



Course Title: Therapeutic Modalities 212 - Electrical Currents for Soft Tissue Healing and Pain Control

Source: Physical Agents in Rehabilitation from Research to Practice, 5 th edition, by Michelle Cameron.

<u>Source Description</u>: With straightforward, in-depth coverage of the use of physical agents to improve patient outcomes, Physical Agents in Rehabilitation: An Evidence-Based Approach to Practice, 5th Edition reflects how physical agents and modalities are being discussed in the classroom. This new edition brings the ideal balance of evidence and practical instruction to the learning and practice of physical agents in rehabilitation. Comprehensive coverage of all physical agents includes the mechanisms, clinical effects, and application techniques for thermal agents, ultrasound, electrical currents, electromagnetic radiation, hydrotherapy, traction, and compression. Plus, each chapter includes a scientific rationale and step-by-step instructions in the use of the agent(s), as well as up-to-date research support and new Find the Evidence tables.

Target Audience: OT / OTA and other healthcare professionals

Course Type: Video vs. <u>Text-based</u>

Educational Level: Beginner, Intermediate, Advanced

CE Hours: 3contact hour / .3 ceu

Course Prerequisites: None

Course Author / Instructor: Cameron, PhD, PT / Brown, MS, OTR/L, CHT

Learning Objectives:

Electrical Currents for Pain Control

- Describe the use of conventional TENS, Low-rate and Burst-Mode TENS for the use of pain control
- List and describe 3 contraindications for the use of electrical currents for pain control
- Examine parameters such as waveform, electrode placement, amplitude, treatment time
- and frequency in the use of electrical currents for the use of pain control
- Read case studies and highlight clinical application

Electrical Currents for Tissue Healing

- Explain how electrical stimulation facilitates wound healing
- Describe 3 parameters for electrical stimulation to promote wound healing
- Explore and list 2 parameters for the use of iontophoresis
- Describe the use of electrical currents for edema control

• List 3 precautions and 3 contraindications for the use of electrical currents in tissue healing

Agenda:

<u>Hour #1</u>

Mechanisms Underlying Electrical Current Use for Pain Control Gate Control **Opioid Release** Selecting Transcutaneous Electrical Nerve Stimulation Approaches Clinical Applications of Electrical Currents for Pain Control Acute Pain Chronic Pain Contraindications and Precautions for Electrical Currents for Pain Control Contraindications for Electrical Currents for Pain Control Precautions for Electrical Currents for Pain Control Adverse Effects of Transcutaneous Electrical Nerve Stimulation **Application Techniques** Documentation Examples **Clinical Case Studies**

<u>Hour #2</u>

Mechanisms Underlying Electrical Currents for Tissue Healing Galvanotaxis Cell Activation Antimicrobial Effects Enhanced Circulation Clinical Applications of Electrical Stimulation for Soft Tissue Healing Chronic Wounds: Pressure Ulcers, Diabetic Ulcers, Venous Ulcers Edema Control

<u>Hour #3</u>

Transdermal Drug Delivery: Iontophoresis Contraindications and Precautions for Electrical Currents for Tissue Healing Contraindications for Electrical Currents for Tissue Healing Precautions for Electrical Currents for Tissue Healing Adverse Effects of Electrical Currents for Tissue Healing Application Techniques Documentation Examples Clinical Case Studies

Course Completion Requirements:

A passing score of 100% is required for course completion. You will have as many attempts as needed until your passing score of 100% is achieved. Upon successful completion of course and completing a satisfaction survey, you will receive your certificate of completion.

Additional Course Information

Course Registration: Register for Free at <u>www.OnlineCE.com</u>. Once registered, you can begin to purchase courses. Contact <u>info@onlinece.com</u> for special needs requests and assistance.

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Cancellation Policy: Only available courses are offered online and on-demand and available for purchase. No registration fees are collected for courses that are not provided on-demand. Due to the online and on demand format, courses are not cancelled.

Course Date and Location: This is an independent course that is available 24/7 on-demand at <u>www.OnlineCE.com</u>.

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