

## **SIM 390 Therapeutic Modalities**

### **Therapeutic Modalities**

- 1-2: The student will perform a physical examination and interview to identify the indications, contraindications, and precautions to various treatment protocols.
- 1-M3: The student will perform a physical examination to identify the current inflammatory stage.
- 2-C1: The student will demonstrate the ability to select the appropriate parameters for and then prepare and apply the following:
- a. cold whirlpool treatment
  - b. controlled cold therapy unit
  - c. ice pack
  - d. vapo-coolant spray
  - e. ice immersion
  - f. ice massage
  - g. cryokinetics
- 2-E1: The student will demonstrate the ability to select the appropriate parameters for and then prepare and apply the following:
- a. sensory-level pain control treatment
  - b. noxious-level pain control treatment
  - c. motor-level pain control treatment
  - d. muscle re-education treatment
  - e. muscle pumping treatment
  - f. muscle atrophy retardation treatment
  - g. acute edema treatment
  - h. muscle splinting/spasm treatment
  - i. iontophoresis treatment
- 2-H1: The student will demonstrate the ability to select the appropriate parameters for and then prepare and apply the following:
- a. moist heat pack
  - b. paraffin treatment
  - c. contrast bath
  - d. warm whirlpool treatment
- 2-I1: The student will demonstrate the ability to select the appropriate parameters for and then prepare and apply intermittent compression to the upper and lower extremities.
- 2-M1: The student will demonstrate the ability to prepare and apply a massage treatment.
- 2-M2: The student will demonstrate the ability to properly perform the following therapeutic massage strokes:
- a. effleurage
  - b. petrissage
  - c. friction (circular, transverse)
  - d. tapotement
  - e. vibration
  - f. myofascial release techniques

2-M3: The student will demonstrate the ability to select the appropriate parameters for and then prepare and apply the following:

- a. mechanical traction
- b. manual traction
- c. positional traction

3-U1: The student will demonstrate the ability to select the appropriate parameters for and then prepare and apply the following:

- a. thermal ultrasound treatment
- b. non-thermal ultrasound treatment
- c. combination electrical-stimulation/ultrasound treatment
- d. phonophoresis treatment
- e. indirect application of ultrasound treatment (underwater, bladder)

### **Therapeutic Exercise**

2-E2: The student will set-up and apply the following types of electrical stimulation units:

- a. monophasic stimulator (e.g., high volt stimulation)
- b. biphasic stimulator (e.g., Transcutaneous Electrical Nerve Stimulation [TENS], Neuromuscular Electrical Stimulation [NMES])
- c. direct current (e.g., iontophoresis)
- d. alternating current (e.g., interferential, NMES)
- e. multifunction electrical stimulation devices

### **Acute Care of Injuries and Illnesses**

2-M3: The student will demonstrate the ability to:

- a. manage open and closed wounds
- b. apply direct and indirect pressure to control bleeding
- c. clean, debride, and protect an open wound
- d. apply superficial skin closures
- e. properly apply and remove gloves and other personal protective equipment
- f. properly dispose of biohazardous waste
- g. apply appropriate dressings
- h. apply ice, compression, and elevation to an acute sprain, strain, or contusion