MASTER SYLLABUS

COURSE NO., HOURS, AND TITLE: PTH 203 - 2 credits - Pathology

COURSE DESCRIPTION: Students will be able to describe the fundamental basis of diseases including inflammation, cardiovascular diseases, vascular diseases, orthopedic conditions and repair of bone and soft tissue injuries. Emphasis will be placed on those conditions treated through physical therapy procedures.

PREREQUISITES: PHSL 201 & 208 or AH 241; Restricted to PTH major.

PREREQUISITE TO: PTH 321A, 321B, 322

COURSE OBJECTIVES:
Upon successful completion of this course, the student shall be able to demonstrate the following knowledge as measured by written examination:

1. Define the terms pathology, etiology, pathogenesis, diagnosis, and prognosis.
2. Describe the inflammatory process.
3. Understand the significance of the inflammatory process.
4. Describe the systems involved in immunity and their role.
5. Describe the normal process of soft tissue healing including:
   A. Regeneration
   B. Repair
   C. Primary Intention
   D. Secondary Intention
6. Understand the principles of wound care for the Physical Therapist Assistant including:
   A. Identify potential risk of wound development.
   B. Recognize normal and abnormal integumentary changes.
   C. Describe and identify the stages of wound development.
   D. Differentiate between viable and nonviable tissue.
   E. Identify the proper dressing based upon wound conditions.
   F. Describe the proper procedure and precautions for the application and removal of dressings
   G. Understand pertinent lab values related to wound healing.
   H. Describe and explain the effect of disease states on the normal process of healing.
   I. Describe the condition of a wound meeting physical therapy documentation requirements.
7. Relate the physical therapy plan of care and goals developed by the physical therapist to wound care and soft tissue healing.
8. Describe the etiology, pathogenesis, signs, symptoms, and potential treatments of neoplasia of various body systems.
10. Differentiate between congenital and hereditary disorders in terms of etiology.
11. Differentiate between autosomal dominant, autosomal recessive and sex-linked disorders in terms of etiology and transmission.
12. Describe the etiology, pathogenesis, signs, symptoms, epidemiological factors and treatment of various diseases and disorders of the cardiovascular system across the lifespan.
13. Understand pertinent lab values related to the cardiovascular system and their implications to physical therapy treatment.
14. Understand the stages of cardiac rehabilitation in physical therapy including the focus of physical therapy treatment for each stage.
16. Relate the physical therapy plan of care and goals developed by the physical therapist to pathology of the cardiovascular system.
17. Explain the process of normal fluid transmission at the capillary bed.
18. Understand how disruptions of normal fluid transmission at the capillary bed results in edema.
19. Relate the physical therapy plan of care and goals developed by the physical therapist to the pathology of edema.
20. Describe the etiology, pathogenesis, diagnosis and prognosis of thrombi and emboli.
21. Explain the etiology and process of hemorrhage and hemostasis.
22. Describe the different types of fractures and the stages of bone healing.
23. Explain the common complications of fractures and healing.
24. Describe the methods of reduction and maintenance of fractures.
25. Differentiate between Rheumatoid Arthritis and Osteoarthritis in terms of etiology, pathology, pathogenesis, and physical therapy treatment implications.
26. Relate the physical therapy plan of care and goals developed by the physical therapist to fractures and arthritis.
27. Understand the pathology, pathogenesis, diagnosis and treatment of various bone disorders across the lifespan including:
   A. Osteoporosis
   B. Paget's Disease
   C. Osteogenesis Imperfecta
   D. Osteomalacia

* Fulfillment of each objective will be determined by written examination.

**TOPICAL OUTLINE:**

<table>
<thead>
<tr>
<th>Topics</th>
<th>Percentage of Time</th>
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<tbody>
<tr>
<td>I. INTRODUCTION</td>
<td>5%</td>
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<tr>
<td>A. Disease terminology</td>
<td></td>
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<tr>
<td>II. INFLAMMATION, IMMUNITY, ALLERGY</td>
<td>20%</td>
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MASTER SYLLABUS. 08/17
III. HEALING & REPAIR 10%

IV. NEOPLASIA 5%

V. GENETICS 5%

VI. CIRCULATORY SYSTEM 30%
   A. Anatomy & Physiology
   B. Cardiac Disease
   C. Disease of Blood Vessels
   D. Disease of Blood
   E. Hemorrhage, Hemostasis, Shock
   F. Edema

VII. SKELETAL SYSTEM 25%
   A. Fractures
   B. Disease of Skeletal System

TEXTBOOKS:
Required
