JEFFERSON COLLEGE

COURSE SYLLABUS

PTA245

PATHOLOGICAL IMPLICATIONS IN REHABILITATION

2 Credit Hours

Bridget B. Webb, PT, MPT, CEEAA
September 12, 2014

Kenneth Wilson, Division Chair, Health Occupation Programs
Dr. Dena McCaffrey, Dean, Career & Technical Education
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)

<table>
<thead>
<tr>
<th>Expected Learning Outcomes</th>
<th>Assessment Measures</th>
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<tr>
<td>Describe etiology, incidence, risk factors, and signs and symptoms of common pathological conditions seen in rehabilitation.</td>
<td>Quizzes, Written Assignments, Written Examinations</td>
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<tr>
<td>Identify necessary modifications to physical therapy interventions for patients with common pathological conditions.</td>
<td>Quizzes, Written Assignments, Written Examinations</td>
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<td>Compare and contrast the side effects of different medications used to manage common pathological conditions in rehabilitation.</td>
<td>Quizzes, Written Assignments, Written Examinations</td>
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<tr>
<td>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.).</td>
<td>Quizzes, Written Assignments, Written Examinations</td>
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<tr>
<td>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.).</td>
<td>Quizzes, Written Assignments, Written Examinations</td>
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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

VI. REQUIRED MATERIALS
A. Textbook
B. Computer access to Blackboard for course homepage

VII. SUPPLEMENTAL REFERENCES
C. Acosta, W., *Pharmacology for Health Professionals* (current edition). Baltimore, MD: Lippincott, Williams, and Wilkins

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 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

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.