

**Southwest Baptist University**  
**ATH 4014 Therapeutic Modalities**  
**Competencies/Proficiencies – 4<sup>th</sup> Edition**

**Pathology**

- PA-C4 Identify the normal acute and chronic physiological and pathological responses (e.g., inflammation, immune response, and healing process) of the human body to trauma, hypoxia, microbiologic agents, genetic derangements, nutritional deficiencies, chemicals, drugs, and aging affecting the musculoskeletal and other organ systems, and musculoskeletal system adaptations to disuse.
- PA-C6 Describe the body's responses to physical exercise during common diseases, illnesses, and the injury.

**Acute Care**

- AC-C17 Explain the application principles of rest, cold application, elevation, and compression in the treatment of acute injuries.
- AC-C18 Describe the signs, symptoms, and pathology of acute inflammation.
- AC-C33 Describe home care and self-treatment plans of acute injuries and illnesses.

**Therapeutic Modalities**

- TM-C1 Describe the physiological and pathological processes of trauma, wound healing and tissue repair and their implications on the selection and application of therapeutic modalities used in a treatment and/or rehabilitation program.
- TM-C2 Explain the principles of physics, including basic concepts associated with the electromagnetic and acoustic spectra (e.g., frequency, wavelength) associated with therapeutic modalities.
- TM-C3 Explain the terminology, principles, basic concepts, and properties of electric currents as they relate to therapeutic modalities.
- TM-C4 Describe contemporary pain-control theories.
- TM-C5 Describe the role and function of the common pharmacological agents that are used in conjunction with therapeutic modalities
- TM-C6 Explain the body's physiological responses during and following the application of therapeutic modalities.
- TM-C7 Describe the electrophysics, physical properties, biophysics, patient preparation and modality set-up (parameters), indications, contraindications, and specific physiological effects associated with commonly used therapeutic modalities.
- TM-C8 Identify appropriate therapeutic modalities for the treatment and rehabilitation of injuries and illness.
- TM-C9 Describe the process/methods of assessing and reassessing the status of the patient using standard techniques and documentation strategies to determine appropriate treatment and rehabilitation and to evaluate

readiness to return to the appropriate level of activity. This includes the ability to:

- TM-C9a Describe and interpret appropriate measurement and assessment procedures as they relate to the selection and application of therapeutic modalities.
- TM-C9b Interpret objective measurement results as a basis for developing individualized therapeutic modality application and set-up (parameters).
- TM-C9c Interpret the results of injury assessment and determine an appropriate therapeutic modality program to return the patient to physical activity.
- TM-C9d Determine the appropriate therapeutic modality program and appropriate therapeutic goals and objectives based on the initial assessment and frequent reassessments.
- TM-C9e Determine the criteria for progression and return to activity based on the level of functional outcomes.
- TM-C9f Describe appropriate methods of assessing progress when using therapeutic modalities and interpret the results.
- TM-C9g Interpret physician notes, postoperative notes, and physician prescriptions as they pertain to a treatment plan.
- TM-C9h Describe appropriate medical documentation for recording progress in a therapeutic modality program.
- TM-C10 Identify manufacturer's, institutional, state, and federal standards for the operation and safe application of therapeutic modalities.
- TM-C11 Identify manufacturer's, institutional, state and federal guidelines for the inspection and maintenance of therapeutic modalities.
- TM-P1 Assess patient to identify indications, contraindications, and precautions applicable to the application of therapeutic modalities.
- TM-P2 Obtain and interpret baseline and posttreatment objective physical measurements to evaluate and interpret results.
- TM-P3 Inspect the therapeutic modalities and treatment environment for potential safety hazards.
- TM-P4 Position and prepare the patient for the application of therapeutic modalities.
- TM-P5 Select and apply appropriate therapeutic modalities according to evidence-based guidelines.
- TM-P6 Document treatment goals, expectations, and treatment outcomes.

### **Psychosocial**

- PS-C3 Describe the motivational techniques that the athletic trainer must use during injury rehabilitation and reconditioning.
- PS-C12 Describe the basic signs and symptoms of mental disorders (psychoses), emotional disorders (neuroses, depression), or personal/social conflict (family problems, academic or emotional stress, personal assault or abuse, sexual assault, sexual harassment), the contemporary personal, school, and community health service agencies, such as community-based psychological and social support services that treat these conditions and

the appropriate referral procedures for accessing these health service agencies.

PS-C13 Describe the acceptance and grieving processes that follow a catastrophic event and the need for a psychological intervention and referral plan for all parties affected by the event.

PS-C15 Describe the psychosocial factors that affect persistent pain perception (i.e., emotional state, locus of control, psychodynamic issues, sociocultural factors, and personal values and beliefs) and identify multidisciplinary approaches for managing patients with persistent pain.

### **Professional Development**

PD-C14 Interpret the current research in athletic training and other related medical and health areas and apply the results to the daily practice of athletic training.