



# BAKER COLLEGE

## STUDENT LEARNING OUTCOMES

PTA 2450 Orthopedic Interventions

2 Semester Hours

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### Student Learning Outcomes and Enabling Objectives

At the completion of this course, the student will be able to perform the following outcomes with a minimum competency of 77% (C+) or better.

1. Compare and contrast the various philosophical approaches to orthopedic manual physical therapy.
  - a. Nordic approach
  - b. McKenzie method
  - c. Mulligan concept
  - d. Australian approach
  
2. Demonstrate the appropriate selection and application of various soft tissue mobilization techniques for commonly treated patient conditions.
  - a. Demonstrate common massage strokes for treatment of soft tissue restrictions in the trunk and extremities.
  - b. Apply cross friction massage to commonly inflamed tissues as appropriate to patient condition and tissue integrity.
  - c. Perform basic functional massage, muscle energy, and strain/counterstrain techniques for common muscle groups affected by edema and/or fibrosis due to injury or disuse.
  - d. Adapt to the various psychological responses to touch and non-verbal communication, including differences based on culture.
  - e. Identify the physiological responses, indications, and contraindications for soft tissue mobilization as a treatment technique, including cultural differences in patient responses.
  
3. Apply manual spinal traction techniques as appropriate for the physical therapist assistant under the supervision of a physical therapist.
  - a. Demonstrate preparation of patient including positioning, draping, skin integrity and pain assessment before and after applying traction.
  - b. Explain the indications, contraindications, and desired therapeutic effects of various modes of traction.
  - c. Demonstrate safe and appropriate application, patient handling and patient education for commonly used traction techniques.
  - d. Apply the various types of cervical and lumbar manual traction to include intermittent, positional, and sustained traction based on patient condition and desired effects.
  - e. Teach patients how to safely and effectively perform self-traction techniques independently for self-management and pain reduction.

4. Demonstrate safe and effective therapeutic interventions to improve flexibility for all the major joints including manual muscle stretching, contract/relax stretching, dynamic flexibility and static stretching.
5. Demonstrate safe and effective Grade I and Grade II joint mobilizations for the major extremity joints for pain reduction and ROM.
  - a. Select the appropriate grade of joint mobilization based on plan of care of the physical therapist, and patient condition.
  - b. Demonstrate competency in applying the selected grade of joint mobilization to all extremity joints.
  - c. Explain the indications, contraindications, and desired therapeutic effects of various joint mobilization techniques.
  - d. Assess patient response to applied joint mobilization and modify as necessary.
6. Examine the clinical significance of commonly used orthopedic special tests for differentiation of contractile vs. non-contractile impairments.
7. Instruct patients in advanced and functional spinal stabilization exercises for various diagnoses.
  - a. Select appropriate stabilization exercise based on patient acuity and functional level.
  - b. Progress stabilization exercise appropriately based on patient response and ability.
  - c. Monitor for safety and common compensations during spinal stabilization exercises.
  - d. Teach patients how to perform exercises independently for home exercise program.

**Big Ideas:**

1. Manual therapy approaches
2. Advanced spinal exercises
3. Extremity joint mobilizations
4. Muscle stretching
5. Spinal Traction
6. Soft Tissue Mobilization
7. Massage
8. Orthopedic Special tests

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These SLOs are not approved for experiential credit.

**Effective: Fall 2018**