

**Bossier Parish Community College**  
**Master Syllabus**

**Course Prefix and Number:** PTAP 213

**Number of Credits:** 3

**Course Title:** Neurological Conditions

**Course Prerequisites:** Selective admission to the Physical Therapist Assistant program.

**Textbooks:** O’Sullivan; S.B. and Schmitz, T.J.; Physical Rehabilitation: 6<sup>th</sup> edition  
O’Sullivan; S.B. and Schmitz, T.J.; Improving Functional Outcomes in Physical Rehabilitation, 2<sup>nd</sup> Edition

**Course Description:**

Exploration of the impact of selected neurological conditions on normal life span, motor development and motor control with emphasis on pathophysiology and physical therapy management of these conditions. Self-directed research and oral presentation of an assigned neurological condition is required.

**Learning Outcomes:**

At the end of this course, the student will

- A. use task analysis and observation to identify impairments in functional mobility, balance, motor development & motor control in neurological patients.
- B. communicate an understanding of typical sites of damage or dysfunction within the nervous system, pathophysiology, clinical signs and symptoms, and physical impairments for selected neurological conditions and how these factors impact the common PT goals and expected functional outcomes for the neurological patient;
- C. demonstrate selected therapy assessment and intervention skills in the laboratory as they apply to neurological impairments;
- D. appropriately select, justify, sequence, and show progression of interventions for neurological patients in a variety of clinical settings through selected readings and accurate interpretation a PT plan of care;
- E. read and understand health care literature through self-directed research activities to prepare and present professional in-services in the workplace;
- F. communicate with patients using lay terminology and non-verbal strategies and with therapists and other clinicians using medical terminology and good written documentation;
- G. apply skills or expand knowledge from this course (or concurrent courses) by participating in one or more community service or professional development opportunities.

To achieve the learning outcomes, the student will:

1. describe normal growth and movement from birth through maturation and aging. (A)
2. assess the presence/absence of primitive reflexes, postural reactions and explain the significance these play in the development of motor milestones and normal balance and motor control including the consequences of tone or failure to integrate or the re-emergence of selected primitive reflexes. (A)
3. correlate the typical impairments, signs and symptoms for common neurological pathologies with the areas of the nervous system involved, the etiology and pathophysiology of that condition. (B)
4. perform observational task analysis of normal movements and transitions in lab on classmates and using video patients to identify impairments and missing components in order to design part-task activities and lead-up skills for improved movement outcomes. (A, C, D)
5. utilize the vocabulary common in describing motor control, tone, sensory, reflex, autonomic and cognitive deficits present with neurological impairment. (A,B,E)
6. interpret the clinical significance of evaluative findings, problem list, short and long term goals and the plan of care written by the PT for neurologically involved patients. (B,D)
7. administer a variety of treatment interventions and assessment techniques, including standardized tests/instruments for arousal, mental function, tone, reflexes, balance, endurance, coordination, postural awareness and functional mobility that can be used within a PT's POC. (C)
8. discuss the typical physical therapy management of individual neurological conditions and comorbid diagnoses including associated safety precautions, red flags and contraindications. (B,C,D,E)
9. analyze case studies that require the student to review the medical record, physical therapy evaluation and plan of care; sequence appropriate progression of interventions to meet the therapeutic goals and discuss the elements of discharge planning, ADL/home modification and home exercise program. (D)
10. prepare documentation with emphasis on assessments and interventions appropriate for neurologically impaired patients using either video or written case studies or PT evaluations. (F)
11. identify a case study patient's impairments, activity limitations and participation restrictions (ICF) and link those to proposed functional goals and outcomes from the PT POC to show medical necessity and defend continuation of skilled PT services. (A, F)
12. educate patients and family members on how they can be involved in the management of selected conditions through regular participation in an appropriate physical therapy program. (D,F)
13. plan relevant questions for patient interview to confirm current and prior level of function, pain, or changes in impairments or function due to therapy with emphasis on appropriate patient and family interaction. (B, F)

14. collaborate with peers in PTA and interprofessional groups to provide treatment to neurologically impaired patients in the SIM Lab.(B,C,D,F)
15. make appropriate judgments during simulated patient care and report to the PT any new SSx, complaints or significant changes in function or patient status. (A, D, F)
16. research, read and demonstrate understanding of current professional literature related to an assigned neurological condition. (B,E)
17. create and orally present a professional in-service to classmates on an assigned neurological condition. (B,D,E,F)
18. participate in one or more approved community service or professional development activity during this semester (G)

**Course Requirements:** To earn a grade of “C” or higher the student must earn 70% of the total points for the course and meet all of the following course requirements.

- satisfactory completion of developmental lab assignments
- minimum 75% average on integrated lab practicals
- minimum 75% average on three written case studies with SOAP notes
- minimum 75% in-service presentation on neurological condition
- co-curricular community service or professional development (required for grade of A only)

**Course Grading Scale:**

- A- 90% or more of total possible points including the comprehensive final exam; and minimum of 75% average on laboratory practical tests; and minimum of 75% average on three written case studies; satisfactory completion of developmental lab assignments; and satisfactory presentation on a neurological condition in-service and participation in at least one approved community service or professional development activity.
- B- 80% or more of total possible points including the comprehensive final exam; and minimum of 75% average on laboratory practical tests; and minimum of 75% average on three written case studies; satisfactory completion of developmental lab assignments; and satisfactory presentation on a neurological condition in-service.
- C- 70% or more of total possible points including the comprehensive final exam; and minimum of 75% average on laboratory practical tests; and minimum of 75% average on three written case studies; satisfactory completion of developmental lab assignments; and satisfactory presentation on a neurological condition in-service.
- D- 60% or more of total possible points including the comprehensive final exam; and minimum of 75% average on laboratory practical tests; and minimum of 75% average on three written case studies; satisfactory completion of developmental

lab assignments; and satisfactory presentation on a neurological condition in-service.

- F- less than 60% of total possible points including the comprehensive final exam; or less than 75% average on laboratory practical tests; or less than 75% average on three written case studies; or failure to satisfactorily complete the developmental lab assignments or the neurological conditions in-service.

**Attendance Policy:** The college attendance policy, which is available at <http://www.bpcc.edu/catalog/current/academicpolicies.html>, allows that “more restrictive attendance requirements may apply to some specialized classes such as laboratory, activity, and clinical courses because of the nature of those courses.” The attendance policy of the Physical Therapy Assistant program is described in the Physical Therapy Assistant Clinical Handbook.

**Course Fees:** This course is accompanied with an additional non-refundable fee for supplemental materials, laboratory supplies, certification exams and/or clinical fees.

### **Nondiscrimination Statement**

Bossier Parish Community College does not discriminate on the basis of race, color, national origin, gender, age, religion, qualified disability, marital status, veteran's status, or sexual orientation in admission to its programs, services, or activities, in access to them, in treatment of individuals, or in any aspect of its operations. Bossier Parish Community College does not discriminate in its hiring or employment practices.

### COORDINATOR FOR SECTION 504 AND ADA

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Reviewed by L. Bryant 5/21