Common Course Outline
OCTA 206
Analysis of Human Performance
3 Credits

The Community College of Baltimore County

Description

OCTA 206 – Analysis of Human Performance presents the principles and techniques needed to identify and analyze motor movement in order to adapt human performance tasks. This course examines: osteology of the upper and lower extremities; motor reflexes; synergy patterns; the musculoskeletal system; agonist/antagonist muscle groups; and patterns of proximal stability. Students will develop observational and assessment skills with regard to body movement. This course introduces students to handling techniques, isometric/isotonic exercise, and sensory issues that impact motor skills.

3 Credits: 2 lecture hours and 2 laboratory hours
Prerequisite: Admission to the occupational therapy assistant program.
Co-requisite: OCTA 201

Overall Course Objectives

Upon completion of this course students will be able to:

1. state appropriate anatomical terminology;
2. identify bones of the upper extremity, lower extremity, and trunk;
3. identify joints and motions at each joint of the upper extremity, lower extremity, and trunk;
4. accurately identify surface anatomical landmarks;
5. identify muscles involved in movements at each joint and their function;
6. explain the biomechanical principles and how to use them as assessment tools;
7. discuss concepts of prime movers, agonists and antagonists;
8. describe innervation of the upper extremity;
9. demonstrate accurate placement and reading of the goniometer
10. perform the following OT assessments: manual muscle test, sensory examination, and functional coordination and dexterity;
11. list indicators for use of orthotics as a treatment modality;
12. recognize the use of superficial thermal and mechanical modalities as preparatory treatment techniques to address occupational performance;
13. demonstrate precautions when using orthotics and physical agent modalities; and
14. recognize and link anatomical movement and the impact of musculoskeletal diagnoses that make normal movement challenging.

Major Topics

I. Terminology
   A. Anatomical position
   B. Functional position
   C. Motions of the upper extremity
II. Osteology of the Upper Extremity Joints
   A. Surface anatomy of the shoulder girdle
   B. Surface anatomy of the shoulder joint
   C. Surface anatomy of the elbow and radioulnar joints
   D. Surface Anatomy of the wrist and hand joints
III. Musculature of the Upper Extremity
   A. Muscles and range of motion of the shoulder girdle
   B. Muscles and range of motion of the shoulder joint
   C. Muscles and range of motion of the elbow and radioulnar joints
   D. Extrinsic muscles and range of motion of the wrist and hand
   E. Intrinsic muscles and the range of motion of the hand
IV. Assessment of the Upper Extremity
   A. Introduction to assessment tools (i.e. goniometer)
   B. Measuring range of motion with appropriate tools
   C. Introduction to manual muscle testing
   D. Introduction to sensory testing
   E. Introduction to coordination/dexterity testing
V. Osteology of the Lower Extremity
   A. Surface anatomy of the hip joint
   B. Surface anatomy of the knee joint
   C. Surface anatomy of the ankle joint
   D. Surface anatomy of the foot.
VI. Musculature of the Lower Extremity
   A. Key muscles in the lower extremity
   B. Motions of the hip, knee, ankle, and foot
   C. The lower extremity and occupational therapy function

Course Requirements

Grading/exams: Grading procedures will be determined by the individual faculty member but will include a minimum of the following:

- Term Exams (2)
- Final Exam
- Lab Assignments (4)
- Lab Skills Practicum Test (3)

Students are required to use appropriate academic resources.

Other Course Information

This course is a required course in the Occupational Therapy Assistant Program offered by the School of Health Professions. This is a first semester course in the Occupational Therapy Curriculum.

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