Course Information Sheet

Course Title: Therapeutic Modalities for Musculoskeletal Injuries, 4th ed.

Course Description:

Therapeutic Modalities for Musculoskeletal Injuries offers comprehensive coverage of evidence-based therapies for rehabilitation of musculoskeletal injuries. The information is a vital resource for professionals in the field who wish to stay informed of the latest research. The content of the book is organized in parts to logically address therapeutic interventions for musculoskeletal injuries. Part I explains the core concepts of therapy, specifically in terms of clinical practice, and part II addresses the physiology of the acute response to tissue damage, tissue repair, and pain. Part III examines electrical modalities for pain management, provides an introduction to neuromuscular control, and addresses the use of biofeedback and neuromuscular stimulation to restore neuromuscular control in rehabilitation. Parts IV and V delve into a critical evaluation of therapeutic applications of cold, superficial heat, ultrasound, electromagnetic fields, and low-power laser therapy. Part VI examines foundational concepts of mechanobiology and explains how and why exercise and mechanical forces are essential to musculoskeletal tissue repair. Part VII brings all of the concepts from the text together through a series of case studies and guided scenarios, which allow students to apply fundamentals to real-world situations. Softcover, 388 pages.

Learning Objectives:

1. Identify the varying groups of therapeutic modalities and their purposes.

2. Discuss the impact that cognitive appraisal can have on the physically active patient’s psychological and emotional response to injury.

3. Compare and contrast the components of randomized controlled clinical trials.

4. List the principles of tissue healing.

5. Explain the multidimensional nature of pain and pain relief.

6. Analyze the process used to evaluate and treat physically active people who have persistent pain.

7. Examine the principles of the clinical application of electrical stimulation.

8. Identify the components of neuromuscular control and biofeedback.

9. Compare and contrast the principles of cold and superficial heat application.
10. List the physical principles and applications of ultrasound, electromagnetic fields, and laser therapies.

11. Identify the role mechanical forces play in maintaining tissue health and promoting repair.

12. Describe how tendon, muscle, and bone respond to stress on the tissue.

Target Audience: Beginner/Intermediate/Advanced

Schedule and Format: Self-paced home study

Fees: Please see our website for the most current details on pricing & CE awards: www.exerciseetc.com

Cancellation/Refund Policy: After you get your home study course you have three days to change your mind for a full refund. Just notify us within that three day window and then return the book to us in saleable condition. That’s it. No questions asked.

Instructor/Author Credentials:

Craig R. Denegar, PhD, PT, ATC, FNATA, is a professor in the department of kinesiology and director of the doctor of physical therapy program at the University of Connecticut. He has more than 30 years of experience as an athletic trainer and physical therapist and has extensive clinical practice experience related to persistent orthopedic pain.

Denegar is a member of the National Athletic Trainers’ Association (NATA) and the American Physical Therapy Association. He is editor in chief of the Journal of Athletic Training and serves on the editorial boards of the Journal of Sport Rehabilitation, Journal of Strength and Conditioning Research, and Open Access Journal of Sport Medicine. He is the former vice chair of free communications on the NATA Research and Education Foundation’s Research Committee and was the 2003 recipient of the William G. Clancy Medal for Distinguished Athletic Training Research and the 2004 Distinguished Merit Award from the Pennsylvania Athletic Trainers’ Society. Denegar was elected a fellow of the NATA in 2011 and recognized as a Most Distinguished Athletic Trainer by the NATA in 2014.

Ethan Saliba, PhD, ATC, PT, has been teaching therapeutic modalities at the University of Virginia at Charlottesville for over 25 years. He is the head athletic trainer and associate athletics director for sports medicine, and he oversees 25 varsity sports. Saliba is a certified athletic trainer, licensed physical therapist, and sport-certified specialist who has written extensively on various aspects of athletic injuries and rehabilitation. Saliba was honored as the NATA Head Athletic Trainer of the Year in 2007.

Susan Foreman Saliba, PhD, ATC, PT, is an associate professor in the Curry School of Education at the University of Virginia at Charlottesville. She has over 20 years of clinical experience and
taught therapeutic modalities during that time. Susan is a member of both the NATA and the American Physical Therapy Association (APTA) and has served on the NATA Educational Executive Committee and the Free Communications Committee of the NATA Research and Education Foundation. She is conducting research on the clinical application of therapeutic modalities.

About the Contributors

**Michael Joseph, PhD, PT**, is an assistant professor in the department of kinesiology physical therapy program at the University of Connecticut. Joseph has more than 15 years of clinical experience as a physical therapist specializing in sports medicine and is a consultant for many professional and collegiate teams. He is a member of the American Physical Therapy Association and is on the editorial board of the *Journal of Strength and Conditioning Research* and the *World Journal of Orthopedics*. Joseph teaches clinical and musculoskeletal pathology, mechanobiology, and musculoskeletal evaluation and treatment. His focus of research is the adaptation of connective tissue to physiological loading.

**Kavin Tsang, PhD, ATC**, is an associate professor in the department of kinesiology at California State University at Fullerton. He is an active member of the National Athletic Trainers’ Association (NATA) and an athletic trainer certified by the Board of Certification. His clinical experiences encompass physical therapy clinics, high school athletics, collegiate intramural programs, and intercollegiate athletics. He has been teaching therapeutic modalities in various athletic training education curricula for over 14 years. Tsang serves on the NATA Research and Education Foundation (NATA REF) Board of Directors, NATA REF Free Communications Committee, NATA Convention Program Committee, and FWATA Education Program Committee. He is also chair of the Far West Athletic Trainers’ Association (FWATA) Research and Grants Committee.

**Contact Hours/CEs:** Please see our website for the most current details on pricing & CE awards: [www.exerciseetc.com](http://www.exerciseetc.com)

**Sponsors:** N/A