

SPRINGFIELD TECHNICAL COMMUNITY COLLEGE

ACADEMIC AFFAIRS

Course Number: PTAS 201 Department: Physical Therapist Assistant

Course Title: PTA 2 Semester: Spring Year: 1997

Objectives/Competencies

Course Objective	Competencies
1. The use of Heat and Cold	<ol style="list-style-type: none">1. List effects of heat and cold on the body.2. Define heat, the inverse square law, and electromagnetic spectrum.3. Differentiate heat transference by conduction, convection, radiation, and conversion.4. Identify the mode(s) of heat transference for each modality.5. State correct temperature ranges for hydrocollator units.6. List indications and contraindications for the use of heat and cold.
2. Paraffin Treatments	<ol style="list-style-type: none">1. Prepare the patient and equipment for the prescribed hydrotherapy treatment.2. Safely operate the whirlpool equipment.3. Follow tank cleaning procedures.4. List indications and contraindications for treatment with hot or cold whirlpool.5. Name properties of water which make it a valuable agent.

Course Objective	Competencies
<p>4. The Short Wave Diathermy Unit</p>	<p>6. State the temperature of range of water used in the whirlpool bath. 7. Identify the physiological effects of hydrotherapy.</p>
<p>5. Infrared Radiation</p>	<p>1. Successfully simulate operation of the diathermy unit. 2. Identify the clinical uses, contraindications, the dangers, and the physiological effects of short wave diathermy.</p>
<p>6. Ultraviolet Techniques</p>	<p>1. Name sources of infrared radiation. 2. List indications, contraindications and physiological effects for treatment with infrared radiation.</p>
<p>7. The Ultrasound Unit</p>	<p>1. State the clinical uses, the contraindications, and the physiological effects of ultraviolet. 2. Identify the clinical uses, the contraindications, and the physiological effects of ultraviolet. 3. Safely perform a MED test using an ultraviolet light source.</p>
<p>8. Jobst Compression Units.</p>	<p>1. Explain the rationale for the use of a coupling agent. 2. Identify the clinical uses, the contraindications, and the physiological effects of ultrasound and phonophoresis. 3. Safely administer an ultrasound treatment.</p>
	<p>1. Correctly position a patient for treatment with a Jobst compression unit. 2. Demonstrate proficiency in using the upper and lower</p>

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<p>9. Traction Techniques</p>	<p>extremity sleeves at appropriate pressures.</p> <ol style="list-style-type: none"> 3. Explain the purpose of treatment with intermittent compression and the clinical diagnoses which would benefit by treatment with this modality. <ol style="list-style-type: none"> 1. Explain traction and differentiate between mechanical and skin traction techniques with examples. 2. Identify equipment used in the application of cervical and lumbar traction. 3. Demonstrate correct application of cervical and lumbar traction to the patient. 4. Understand the indications and contraindications for the use of traction in the clinic.
<p>10. The Physiological Mechanisms Underlying Pain</p>	<ol style="list-style-type: none"> 1. Define Spasm. 2. Describe types of pain. 3. Understand present theories of pain awareness. 4. Recognize pain scales used in the clinic.
<p>11. Electrical Stimulation Equipment</p>	<ol style="list-style-type: none"> 1. Define and understand the terminology used in electrotherapy. 2. Define Joule's law. 3. List indications and contraindications for treatment with electrical stimulation. 4. Locate motor points of the facial nerve with a muscle stimulator. 5. Demonstrate safe use of a variety of E-stim units.

Course Objective	Competencies
12. Wound Care	6. Identify various types of electrodes used in E-stim.
13. Joint Mobilization	<ol style="list-style-type: none"> 1. Demonstrate an understanding of the normal healing process. 2. Identify staging and classification of wounds. 3. Identify physical agents used in wound healing. 4. Identify proper dressing for wounds.
14. Appropriate Affective Clinical	<ol style="list-style-type: none"> 1. List indications and contraindications for treatment. 2. Demonstrate an understanding of the principles of joint mobilization. 3. With supervision, perform selected joint mobilization techniques. 1. Use lab time effectively for the practice of skills. 2. Interact in a professional manner with patient. 3. Demonstrate a professional appearance. 4. Assume responsibility for scheduling and completion of lab skill tasks. 5. Be on time for class and laboratory sessions.