



## OTA 121: Cognitive and Sensorimotor Performance

This course demonstrates how performance skills, performance patterns, context, activity demands, and client factors influence areas of occupation. The course explores the collaborative role of the COTA and OTR in the occupational therapy process. The lab emphasizes therapeutic intervention related to Activities of Daily Living, education, work, play, leisure, and social participation and develops skills in family/caretaker training, environmental adjustments, adaptive equipment, assistive technology, and neuromuscular techniques. Prerequisite: OTA 111 and OTA 117, and BIO 234. Three class hours and two lab hours a week. Instructional Support Fee applies.

### Course Student Learning Outcomes

Upon successful completion of the lecture portion of this course, the student will know or be able to:

1. Identify the various areas of occupation. (B.3.2)
2. Describe the importance of balancing the various areas of occupation to achieve health and wellness within various contexts. (B.3.4)
3. Describe the effect of physical and cognitive dysfunction on occupational performance. (B.3.5)
4. Recognize and describe the psychosocial implications of a physical disability. (B.3.5)
5. Demonstrate basic activity analysis skills for areas of occupation. (B.3.6)
6. Apply abilities to grade and adapt activities for those tasks that a client can no longer perform or performs with great difficulty. (B.4.18)
7. Identify adaptive equipment and assistive technology available to enhance function in areas of occupation. (B.4.3)
8. Describe the collaborative role of the OTA and the OTR in the occupational therapy process of data collection, assessment, intervention planning, implementation, and documentation. (B.4.4)
9. Appreciate and analyze the influence of client's gender, age, race, environment, sociocultural, socioeconomic, and lifestyle choices and their effect on the OT process. (B.4.4)
10. Understand and describe common types of progress notes in OT practice: SOAP, DAP and narrative notes. (B.4.29)
11. Identify commonly utilized abbreviations in OT practice. (B.4.29)
12. Appreciate the need for well-written, effective documentation to ensure correct reimbursement. (B.4.29)
13. Describe various sensorimotor approaches (Rood, Brunnstrom, PNF, NDT, CIMT) and demonstrate beginning application of techniques. (B.4.0; B.2.1)
14. Describe principles of joint protection, energy conservation, work simplification, wellness, safety, and health promotion. (B.4.10)
15. Describe the use of preparatory methods (i.e. therapeutic exercise, PAM's), practice skills (i.e. contrived activities such as cones or pegboards), purposeful activities, and occupation in the overall intervention of client with physical dysfunction. (B.4.10; B.4.21; B.4.17)
16. Identify areas of cognition and demonstration of application of OT interventions with clients with cognitive deficits. (B.4.9; B.4.9)
17. Utilizing the internet and various data bases, research assistive technology products and identify populations which would benefit from these products. (B.4.11)
18. Identify the roles of the generalist and the specialist in driving assessments and when to refer to a specialist. (B.4.14; B.4.26)
19. Describe dysphagia, precautions, and social and contextual impact for clients with dysphagia. (B.4.16)
20. Utilizing a case study format, demonstrate beginning intervention planning with emphasis on developing home programming of therapeutic exercise program and identification of activity to enhance function. (B.4.27)
21. Identify various practice settings for OT interventions and the impact of these settings/contexts on the delivery of OT services. (B.4.27; B.4.18)
22. Demonstrate ability to effectively create patient/caregiver educational handouts to complement OT treatment. (B.4.23)
23. Identify other specialists (i.e. SLP, PT, audiologist) whose intervention would benefit a patient's plan of care. (B.4.26)
24. Understand the intervention process from referral to discharge. (B.4.22)
25. Recognize the need for termination of OT services when goals have been achieved or when it is determined that goals are not achievable. (B.4.28)
26. Demonstrate oral presentation skills via individual and/or group presentation. Upon successful completion of the lab portion of this course, the student will know or be able to:

1. Demonstrate safety awareness for self, clients, and caregivers including environment, equipment and body mechanics. (B.3.7)
2. Describe methods for controlling the spread of infection, including hand washing, Universal and Standard Precautions, and use of personal protective equipment. (B.3.7)
3. Demonstrate beginning knowledge of commercially available adaptive equipment, custom made modifications/adaptations, environmental modifications, adaptive strategies including positioning, grading, one handed techniques, energy conservation and joint protection techniques, diaphragmatic and pursed lip breathing, and relaxation techniques to facilitate task completion. (B.4.3)
4. Provide remedial and compensatory

intervention for cognitive process deficits. (B.4.3 B.4.9) 5. Demonstrate proper technique for obtaining the following vital signs: heart rate, blood pressure, respiration rate, oxygen saturation; describe the signs and symptoms of distress and identify abnormal vital signs. (B.4.5) 6. Perform standardized sensory and perceptual testing. Recognize normal and abnormal responses. Describe the potential impact of sensory and perceptual impairment on function and safety and develop treatment interventions for sensory and perceptual loss. (B.4.5) 7. Perform standardized testing (circumferential girth and volumetrics) of edema and demonstrate edema reduction techniques (elevation, cryotherapy, compression, retrograde massage, active range of motion). (B.4.5) 8. Describe the variables used to grade pain, the pain cycle and techniques for reducing pain (breathing, relaxation, positioning, exercise, activity, physical agent modalities, and medication). (B.4.5) 9. Demonstrate standardized grip and pinch testing. (B.4.5) 10. Demonstrate assessment and intervention in activities of daily living (ADL) (self care, meal preparation), instrumental activities of daily living (IADL) (self management, home management, community reintegration), and work reintegration, breaking down into component parts. (B.4.5; B.4.21) 11. Describe performance objectively utilizing accepted terminology (Functional Independence Measure scale and CARE tool). (B.4.5) 12. Recognize low vision disorders and develop compensatory treatment interventions. (B.4.4) 13. Describe scar characteristics, recognize signs and symptoms of healing or infection, and demonstrate scar management techniques (massage, stretch, compression, elastomer patch fabrication and application, desensitization). (B.4.4) 14. Describe performance skills that facilitate coordination & demonstrate the application of intervention principles to compensate for and remediate coordination deficits. (B.4.4; B.4.9) 15. Design and grade therapeutic exercise programs utilizing appropriate equipment. (B.4.0) 16. Demonstrate proper technique in performing range of motion (passive, active-assistive, active), and passive stretch, isotonic and isometric strengthening. (B.4.10) 17. Describe beginning appreciation of the general principles of motor performance and re-training. Identify the performance skills that impact motor performance. Simulate basic facilitation and inhibition techniques. (B.4.10) 18. Provide remedial and compensatory intervention for physical and neuromuscular deficits. (B.4.9) 19. Identify factors that increase risk for falls and other injuries around the home and describe a variety of strategies and equipment that can reduce injury. (B.4.18) 20. Identify the major categories of wheelchairs and wheelchair parts; provide training in wheelchair mobility, wheelchair management, and community mobility. Identify seating issues and solutions. (B.4.11; B.4.13) 21. Recognize and name various types of ambulatory devices; demonstrate safe use and adjustment. (B.4.13) 22. Demonstrate safe functional transfers (toilet, tub, bed, chair) utilizing the appropriate adaptive equipment. (B.4.13) 23. Provide training in techniques to optimize functional transfers and functional mobility. (B.4.14) 24. Demonstrate safe and effective method of administration of superficial thermal and modalities, adhering to established parameters. Identify precautions and/or contraindications. (B.4.17) 25. Demonstrate ability to educate clients, colleagues, and other healthcare providers in a professional manner through effective written, oral, or other forms of nonverbal communication. (B.4.23)

**Credits:** 4

**Program:** Occupational Therapy