

Virginia Western Community College

PTH 227

Pathological Conditions

Prerequisites

PTH 131 and PTA program placement

VCCS Course Description

Presents specific pathologic conditions commonly seen in physical therapy. Emphasizes musculoskeletal and neurological system conditions, and all major body systems are represented.

VWCC Discipline Specific Course Description

Same as above.

Semester Credits: 3

Lecture Hours: 3

Lab Hours: 0

Required Materials

Textbook

- *Introduction to Pathology for the Physical Therapist Assistant, 2nd edition by Jahangir Moini and Casey Chaney; ISBN: 9781284179361*

Course Supplies:

- No additional supplies

Note to Instructors

- This course should follow all PTA program policies.

VWCC AND DISCIPLINE SPECIFIC OUTCOMES

At the completion of this course, students will be able to correctly:

- Differentiate terminology regarding pathophysiology, including etiology, incidence, and prevalence.
- Identify the etiology, signs, symptoms, treatment, and physical therapy implications for diseases and disorders of the following body systems across the lifespan:
 - Cardiovascular system

- Endocrine and metabolic systems
- Gastrointestinal system
- Genital and reproductive systems
- Hematologic system
- Hepatic and biliary systems
- Immune system
- Integumentary system
- Lymphatic system
- Musculoskeletal system
- Nervous system
- Respiratory system
- Renal and urologic systems
- Identify the etiology, signs, symptoms, treatment, and physical therapy implications for diseases and disorders of conditions impacting multiple systems that occur across the lifespan.
- Recognize common medical and surgical conditions that occur throughout the lifespan.
- Recognize red flags for physical therapy intervention related the following systems across the lifespan:
 - Cardiovascular system
 - Endocrine and metabolic systems
 - Gastrointestinal system
 - Genital and reproductive systems
 - Hematologic system
 - Hepatic and biliary systems
 - Immune system
 - Integumentary system
 - Lymphatic system
 - Musculoskeletal system
 - Nervous system
 - Respiratory system
 - Renal and urologic systems
- Differentiate the types of dementia and memory loss disorders, including implications for patient communication and physical therapy treatment.
- Differentiate anatomical and physiological changes that occur with aging in general and impacting the following systems:
 - Cardiovascular system
 - Endocrine and metabolic systems
 - Gastrointestinal system
 - Genital and reproductive systems
 - Hematologic system
 - Hepatic and biliary systems
 - Integumentary system
 - Lymphatic system

- Musculoskeletal system
 - Nervous system
 - Respiratory system
 - Renal and urologic systems
- Differentiate pathophysiology, signs, and symptoms of oncology disorders impacting the following body systems:
 - Gastrointestinal system
 - Genital and reproductive systems
 - Hematologic system
 - Integumentary system
 - Lymphatic system
 - Musculoskeletal system
 - Nervous system
 - Respiratory system
 - Renal and urologic systems
- Identify the impact of common cancer treatments on the immune, integumentary, musculoskeletal, and nervous systems.
- Identify the anatomical and physiological changes that occur with pregnancy.
- Recognize the role of physical therapy in the management of women's and men's health conditions impacting the genitoreproductive and urinary systems.
- Differentiate between various types of incontinence and physical therapy interventions to address each type.
- Outline the potential complications of diabetes mellitus on various body systems.
- Recognize the role of physical therapy in the management of cancer-related weakness and disability.
- Recognize factors, including exercise, that may impact the immune system.
- Identify the impact of common cardiovascular medications on exercise response and activity tolerance.
- Recognize signs and symptoms of respiratory distress.
- Identify the physical therapy implications of genetic and developmental disorders.
- Differentiate the stages of normal motor development.
- Compare the signs and symptoms of central and peripheral nervous system pathologies across the lifespan.
- Identify normal and abnormal lab values, including their clinical significance for physical therapy treatment for various body systems.
- Compare and contrast the use and reasons for various diagnostic tests and diagnostic imaging used to assess disorders of various body systems.
- Interpret lab values, diagnostic tests, and imaging results from the medical record to accurately determine appropriate physical therapy interventions from within the physical therapist's plan of care.
- Recognize basic pharmacokinetic principles.
- Select appropriate modifications of a patient treatment session based on the physical therapy plan of care to account for the impact of common medications.

- Identify the indications, side effects, and physical therapy implications of common medications.
- Outline the role of the gastrointestinal, hepatic, and renal systems in the absorption, distribution, metabolism, and excretion of medications.
- Design a podcast episode utilizing evidence-based resources summarizing an assigned pathology impacting a major body system.
- Discuss with other healthcare students high-quality interprofessional practice including values and ethics, communication strategies, professional roles and responsibilities, and teamwork.

VWCC AND DISCIPLINE SPECIFIC TOPICAL DESCRIPTIONS

- The etiology, signs, symptoms, treatment, and physical therapy implications for diseases
and disorders of the following body systems across the lifespan:
 - o Cardiovascular system, Endocrine and metabolic systems, Gastrointestinal system, Genital and reproductive systems, Hematologic system, Hepatic and biliary systems, Immune system, Integumentary system, Lymphatic system, Musculoskeletal system, Nervous system, Respiratory system, Renal and urologic systems, Multisystem pathologies
- Types of dementia and memory loss disorders, including implications for patient communication and physical therapy treatment.
- Normal and abnormal lab values, including their clinical significance for physical therapy treatment.
- Review of lab values, diagnostic tests, and imaging results from the medical record prior to determining appropriate physical therapy interventions from within the physical therapist's plan of care for a patient scenario.
- Pharmacokinetic principles, common medications impacting each system discussed in class, modification of treatments to consider the impact of medications.

[TITLE IX STATEMENT](#)

[ADA STATEMENT](#)