SOUTHEAST COMMUNITYCOLLEGE
HEALTH SCIENCES DIVISION
PHYSICAL THERAPIST ASSISTANT
Revision Date: 10/2020
Syllabus Statements

I. CATALOG DESCRIPTION

Course Number:	**PTAS 1210**
Course Title:	Physical Agents
Prerequisite(s):	PTAS 1101, PTAS 1110, PTAS 1112
Catalog Description:	Study of the principles and clinical application of therapeutic modalities and physical agents including massage, cryotherapy, thermal agents, electromagnetic radiation, ultrasound, traction, electrotherapeutic, hydrotherapy, wound care, edema and compression therapy interventions.
Credit Hours:	4
Class Hours:	45
Lab Hours:	45
Total Contact Hours:	90

II. COURSE OBJECTIVES: *Course will:*

1. Review the concepts of healing in musculoskeletal structures within the human body.
2. Summarize the pathogenesis, prognosis and therapeutic management of tone.
3. Summarize the pathogenesis, prognosis and therapeutic management of the sensory system.
4. Explore physiology of pain.
5. Explore the physiology and pathophysiology of the lymphatic system.
6. Summarize the safe application of cryotherapy, thermal agents, massage, electromagnetic radiation, ultrasound, traction, electrotherapeutic, hydrotherapy, edema and compression therapy interventions.
7. Justify the decision making process for the selection of the appropriate modality within the physical therapy plan of care.
8. Demonstrate the role of evidence-based medicine in the selection of physical therapy interventions.

Note: Unit objectives are located in the learning management system within each unit of study.

III. STUDENT LEARNING OUTCOMES AND GENERAL EDUCATION LEARNING OUTCOMES:

A. STUDENT LEARNING OUTCOMES: *The student will be able to:*

1. Relate the physiology of tissue healing, tone, sensation, and pain in the selection of physical agents.
2. Discuss the theory, indications, precautions and contraindications for the application of cryotherapy, thermal agents, massage, electromagnetic radiation, ultrasound, traction, electrotherapeutic, hydrotherapy, edema and compression therapy interventions.
3. Justify the selection of a therapeutic modality/physical agent in the treatment of a simulated patient.
4. Select appropriate tools for data collection in the application of therapeutic modalities.

5. Demonstrate safe and accurate data collection in the treatment of a simulated patient with therapeutic modalities.
6. Demonstrate safe and accurate application of therapeutic modalities in the treatment of a simulated patient.
7. Compose thorough and defensible documentation in the treatment of a simulated patient with a therapeutic modality/physical agent.
8. Demonstrate accurate billing in the treatment of a simulated patient with therapeutic modalities.
9. Value individual and cultural differences which may affect PTA data collection and interventions with therapeutic modalities.
10. Assess when an intervention should not be provided or should be adjusted within the plan of care.
11. Decide when an intervention is beyond that which is appropriate for a PTA.
12. Decide when a patient response would require the attention of the supervising physical therapist or immediate emergency intervention before, during, or after the application of therapeutic modalities.
13. Demonstrate appropriate verbal and nonverbal communication with a simulated patient across the lifespan.
14. Demonstrate proper draping with respect for dignity, safe body mechanics for injury prevention, and universal precautions before, during and after application of therapeutic interventions.
15. Demonstrate proper positioning for the intervention with concern for the impairment.
16. Demonstrate professional conduct during interactions with peers and members of the healthcare team.
17. Debate the use of therapeutic modalities utilizing information from research literature.

B. GENERAL EDUCATION LEARNING OUTCOMES

1. GELO 5: Analytical, Quantitative, and Scientific Reasoning

Outcome: Understand and create logical arguments supported by quantitative and scientific evidence and communicate those arguments in a variety of formats.

IV. **CONTENT/TOPICAL OUTLINE (*course outline may provide more detailed information)***

A. UNITS

1. Introduction to modalities
2. Inflammation, tone, pain and sensation
3. Evidence based medicine
4. Cultural considerations
5. Cryotherapy
6. Thermotherapy
7. Ultrasound
8. Massage
9. Traction
10. Electromagnetic radiation
11. Electrotherapeutic agents
12. Compression, edema and lymphedema
13. Hydrotherapy

V. INSTRUCTIONAL MATERIALS REQUIRED

A. Required Text(s):

Cameron, *Physical Agents in Rehabilitation from Research to Practice* (most current edition)
O'Sullivan, Schmitz, Physical Rehabilitation (most current edition)
Belanger, *Therapeutic Electrophysical Agents* (most current edition)

B. Other Resources:

Pierson and Fairchild, *Principles and Techniques of Patient Care* (most current edition)

VI. METHODS OF PRESENTATION/INSTRUCTION

A. Methods of presentation typically include a combination of the following:

1. Lecture
2. Laboratory
3. Demonstration
4. Field Trip (off campus activity)
5. Handout Materials
6. Class Participation/Presentations
7. Case Studies and Group Work
8. Guest Presenters
9. Power Point slides and videos
10. Pretests and worksheets

VII. METHODS OF EVALUATION

A. Methods of evaluation typically include a combination of assignments, quizzes, exam, projects, skill checkoffs, etc. For grading expectations please see the course information document.

SCC STANDARD GRADING SCALE POLICY:

A+	**95-100**	**C+**	**75-79**
A	**90-94**	**C**	**70-74**
B+	**85-89**	**D+**	**65-69**
B	**80-84**	**D**	**60-64**
		F	**Below 60**

VIII. SPECIFIC COURSE REQUIREMENTS

A. ATTENDANCE

Attendance is crucial to the success of this course. Any class missed could mean valuable missed information, which is difficult to obtain. Please notify the instructor of any pending absences or if you will be late. Absences in excess of four hours may result in failing the course.

B. Must pass all program courses with a C+ to progress to the next term. Courses with a classroom and lab portion must have a C+ or better in both.

Please see course information document for course policies related to grading, expectations, assignments, assessments, and participation.