Course Prefix and Number: OCTA 213
Credit Hours: 3

Course Title: OT Strategies and Intervention to Physical Challenges

Course Prerequisite: Enrollment in the OCTA program courses is limited to those students who have been selected and admitted to the OTA program. Program courses are sequenced by semester and must be taken as a group each semester per program requirements and policies.

Textbooks/ Learning Resources:
Required Text:
Early, Mary Beth; Physical Dysfunction Practice Skills for the Occupational Therapy Assistant, 3rd edition

Supplementary Text:
Pendleton, Heidi McHugh; Pedretti’s Occupational Therapy Practice Skills for Physical Dysfunction, 7th edition

Course Description:
This course will provide knowledge of occupational therapy strategies and interventions in the adult population for conditions that alter an individual's performance in areas of occupation (ADL, IADL, education, play, work, leisure, sleep and social participation). Topics include common diagnoses, treatment environments and treatment for areas of occupation. Lab activities will concentrate on intervention strategies for visual, neurological, cognitive and orthopedic deficits as well as therapeutic positioning and handling of the adult client. The evaluation process and appropriate assessments will be expanded upon.

Relationship to Curriculum Design:
The design of this course provides knowledge about various diseases and the impact it has on one's participation in areas of occupation. It also provides treatment methods and techniques to address these deficits using different strategies and interventions.

Learning Outcomes:
At the end of this course the student will be able to:
A. Demonstrate knowledge of the disease processes of selected diseases and how they impact occupation, psychosocial demands, performance patterns, activity demands, and client factors;
B. Appropriately select assessments, interventions, adaptive equipment and activities for treatment of deficit areas through researching evidence based practice;
C. Analyze data, critically think and formulate appropriate adaptations to the OT's plan of care;
D. Communicate appropriately in the clinical environment, both verbally and in written form, the status of the patient's progress; utilize therapeutic use of self with patient, family and care-giver interaction
E. Demonstrate proficiency in clinical skills when treating patients
F. Demonstrate the role of the OTA and the OT throughout the OT process.
G. Demonstrate an understanding of the purposes and principles of orthotic fabrication, prosthetic fitting and training along with indications and contraindications.
H. Determine how the occupations of ADLs, work, health and wellness, and leisure are changed with physical disabilities
Course Objectives
To achieve the learning outcomes, the student will:

1. Demonstrate task analysis in areas of occupation, performance skills, performance patterns, activity demands, context(s) and environments, and client factors to implement the intervention plan. *(B.2.7) (A,B)*

2. Understand the effects of heritable diseases, genetic conditions, disability, trauma, and injury to the physical and mental health and occupational performance of the individual. *(B.2.6) (A)*

3. Assist with the development of occupation-based intervention plans and strategies (including goals and methods to achieve them) on the basis of the stated needs of the client as well as data gathered during the evaluation process in collaboration with the client and others. Intervention plans and strategies must be culturally relevant, reflective of current occupational therapy practice, and based on available evidence. Interventions address the following components: the occupational profile, Client factors, performance patterns, context and performance skills *(B.5.1) (B)*

4. Select and provide direct occupational therapy interventions and procedures to enhance safety, health and wellness, and performance in ADLs, IADLs, education, work, play, rest, sleep, leisure, and social participation. *(B.5.2 and 5.5) (B,C)*

5. Provide development, remediation, and compensation for physical, mental, cognitive, perceptual, neuromuscular, behavioral skills, and sensory functions (e.g. vision, tactile, auditory, gustatory, olfactory, pain, temperature, pressure, vestibular, proprioception). *(B.5.6) (B,C)*

6. Implement intervention strategies to remediate and/or compensate for cognitive deficits that affect occupational performance. *(B.5.8) (B)*

7. Demonstrate therapeutic use of self, including one’s personality, insights, perceptions, and judgments, as part of the therapeutic process in both individual and group interaction. *(B.5.7) (D)*

8. Effectively interact through written, oral and nonverbal communication with the client, family, significant others, colleagues, other health providers, and the public in a professionally acceptable manner. *(B.5.20) (D)*

9. Effectively communicate and work inter-professionally with those who provide services to individuals and groups in order to clarify each member’s responsibility in executing an intervention plan *(B.5.21) (F)*

10. Teach compensatory strategies, such as use of technology and adaptations to the environment, that support performance, participation, and well-being. *(B.5.24) (B,C,E)*

11. Effectively locate and understand information, including the quality of the source of information. *(B.8.2) (B)*

12. Use professional literature to make evidence-based practice decisions in collaboration with the occupational therapist. *(B.8.3) (B)*

13. Discuss common sensorimotor deficits seen in patients with neurological dysfunction *(A)*

14. Discuss eye diseases and the treatment strategies for visual acuity *(A)*

15. Name the deficits in CNS visual skills and the treatment strategies *(A,B,E)*

16. Identify common compensatory strategies used to complete ADLs with vision loss. *(B,E)*

17. Define Cerebrovascular accident (CVA) and identify risk factors of CVA *(A)*

18. Discuss the common motor, sensory, visual perceptual, cognitive, speech and language, and behavioral impairments after stroke and identify OT treatment strategies *(A,B,C,E)*

19. Describe the role of the OTA in the treatment of people with CVA’s *(F)*

20. List and discuss the deficits associated with left-sided CVA, right-sided CVA, bilateral CVA and recurrent CVA *(A)*
21. Describe the areas of occupation often impacted by CVA and OT treatment techniques including the use of adaptive equipment. (A,B)
22. Explain the clinical picture of a person with TBI (A)
23. Describe the treatment process of people with mild, moderate or severe TBI (F)
24. Describe OT intervention, treatment objectives and treatment methods patients with SCI (B,E)
25. Describe the etiology, medical management and OT intervention for selected orthopedic conditions including: hip fractures, total joint replacement and partial joint replacement and amputation. (A,B,C,E)
26. Discuss the relationship between levels of amputation and the function of the amputee. (A)
27. Apply concepts of fabrication, application, fitting, and training in orthotic devices used to enhance occupational performance and participation, and training in the use of prosthetic devices to clients with physical disabilities (B.5.11) (G)
28. Identify psychosocial considerations for persons with cardiovascular or pulmonary disease (A)
29. Describe the treatment process of people with mild, moderate or severe TBI (F)
30. Describe the etiology, medical management and OT intervention for selected orthopedic conditions including: hip fractures, total joint replacement and partial joint replacement and amputation. (A,B,C,E)
31. Identify common symptoms and differences between rheumatoid arthritis (RA), osteoarthritis (OA), and gout (A)
32. Identify common joint and hand deformities seen in arthritis (A)
33. Recognize common medications used, side effects of medications and surgery performed in treating arthritis (A)
34. Identify treatment precautions for arthritic conditions (A)
35. Demonstrate understanding of Brunnstrom’s stages of motor recovery (A)
36. Describe therapeutic exercises and activities, understand the purpose of each, their indications for use and contraindications (B, E)
37. Identify exercise programs, types of muscle contractions and exercise and activity classification (A,B,C)
38. Compare and contrast wheelchair dependent with paraplegia and quadriplegia (A)
39. Describe issues related to ergonomics, industrial rehabilitation, work hardening, and work conditioning (H)
40. Explain the importance of leisure and social participation in daily life with disabilities and describe how to incorporate leisure and social participation into intervention (H)
41. Articulate the importance of balancing areas of occupation with the achievement of health and wellness for the clients (B.2.4) (H)
42. Explain the role of occupation in the promotion of health and the prevention of disease and disability for the individual, family, and society. (B.2.5) (A,B,C,D)

Topical Outline

I. Orthopedic and Musculoskeletal Disorders
   A. Osteoarthritis vs. Rheumatoid arthritis
   B. Upper Extremity and Lower Joint Replacement (Shoulder, Hip, Knee)
   C. Shoulder Replacement -
   D. Hip Fractures: Types of hip fractures and medical management
   E. Knee replacement
   F. Psychological factors
   G. Rehabilitation Measures
II. FIM

III. Cerebrovascular accident
   A. Definition and Etiology
   B. Effects and medical management
   C. Occupational therapy intervention
   D. Dysfunction: characteristics and OT intervention
   E. Hemispheric lateralization
   F. Areas of occupation and OT treatment techniques

IV. Sensorimotor approaches to treatment
   A. Rood Approach
   B. Movement therapy: Brunstrom’s Approach to treatment of hemiplegia
   C. Proprioceptive Neuromuscular Facilitation
   D. Neurodevelopmental treatment of adult hemiplegia: Bobath approach

V. Interventions for deficits in vision and other sensory functions
   A. Interventions for sensory dysfunction
   B. Treatment of vision deficits and visual-perceptual dysfunction

VI. Treatment of disturbances in perception and cognition
   A. Treatment of perceptual and perceptual motor deficits
   B. Treatment of cognitive dysfunction

VII. Traumatic Brain Injury (TBI)
   A. What is a TBI
   B. Levels of cognitive functioning (Rancho Los Amigos)
   C. Compare and contrast focal and multifocal/diffuse brain injury
   D. Glasgow Coma Scale
   E. Treatment of clients with severe, moderate or mild traumatic brain injury

VIII. Spinal Cord Injury (SCI)
   A. Prognosis for recovery
   B. Medical and surgical management
   C. Sexual function
   D. Occupational therapy intervention
   E. Expected functional outcomes
   F. Aging with spinal cord injury

IX. Cardiac Dysfunction and Chronic Obstructive Pulmonary Disease
   A. Cardiovascular system
   B. Pathology of cardiac disease
   C. Cardiac rehabilitation
   D. Anatomy and physiology of respiration
   E. OT evaluation and treatment

XI. Degenerative Diseases of the central nervous system
   A. Multiple Sclerosis
   B. Parkinson’s Disease
   C. Amyotrophic Lateral Sclerosis
D. Huntington’s Disease

XII. Motor Unit Dysfunction
A. Neurogenic Disorders: Lower motor neuron dysfunction
B. Disease of the neuromuscular junction
C. Myopathic Disorders

XIII. Amputation and Prosthetics
A. Team members
B. Congenital and acquired amputations
C. Psychological adjustment
D. Postoperative complications
E. Upper extremity amputations
F. Lower extremity amputations

XIV. Work
A. Role of the OTA in work programs
B. Industrial rehabilitation
C. Transitions services from school to work
D. Work readiness programs

XV. Promoting Engagement in Leisure and Social Participation
A. Leisure and social participation
B. Importance of leisure and social activities in everyday life with people with disabilities
C. Facilitating leisure and social participation
D. Health Literacy

Course grade: The student’s grade for this course will be based on:
- Written Exams which comprise 70% of final grade (average of all written exams) and
- Activities, Assignments, active participation, professional behavior and attendance which comprise 30% of final grade
  o 15% Practical Tests
  o 5% Comprehensive Case based learning practical test
  o 10% Lab activities, active participation, professional behavior and attendance

Instructional methods include lecture, presentation, case studies, small group activities, role play and video observation and analysis.

** Lab competencies are scored differently than written exams. All mistakes result in a point deduction for grading purposes. However, failure to demonstrate fundamental competency, safety or professionalism in the execution of the skill as evaluated by the course instructor(s) will result in an immediate failing score. The student will then be required to re-test on the skill preceding fall/spring clinical practice experiences with the specific scheduling and format for such being at the discretion of the primary course instructor but the responsibility of the student. The student will be given up to two additional testing attempts to demonstrate competency. If unable to safely, competently and professionally execute the skill on subsequent attempts, the student will be given a failing grade for
the course and will not continue in the clinical program. The remediation scores will not replace the first attempt test score.

**Student Expectations:**

a. Course faculty will determine if class absence is excused. Unexcused absences will result in a zero (0) for the exam, assignment, or class participation due on the date of absence.

b. **One** tardy will be excused per semester. All other tardies will constitute a decrease of one percentage point each in final grade.

c. Make-up work or exams for excused absences will be given at the discretion and convenience of the instructor.

d. No late assignments will be accepted. If an assignment is not submitted by due date and time, a grade of zero will be given.

e. All written work will be typed and produced according to the *APA Publication Manual, 6th edition* unless otherwise indicated in assignment directions.

f. **Active** participation during class time, community outings, fieldwork experiences, and other professional experiences is mandatory. Passive note taking and silent observation is not considered active participation.

g. Professional development is an integral part of becoming an Occupational Therapy Assistant. Students are expected to accept constructive criticism from faculty and peers and modify behavior accordingly.

h. **ALL** appointment requests with faculty must be made in writing via email.

**Course Requirements:**

In order to receive a grade of “C” the student must earn **70%** of the total possible points for the course and achieve **all** of the following course requirements.

- A minimum of 75% average on lab practical skills tests
- Satisfactory completion of all course assignments (minimum score of 75%)

**Course Grading Scale:**

**A-** 90% or more of total possible points; and minimum of 75% average on laboratory practical test; satisfactory completion of lab assignments and activities and/or presentations.

**B-** 80% or more of total possible; and minimum of 75% average on laboratory practical test; satisfactory completion of lab assignments, activities and/or presentations.

**C-** 70% or more of total possible points; and minimum of 75% average on laboratory practical test; satisfactory completion of lab assignments, activities and/or presentations.

**D-** 60% or more of total possible points; and minimum of 75% average on laboratory practical test; satisfactory completion of lab assignments, activities and/or presentations.

**F-** Less than 60% of total possible points; or less than 75% average on laboratory practical test; or failure to satisfactorily completion of lab assignments, activities and/or presentations.
Students must have a "C" or better and a semester GPA of 2.5 or better to receive credit toward the OTA program requirements and to move to the next level of coursework.

**Attendance Policy:** The college attendance policy, which is available at [http://www.bpcc.edu/catalog/current/academicpolicies.html](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 OTA program is described in the OTA 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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**Revised 9/18 M. Allison**