE TITLE: Medical-Surgical Nursing I**  
**UNIT TITLE: Musculo-Skeletal Disorders**

STUDENT LEARNING COURSE OUTCOMES	HR	CONTENT	LEARNING RESOURCE AND ACTIVITY	SETTING	EVALUATION
<p>At the end of the Unit, the student will:</p> <p>Identify the course objectives and requirements</p> <p>Describe normal structure and function of the musculo-skeletal system</p> <p>Discuss diagnostic evaluation the patient with a disorder the musculo-skeletal system</p> <p>List normal values for selecting blood studies</p> <p>Describe nursing management of the patient undergoing diagnostic evaluation of the musculo-skeletal system</p>	<p>.5</p> <p>2</p>	<p>1. Orientation</p> <p>    A. Course outcomes</p> <p>    B. Course content</p> <p>    C. Evaluation tools</p> <p>2. Anatomy and Physiology Review</p> <p>3. Diagnostic Evaluation</p> <p>    A. History &amp; Physical Exam</p> <p>    B. Nursing Assessment</p> <p>    C. X-rays</p> <p>        1. Bone film</p> <p>        2. Myelogram</p> <p>        3. Arthrogram</p> <p>        4. Electromyelogram</p> <p>        5. Bone Scanning</p> <p>        6. CT Scanning</p> <p>D. Blood studies</p> <p>E. MRI</p> <p>F. Arthroscopy</p>	<p>Lecture/Discussion</p> <p>Powerpoint</p> <p>Herlihy: Chapters 8 &amp; 9</p> <p>Williams: Chapters 45</p> <p>Leeuwen/Bladh: Normal Values for:</p> <p>    1. PTT</p> <p>    2. PT</p> <p>    3. ESR</p> <p>    4. H &amp; H</p> <p>    5. Calcium</p> <p>    6. C-Reactive Protein</p> <p>    7. LE Prep</p> <p>    8. RA Factor</p> <p>    9. ANA</p> <p>Audio-visuals</p>	<p>Classroom</p>	

**COURSE TITLE: Medical-Surgical Nursing I**  
**UNIT TITLE: Musculo-Skeletal Disorders**

STUDENT LEARNING COURSE OUTCOMES	HR	CONTENT	LEARNING RESOURCE AND ACTIVITY	SETTING	EVALUATION
<p>Discuss etiology of common disorders</p> <p>List signs and symptoms of common disorders</p> <p>Discuss pathophysiology of common disorders</p> <p>Discuss treatment of common disorders</p> <p>Discuss medical management of a patient with a common disorder</p> <p>Discuss nursing management of a patient with a common disorder</p> <p>Discuss nutritional and pharmacological therapy for the patient with a common disorder</p>	.5	<p>4. Common Disorders</p> <p>A. Etiology</p> <p>B. Signs and symptoms</p> <p>C. Pathophysiology</p> <p>D. Treatment</p> <p>E. Medical management</p> <p>F. Nursing management</p> <p>G. Nutritional and pharmacological therapy</p>	<p>Lecture/Discussion</p> <p>Williams: Chapters 46</p> <p>Ford/Roach Chapter 30</p>	Classroom	
<p>Discuss etiology of fractures</p> <p>List signs and symptoms of fractures</p> <p>Discuss pathophysiology of fractures</p> <p>Discuss treatment of the patient with a fracture</p> <p>Discuss medical management of the patient with a fracture</p> <p>Discuss nursing management of the patient with a fracture</p> <p>Discuss nutritional and pharmacological therapy for the patient with a fracture</p>	6	<p>5. The Patient with a Fracture</p> <p>A. Etiology</p> <p>B. Signs and symptoms</p> <p>C. Pathophysiology</p> <p>D. Treatment</p> <p>E. Medical management</p> <p>F. Nursing management</p> <p>G. Nutritional and pharmacological therapy</p>	<p>Williams: Chapters 46</p> <p>Ford/Roach Chapter 30</p>	Classroom	<p>Test # 1</p> <p>Units: 2, 3, 4, 5</p>

**COURSE TITLE: Medical-Surgical Nursing I**  
**UNIT TITLE: Musculo-Skeletal Disorders**

STUDENT LEARNING COURSE OUTCOMES	HR	CONTENT	LEARNING RESOURCE AND ACTIVITY	SETTING	EVALUATION
<p>Discuss etiology of bone and joint disease</p> <p>List signs and symptoms of bone and joint disease</p> <p>Discussion pathophysiology of bone and joint disease</p> <p>Discussion treatment of the patient with bone and joint</p> <p>Discussion medical management of the patient with bone and joint disease</p> <p>Discuss nursing management of the patient with bone and joint disease</p> <p>Discussion nutritional and pharmacological therapy for the patient with bone and joint disease</p>	3	<p>6. Bone and Joint Disease</p> <p>A. Etiology</p> <p>B. Signs and symptoms</p> <p>C. Pathophysiology</p> <p>D. Treatment</p> <p>E. Medical management</p> <p>F. Nursing management</p> <p>G. Nutritional and pharmacological therapy</p>	<p>Lecture/Discussion</p> <p>Williams: Chapters 46</p> <p>Ford/Roach Chapter 30</p> <p>Audio-visuals</p>	Classroom	

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STUDENT LEARNING COURSE OUTCOMES	HR	CONTENT	LEARNING RESOURCE AND ACTIVITY	SETTING	EVALUATION
<p>Discuss etiology of amputation</p> <p>Discuss treatment of the patient with an amputation</p> <p>Discuss medical management of the patient with an amputation</p> <p>Discuss nursing management of the patient with an amputation</p> <p>Discuss nutritional and pharmacological therapy for the patient with an amputation</p>	3	<p>7. The Patient with an Amputation</p> <ul style="list-style-type: none"> <li>A. Etiology</li> <li>B. Treatment</li> <li>C. Medical management</li> <li>D. Nursing management</li> <li>E. Nutritional and pharmacological therapy</li> </ul>	<p>Lecture/Discussion</p> <p>Williams: Chapters 46</p> <p>Ford/Roach Chapter 30</p> <p>Audio-visuals</p>	Classroom	<p>Test #2</p> <p>Units: 6 &amp; 7</p>

## Reference

### Books:

- Ackley, B. (2014). *Nursing diagnosis handbook* (10<sup>th</sup> ed). St. Louis, MO: Elsevier.
- Carpenito, L. (2016). *Handbook of nursing diagnosis, application in clinical practice* (15th ed). Philadelphia, PA: Lippincott, Williams & Wilkins.
- Doenges, M., Moorhouse, M., & Murr, A. (2016) *Nursing diagnosis manual: Planning, individualizing, and Documenting client care* (5th ed). Philadelphia, PA: F. A. Davis.
- Ford, S. (2018). *Roach's introductory: Clinical pharmacology* (11th ed). Philadelphia, PA: Wolters Kluwer.
- Herlihy, B. (2018). *The human body in health and illness* (6th ed). St. Louis, MO: Elsevier.
- Nix, S. (2016). *William's basic nutrition and diet therapy* (15th ed). St. Louis, MO: Elsevier.
- Perry, A., Potter, P., & Ostendorf, W. (2020). *Nursing interventions and clinical skills* (7th ed). St. Louis, MO: Elsevier.
- Van Leeuwen, A., & Bladh, M. (2017). *Davis's comprehensive handbook of laboratory and diagnostic tests with nursing implications* (7th ed). Philadelphia, PA: F.A. Davis.
- Vallerand, A., & Sanoski, C. (2017). *Davis's drug guide for nurses* (15th ed). Philadelphia, PA: F.A. Davis.
- Williams, L., & Hopper, P. (2019). *Understanding medical-surgical nursing* (6th ed). Philadelphia, PA: F.A. Davis.

### Other Sources:

- Carek, S. M., & Carek, P. J. (2018). Consider these exercises for chronic musculoskeletal conditions. *Journal of Family Practice*, 67(9), 534.
- Devaraj, N. K. (2019). The Atypical Presentation of Rheumatoid Arthritis in an Elderly Woman: A Case Report. *Ethiopian Journal of Health Sciences*, 29(1), 957–958.
- Doghramji, P. P. (2018). Long-term Treatment of Gout: New Opportunities for Improved Outcomes. *Journal of Family Practice*, 67, S19–S24.
- Harbourne, A. D., Sanchez-Santos, M. T., Arden, N. K., & Filbay, S. R. (2019). Predictors of return to desired activity 12 months following unicompartmental and total knee arthroplasty. *Acta Orthopaedica*, 90(1), 74–80.
- Towiwat, P., Chhana, A., & Dalbeth, N. (2019). The anatomical pathology of gout: a systematic literature review. *BMC Musculoskeletal Disorders*, 20(1), 1–14.