

JEFFERSON COLLEGE

COURSE SYLLABUS

PTA245

PATHOLOGICAL IMPLICATIONS IN REHABILITATION

2 Credit Hours

Prepared by:

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PTA245 Pathological Implications in Rehabilitation

I. CATALOGUE DESCRIPTION

- A. Prerequisites: PTA130 Professional Conduct and Communication and PTA140 Neuromotor Development, each with a grade of “C” or better, BIO245 Pathophysiology with a grade of “C” or better or instructor permission, successful completion of PTA150 Clinical Experience I, and Reading Proficiency
- B. Credit hour award: 2 credit hours
- C. Description: This course builds on the information presented in BIO245 Pathophysiology on common pathologies of each organ system. This course will present information to include signs and symptoms patients may present within the rehabilitation setting, implications when more than one pathology is present, clinical and exercise considerations, handling of emergency situations, and implications with respect to pharmacological interventions. The information learned in this course runs concurrently with PTA220 PTA Principles and Procedures II and PTA240 PTA Principles and Procedures III, which present in depth physical therapy interventions for patients with various musculoskeletal, neuromuscular, cardiovascular, and pulmonary pathological conditions. (F)

II. EXPECTED LEARNING OUTCOMES/CORRESPONDING ASSESSMENT MEASURES (numbers in parentheses refer to CAPTE Evaluative Criteria)

Describe etiology, incidence, risk factors, and signs and symptoms of common pathological conditions seen in rehabilitation.	Quizzes Written Assignments Written Examinations
Identify necessary modifications to physical therapy interventions for patients with common pathological conditions.	Quizzes Written Assignments Written Examinations
Compare and contrast the side effects of different medications used to manage common pathological conditions in rehabilitation.	Quizzes Written Assignments Written Examinations
Select an appropriate intervention within the plan of care established by the physical therapist in response to patient clinical indications and report this to the supervising physical therapist (3.3.2.9.).	Quizzes Written Assignments Written Examinations
Identify when an intervention should not be provided due to changes in the patient’s status and report this to the supervising physical therapist (3.3.2.10.).	Quizzes Written Assignments Written Examinations

Select the appropriate action to take in an emergency situation (3.3.2.15.).	Written Assignments Written Examinations
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III. OUTLINE OF TOPICS

- A. Pharmacokinetics
 - 1. Drug Administration
 - 2. Drug Absorption
- B. Pharmacodynamics
- C. Adverse Drug Reactions
- D. Problems Affecting Multiple Systems
 - 1. Radiation and Chemotherapy
 - 2. Fluid-Electrolyte Imbalances
 - 3. Acid-Base Imbalances
- E. Etiology, Signs and Symptoms, Risk Factors, Clinical and Exercise Considerations for the PTA, Pharmacological Management, and Pharmacological Side Effects of Common Pathological Conditions for each of the Following Systems or Type of Pathology
 - 1. The Immune System
 - 2. Infectious Disease
 - 3. Oncology
 - 4. The Integumentary System
 - 5. The Endocrine and Metabolic Systems
 - 6. The Cardiovascular System
 - 7. The Hematologic System
 - 8. The Respiratory System
 - 9. The Hepatic, Pancreatic, and Biliary Systems
 - 10. The Musculoskeletal System
 - 11. The Central Nervous System
 - a. Stroke
 - b. Traumatic Brain Injury
 - c. Traumatic Spinal Cord Injury
 - d. Cerebral Palsy
 - 12. The Peripheral Nervous System

IV. METHOD OF INSTRUCTION: Hybrid

- A. Lecture
- B. Online

V. REQUIRED TEXTBOOK

Goodman, C. & Fuller, K. *Pathology for the Physical Therapist Assistant* (current edition). St. Louis, MO: Elsevier.

VI. REQUIRED MATERIALS

- A. Textbook
- B. Computer access to Blackboard for course homepage

VII. SUPPLEMENTAL REFERENCES

- A. Ciccone, C.D., *Davis's Drug Guide for Rehabilitation Professionals* (current edition). Philadelphia, PA: F. A. Davis Company
- B. Lescher, P. J., *Pathology for the Physical Therapist Assistant* (current edition). Philadelphia, PA: F. A. Davis Company
- C. Acosta, W., *Pharmacology for Health Professionals* (current edition). Baltimore, MD: Lippincott, Williams, and Wilkins
- D. Gladson, B., *Pharmacology for Rehabilitation Professionals* (current edition). St. Louis, MO: Saunders-Elsevier

VIII. METHODS OF EVALUATION

- A. Quizzes; 25%
- B. Written Examinations; 35%
- C. Written Assignments; 40%

IX. ADA AA STATEMENT

Any student requiring special accommodations should inform the instructor and the Coordinator of Disability Support Services (Library; phone 636-481-3169).

X. ACADEMIC HONESTY STATEMENT

All students are responsible for complying with campus policies as stated in the Student Handbook. (See College website <http://www.jeffco.edu>).

All Physical Therapist Assistant (PTA) students are also responsible for complying with PTA Program policies as stated in the PTA Student Handbook distributed at orientation.

XI. ATTENDANCE STATEMENT

Regular and punctual attendance is expected of all students. Any one of these four options may result in the student being removed from the class and an administrative withdrawal being processed: (1) Student fails to begin class; (2) Student ceases participation for at least two consecutive weeks; (3) Student misses 15 percent or more of the coursework; and/or (4) Student misses 15 percent or more of the course as defined by the instructor. Students earn their financial aid by regularly attending and actively participating in their coursework. If a student does not actively participate, he/she may have to return financial aid funds. Consult the College Catalog or a Student Financial Services representative for more details.

XII. OUTSIDE OF CLASS ACADEMICALLY RELATED ACTIVITIES

The U.S. Department of Education mandates that students be made aware of expectations regarding coursework to be completed outside the classroom. Students are expected to spend substantial time outside of class meetings engaging in academically related activities such as reading, studying, and completing assignments. Specifically, time spent on academically related activities outside of class combined with time spent in class meetings is expected to be a minimum of 37.5 hours over the duration of the term for each credit hour.