



BAKER COLLEGE
STUDENT LEARNING OUTCOMES

OCC 6450 Upper Extremity Rehabilitation
3 Semester Credit Hours

Student Learning Outcomes and Enabling Objectives

1. Identify occupational tasks that require anatomical components in the upper extremity to work together for function.
 - a. Recognize in detail the bones, joints, ligaments, muscles, blood vessels and nerves in the upper extremity.
 - b. Identify upper extremity anatomy in a two-dimensional format by labeling anatomical components.
 - c. Identify upper extremity anatomy on human models.
 - d. Explain how the anatomical components of the upper extremity work together for functional use in order to assess for dysfunction.
 - e. Describe the anatomical arrangement of the brachial plexus.

2. Employ best practice occupational therapy techniques commonly used in upper extremity assessment and treatment.
 - a. Use standardized and non-standardized assessment tools to evaluate a client with upper extremity conditions/injuries.
 - b. Use manual therapy techniques (e.g. myofascial release, joint mobilization) in the upper quadrant as part of treatment to facilitate occupational performance.
 - c. Demonstrate safe and effective application of superficial thermal and mechanical modalities (as well as understand indications, contraindications and precautions), as a preparatory measure to improve occupational performance.
 - d. Explain the use of (indications, contraindications, precautions) deep thermal and electrotherapeutic modalities as preparatory measures to improve occupational performance.
 - e. Describe sterile techniques that should be practiced when dealing with open wounds.
 - f. Describe the scar development process and scar remodeling techniques.

3. Justify the choices made in designing treatment plans based on the knowledge of upper extremity anatomy and the facts concluded from case studies.
 - a. Analyze how the effects of diseases, trauma, genetic conditions, and injury to the upper extremity-influence function and dysfunction.

- b. Use knowledge of anatomy, practice models/theory and current literature, to design client centered evaluation.
 - c. Demonstrate clinical reasoning in order to design a comprehensive and individualized treatment intervention based on physiological etiology, safety, health and wellness performance in ADLS, IADLs, work and leisure, as well as unique life circumstances.
 - d. Write documentation needed for third-party reimbursement based on case study content.
 - e. Determine the appropriate orthotic and best practice treatment for a client based on the client's occupational profile, client factors and performance components, performance patterns, contextual factors.
4. Create a comprehensive treatment plan in orthotic devices when used to enhance occupational performance and well- being.
 - a. Determine the anatomical and biomechanical principles of orthotic fabrication based on the scientific principles of anatomy, kinesiology, biomechanics and physics.
 - b. Apply anatomical and biomechanical principles while designing patterns for a variety of orthotics.
 - c. Construct a variety of orthotic devices on human models using anatomical and biomechanical principles.
 - d. Analyze the precautions that should be considered when fabricating orthotic devices.
 - e. Judge whether the orthotic meets all requirements toward desired goals through assessment.

Big Ideas and Essential Questions

Big Ideas

- Upper Extremity anatomy, kinesiology and function
- Treatment Modalities
- Clinical Reasoning
- Splinting

Essential Questions

1. How does occupational therapy utilize anatomic knowledge to address dysfunction?
2. How does occupational therapy determine modalities to improve occupational performance for upper extremity dysfunction?

3. How does occupational therapy use knowledge and resources to accurately identify clients' problems in order to develop effective treatment protocols?
4. How does occupational therapy design orthoses to be used to enhance occupational performance and participation?

These SLOs are not approved for experiential credit.

Effective: Spring 2024