

Bossier Parish Community College
Master Syllabus

Course Prefix and Number: PTAP 214

Credit Hours: 3

Course Title: Therapeutic Exercise

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

Textbooks: Kisner, C. and Colby, L.A.; Therapeutic Exercise: Foundations and Techniques, 5th Edition
O'Sullivan; S.B. and Schmitz, T.J.; Physical Rehabilitation: 6th or 7th Edition
O'Sullivan; S.B. and Schmitz, T.J.; Improving Functional Outcomes in Physical Rehabilitation, 2nd Edition

Course Description:

Principles and techniques of therapeutic exercise in the management of patients with selected neurological, cardiovascular, metabolic and chronic disease problems. Emphasis on the application of selected exercise interventions and patient/family education to improve functional outcomes.

Learning Outcomes:

At the end of this course, the student will:

- A. select, apply and modify intervention approach, treatment environments, and feedback based upon motor control and motor learning theories;
- B. utilize the stimulus and response pathways of the proprioceptive and sensory systems to influence the motor systems of the neurologically impaired patient;
- C. assess patient response to interventions to determine if an activity is too easy or too difficult and progress motor activities based upon level of difficulty;
- D. demonstrate competent hands-on application of a variety of therapeutic exercise intervention techniques;
- E. think critically and creatively using knowledge of neurorehabilitation strategies to design and discuss treatment options for selected problems or goals within a plan of care;
- F. read and understand health care literature through self-directed research activities;
- G. communicate with patients using lay terminology and non-verbal strategies and with therapists and interprofessional team members using medical terminology and good written documentation
- H. 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 students will:

1. compare and contrast different theories of motor control with regard to therapeutic model, strengths and limitations. (A)
2. discriminate where a patient is in the stages of motor learning and provide the necessary modifications to feedback and environmental factors to promote the best learning outcome at that stage. (A,C)
3. select posture and stage of motor control where you would begin interventions for a given patient problem and defend your choice based upon the difficulty or ease of the activity and the patient's impairments and functional level. (A,C,E)
4. critique the difficulty and safety of interventions based on degrees of freedom and organize the progression of interventions from simple to more complex by changing one or more modifiable factors. (C,D,E)
5. give examples of different intervention strategies typically used in rehabilitation and point out how these relate to different theories of motor control, or motor learning. (A,B,C,D)
6. illustrate and describe the stimulus and response of the muscle spindle, GTO and joint receptors (B,C)
7. explain how the proprioceptive, vestibular and exteroceptive pathways impact tone, balance, reflexes, activation, inhibition and facilitation of muscles. (B,C)
8. execute safe use of assistance, hand placements and key points of control during application of NDT or PNF interventions to secure unstable joints, cue activation of key muscle groups, and provide good alignment to improve tone, postural awareness, range of motion and isolated functional movement. (A,B,C,D,E,G)
9. devise and implement a progression of developmental activities, functional training exercises, WC mobility, preambulation and gait activities within the plan of care established by a PT to improve the functional outcomes of the neurologically impaired patient. (A,B,C,D,E,G)
10. examine through independent reading, assignments and practice quizzes the pathophysiology and common physical therapy interventions for selected "other body systems" and chronic medical illnesses. (E,F,G)
11. discuss and demonstrate the application, limitations and benefits of exercise and physical therapy interventions to improve conditioning of patients with coexisting cardiovascular, pulmonary, metabolic, physiologic and chronic medical illnesses. (E,F,G)
12. compile and/or present appropriate choices for patient and family education and home exercise program for a patient within a plan of care established by the physical therapist. (A,C,E,F,G)
13. discuss with the PT the appropriate considerations to prepare for a patient's discharge. (E,G)
14. participate in the group presentation of researched ADA topics (F, G)
15. participate in one or more approved community service or professional development activity during this semester (H)

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.

The student must achieve

- at least 75% on a minimum of 3 assignments applying theories of motor control, stages of motor learning, degrees of freedom, types of practice, or feedback to alter the difficulty of an intervention.
- pass all lab competencies with 75% or higher
- minimum 75% average on integrated lab practicals
- 75% or higher on at least 3 assignments requiring self-directed reading of college-level materials relevant to therapeutic exercise, pathophysiology of body systems, or the ADA.
- complete one or more community service or professional development activity (required for grade of A only)

Course Grading Scale:

A--90% or more of total possible points including the comprehensive final exam, participate in community service or professional development; and completes all course requirements.

B--80% or more of total possible points including the comprehensive final exam; and completes all course requirements.

C--70% or more of total possible points including the comprehensive final exam; and completes all course requirements.

D--60% or more of total possible points including the comprehensive final exam; and/or failure to complete all course requirements.

F--less than 60% of total possible points including the comprehensive final exam; and/or failure to complete all course requirements.

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.

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

Angie Cao, Student and Disability Services Specialist

Disability Services, F254, 6220 East Texas Street, Bossier City, LA 71111

318-678-6511

acao@bpcc.edu

Hours: 8:00 a.m.-4:30 p.m. Monday - Friday, excluding holidays and weekends.

Equity/Compliance Coordinator

Teri Bashara, Director of Human Resources

Human Resources Office, A-105

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Bossier City, LA 71111

Phone: 318-678-6056

Hours: 8:00 a.m.-4:30 p.m. Monday - Friday, excluding holidays and weekends.

Reviewed by L. Bryant 4/23