Course Title: Therapeutic Modalities 210 - Lasers and Lights / Ultraviolet Radiation

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

Source Description: 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

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Course Type: Video vs**.** Text-based

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:

- Discuss the physical properties of electromagnetic radiation
- Become familiar with the history and physical properties of lasers and lights
- List and describe 6 effects of lasers and lights
- Review the indications and contraindications for the use of lasers and lights
- Outline the steps involved in the application of lasers and lights
- Discuss important components involved in documentation with the use of lasers and lights
- Read case studies to understand clinical application
- Outline and describe the physical properties of ultraviolet radiation
- Describe 5 effects of ultraviolet radiation
- List and examine 2 clinical indications for the use of ultraviolet radiation
- List 5 contraindications and adverse effects for the use of ultraviolet radiation
- Describe application techniques for ultraviolet radiation

Agenda:

Hour #1

- Introduction
- Terminology
- Electromagnetic Radiation, Lasers, and Light
- Physiological Effects of Lasers and Light
- Promote Adenosine Triphosphate Production
- Promote Collagen Production
- Modulate Inflammation
- Inhibit Growth of Microorganisms
- Promote Vasodilation
- Alter Nerve Conduction Velocity and Regeneration
- Clinical Indications for Lasers and Light
- Soft Tissue and Bone Healing
- Arthritis
- Lymphedema
- Neurological Conditions
- Pain Management

Hour #2

- Contraindications and Precautions for Lasers and Light
- Contraindications for Lasers and Light
- Precautions for Lasers and Light
- Adverse Effects of Lasers and Light
- Application Technique
- Parameters for the Use of Lasers and Light
- Documentation Examples
- Clinical Case Studies
- Physical Properties of Ultraviolet Radiation
- Effects of Ultraviolet Radiation
- Erythema Production
- Tanning
- Epidermal Hyperplasia
- Vitamin D Synthesis
- Bactericidal Effects
- Other Effects of Ultraviolet Radiation
- Clinical Indications for Ultraviolet Radiation
- Psoriasis

Hour #3

- Wound Healing
- Contraindications and Precautions for Ultraviolet Radiation
- Contraindications for Ultraviolet Radiation
- Precautions for Ultraviolet Radiation
- Adverse Effects of Ultraviolet Radiation
- Burning
- Premature Aging of Skin
- Carcinogenesis
- Eye Damage
- Adverse Effects of Psoralen With Ultraviolet Application Techniques
- Dose-Response
- Assessment Dosimetry for the Treatment of Psoriasis With Ultraviolet Radiation
- Documentation
- Example Ultraviolet Lamps
- Selecting a Lamp
- Lamp Maintenance
- Clinical Case Study

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 www.OnlineCE.com. Once registered, you can begin to purchase courses. Contact info@onlinece.com for special needs requests and assistance.

Refund Policy: There will be no refunds for courses taken at OnlineCE.com or monies deposited into My CE Bank. Any money on account will be used for taking future courses. If you start a course in error, or if you are dissatisfied with a course, please contact us in the first part of the course and we will void the course and you can select a replacement course.

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

Required Materials and Equipment: Courses offered on OnlineCE.com can be accessed on any type of computer or device. No special software is required but we do recommend the use of the Chrome Browser (recommended, not required). All course materials are contained within the courses and no prerequisites are required.

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