

This is a SouthArk Master Syllabus. The course syllabus distributed by the instructor may include additional requirements, must be followed by the student in the given term, and is considered to supersede the Master Syllabus.

Course Number

PTAP 2406/L

Course Title

Physical Therapy Procedures / Lab

Course Description

Course Description: Physical Therapy Procedures includes the study of the principles and techniques of modalities used in the plan of care developed by the physical therapist (PT). Included are the indications and contraindications for each modality and patients' physiological response to each modality with a wide variety of musculoskeletal, neuromuscular, and medical conditions. Emphasis is placed on effective oral and written communication techniques with patient/family, the health care team, and the supervising PT. Students must demonstrate competency in the use of selected therapeutic interventions. Examples of such modalities include: superficial and deep heating agents; cryotherapy; electrical stimulation; and mechanical traction. Also physical therapy interventions include wound care / debridement; stump care and prosthetics.

College Mission

South Arkansas Community College promotes excellence in learning, teaching, and service; provides lifelong educational opportunities; and serves as a cultural, intellectual, and economic resource for the community.

College Wide Student Learner Outcomes

X Critical Thinking

x Responsibility

x Communication

ACTS Course

Program Course

Physical Therapist Assistant

ACTS Outcomes

NA

Program Goals and Objectives / Outcomes

PTA 2406/L includes preparation in the cognitive, affective, and psychomotor domains utilizing critical thinking to become competent entry-level Physical Therapist Assistants. The student successfully completing this course

- 1) Works under the supervision of a Physical Therapist (PT) in providing patient care services after the PT performs the initial evaluation and delegates responsibilities to the Physical Therapist Assistant (PTA).
- 2) Defines and applies the scope of practice of PTAs within the team of health care providers.
- 3) Exhibits conduct that reflects a commitment to the profession while safely, ethically, and legally practicing within the field of physical therapy.
- 4) Applies knowledge of anatomy and physiology of the human body as related to pathologies / injuries commonly seen in the practice of physical therapy.
- 5) Performs selected physical therapy interventions within the plan of care; adjusts interventions as indicated; and reports to supervising PT.
- 6) Performs data collection skills as directed by the supervising PT and reports to supervising PT.
- 7) Communicates effectively, verbally, nonverbally, and in writing, with patients and their families, the supervising PT, other members of the physical therapy staff, and all members of the health care team.
- 8) Recognizes and responds appropriately to the emotional, psycho-social, economic, and relational aspects of physical therapy care with an appreciation of individual and cultural differences.

Course Objectives / Outcomes

#	Course Outcomes	Unit Outcomes/ Competencies	Program Outcomes	Critical Thinking	Communication	Responsibility	Assessment
CLO 1	Discusses indications / contraindications and procedures for thermal agents; including competency in application / instruction	1, 2, 3, 4, 5, 7, 8, 9, 22, 23, 24, 25	1, 2, 3, 4, 5, 7	CT1	C2	R2	Written examination Peer lab assessment Lab practical exam
CLO 2	Discusses indications / contraindications and procedures for electrical stimulation ; including competency in application / instruction	10, 11, 12, 22, 23, 24, 25	1, 2, 3, 4, 5, 7	CT1	C2	R2	Written examination Peer lab assessment Lab practical exam
CLO 3	Discusses indications / contraindications and procedures for spinal traction; including competency in application / instruction	13, 14, 15, 22, 23, 25	1, 2, 3, 4, 5, 7	CT1	C2	R2	Written examination Peer lab assessment Lab practical exam
CLO 4	Explain principles & techniques for hydrotherapy / aquatics	16, 22	2, 4, 7	CT1		R2	Written examination
CLO 5	Explain common wound care procedures and stump care; including stump wrapping	17, 18, 22, 23	1, 2, 3, 4, 5, 7	CT1		R2	Written examination Lab practical exam
CLO 6	Explain principles of intermittent compression	19	2, 4, 5, 7	CT1		R2	Written examination
CLO 7	Discuss prostheses	20	2, 4, 5, 7	CT1	C1	R2	Written examination

Anticipated Level of Achievement

- 1) Written examinations: 75% of the measures for the above CLO were met on written examination/s
- 2) Peer lab assessment: students will complete lab practices on a minimum of 4 subjects
- 3) Lab practical examination: all students will successfully complete the lab practical exam within 3 attempts

Unit Objectives / Outcomes / Competencies

The student successfully completing this course will be able to

1. Describe the indications and contraindications for the use of superficial heat modalities;
2. Explain the therapeutic procedures for the application of various superficial heat modalities;
3. Demonstrate competency in the use of superficial heat modalities;
4. Describe the indications and contraindications for the use of cryotherapy modalities;
5. Explain the therapeutic procedures for the application of various cryotherapy modalities;
6. Demonstrate competency in the use of cryotherapy modalities;
7. Describe the indications and contraindications for the use of deep heat modalities;
8. Explain the therapeutic procedures for the application of deep heating modalities;
9. Demonstrate competency in the use of deep heating modalities
10. Describe the indications and contraindications for the use of electrical stimulation devices (HVPC, TENS, NMES, IFC, biofeedback);
11. Explain the therapeutic procedures for the application of electrical stimulation devices (HVPC, TENS, NMES, IFC, biofeedback);
12. Demonstrate competency in the use of electrical stimulation devices;
13. Describe the indications and contraindications for the use of spinal mechanical traction;
14. Explain the therapeutic procedures for the application of spinal mechanical traction;
15. Demonstrate competency in the use of spinal mechanical traction;
16. Explain the principles and techniques in the use of hydrotherapy/aquatics;
17. Explain common wound care procedures used in physical therapy;
18. Demonstrate competency in stump care;

19. Explain the principles and techniques in the use of intermittent compression;
20. Discuss types of prostheses, wearing assessment, and care;
21. Explain principles and techniques in the use of light modalities;
22. Assess the effects of modalities on pain, edema, skin and deeper tissues, sensation, mobility/flexibility, length and girth measurements, and patient performance;
23. Discuss patient / family education in the use of modalities;
24. Documentation of therapeutic modalities; and
25. Discuss the PTA's role in assisting the supervising PT with discharge planning.

Course Outline:

- I. Evidence Based Practice with physical agents
- II. Tissue Response to Injury
- III. Patient response to therapeutic interventions
- IV. Superficial heat modalities (hot packs, paraffin, fluidotherapy)
 - A. Biophysical principles of superficial heat when applied to the human body
 - B. Principles and techniques of use of the modalities
 - C. Normal and abnormal patient responses, including skin, anthropometric and sensation assessments
 - D. Clinical applications of superficial heat modalities
 1. Rationale
 2. Indications
 3. Physical therapy treatment procedures
 4. Documentation of modality / consultation with supervising PT
 5. Patient / family instruction in use of the modality
 6. Precautions / contraindications
- V. Cryotherapy (cold packs, ice massage, ice towels, cold immersion, vapocoolant sprays)
 - A. Biophysical principles of cryotherapy when applied to the human body
 - B. Principles and techniques of use of the modalities
 - C. Normal and abnormal patient responses, including skin, anthropometric and sensation assessments
 - D. Clinical applications of cryotherapy modalities
 1. Rationale
 2. Indications
 3. Physical therapy treatment procedures
 4. Documentation of modality / consultation with supervising PT
 5. Patient / family instruction in use of the modality
 6. Precautions / contraindications
- VI. Therapeutic Ultrasound and Phonophoresis
 - A. Biophysical principles of ultrasound when applied to the human body
 - B. Principles and techniques of use of the modalities
 - C. Normal and abnormal patient responses, including skin, anthropometric and sensation assessments
 - D. Clinical applications of sound modalities
 1. Rationale
 2. Indications
 3. Physical therapy treatment procedures
 4. Documentation of modality / consultation with supervising PT
 5. Patient / family instruction in use of the modality
 6. Precautions / contraindications
- VII. Electrical Stimulation
 - A. Review of muscle and nerve physiology with regards to pain control and muscle contraction
 - B. Overview of instrumentation
 - C. Effects of electrical stimulation including pain reduction, functional use of electrical stimulation, muscle re-education, delivery of medications, and changes in anthropometric characteristics
 - D. Clinical application of different currents and wave forms
 1. TENS
 - a. waveform, frequency
 - b. indications
 - c. therapeutic procedures
 - d. precautions / contraindications
 - e. documentation of procedures / consultation with supervising with supervising PT
 2. Interferential current
 - a. waveform, frequency
 - b. indications
 - c. therapeutic procedures

- d. precautions / contraindications
- e. documentation of procedures / consultation with supervising with supervising PT
- 3. NMES
 - a. waveform, frequency
 - b. indications
 - c. therapeutic procedures
 - d. precautions / contraindications
 - e. documentation of procedures / consultation with supervising with supervising PT
- 4. HVPC
 - a. waveform, frequency
 - b. indications
 - c. therapeutic procedures
 - d. precautions / contraindications
 - e. documentation of procedures / consultation with supervising with supervising PT
- 5. IOP (iontophoresis)
 - a. waveform, frequency
 - b. indications
 - c. therapeutic procedures
 - d. precautions / contraindications
 - e. documentation of procedures / consultation with supervising with supervising PT
- 6. Electromyographic biofeedback
 - a. waveform, frequency
 - b. indications
 - c. therapeutic procedures
 - d. precautions / contraindications
 - e. documentation of procedures / consultation with supervising with supervising PT
- 7. Direct current
 - a. waveform, frequency
 - b. indications
 - c. therapeutic procedures
 - d. precautions / contraindications
 - e. documentation of procedures / consultation with supervising with supervising PT
- E. Electrodiagnostic testing (NCV, EMG, RD, S-D curve)
- VIII. Mechanical Traction
 - A. Biophysical principles of spinal traction when applied to the human body
 - B. Principles and techniques for the use of traction
 - C. Normal and abnormal patient response, including pain and sensation assessments
 - D. Clinical application
 - 1. Rationale
 - 2. Indications
 - 3. Physical therapy treatment procedures
 - a. supine
 - b. prone
 - c. seated
 - 4. Documentation of traction / consultation with supervising PT
 - 5. Patient / family instruction regarding traction
 - 6. Precautions and contraindications
- IX. Hydrotherapy
 - A. Biophysical principles of hydrotherapy when applied to the human body
 - B. Principles and techniques for the use of hydrotherapy
 - C. Normal and abnormal response, including pain, anthropometric and sensation assessments
 - D. Clinical application
 - 1. Rationale
 - 2. Indications
 - 3. Physical therapy treatment procedures
 - 4. Documentation of hydrotherapy / consultation with supervising PT
 - 5. Patient / family instruction regarding hydrotherapy
 - 6. Precautions and contraindications
 - E. Aquatic physical therapy
- X. Wound care / debridement
 - A. Review of various wound pathologies
 - B. Medical management of peripheral vascular diseases and diabetic vascular problems

- C. Rehabilitation management of wounds and vascular diseases
 - 1. Rationale for therapeutic treatment
 - 2. Indications for treatment
 - 3. Precautions / contraindications
 - 4. Dressing types, dressing removal and application
 - 5. Wound debridement
 - 6. Review of asepsis, Universal Precautions and sterile technique
 - 7. Skin, anthropometric and sensation assessments
- D. Documentation of wound care procedures / consultation with supervising PT
- XI. Amputations and Prosthetics
 - A. Pre-prosthetic amputation management
 - B. Residual limb bandaging
 - C. Care of residual limb during prosthetic training
 - D. Prosthetics
 - E. Skin, anthropometric and sensation assessments
 - F. ADL and functional training for amputees
 - G. Documentation of stump care procedures / consultation with supervising PT
- XII. Intermittent Compression
 - A. Biophysical principles of intermittent compression when applied to the human body
 - B. Principles and techniques of use of intermittent compression
 - C. Normal and abnormal patient response
 - D. Clinical applications
 - 1. Rationale
 - 2. Indications
 - 3. Length, girth, and volumetric measurements
 - a. equipment
 - b. indications
 - c. reliability
 - 4. Blood pressure
 - 5. Skin, anthropometric and sensation assessments
 - 6. Physical therapy treatment procedures
 - 7. Documentation of modality / consultation with supervising PT
 - 8. Patient / family instruction regarding use of compression
 - 9. Precautions / contraindications
- XIII. Shortwave Diathermy
 - A. Biophysical principles of shortwave diathermy when applied to the human body
 - B. Principles and techniques of use of diathermy
 - C. Normal and abnormal patient response, including skin and sensation assessment
 - D. Clinical application of diathermy
 - 1. Rationale
 - 2. Indications
 - 3. Physical therapy procedures
 - 4. Documentation of modality / consultation with supervising PT
 - 5. Patient / family instruction regarding use of diathermy
 - 6. Precautions / contraindications
- XIV. Laser
 - A. Biophysical principles of laser when applied to the human body
 - B. Principles and techniques of use of laser
 - C. Normal and abnormal patient response, including skin and sensation assessment
 - D. Clinical application of laser
 - 1. Rationale
 - 2. Indications
 - 3. Physical therapy procedures
 - 4. Documentation of modality / consultation with supervising PT
 - 5. Patient / family instruction regarding use of laser
 - 6. Precautions / contraindications

Assessment Description(s)

Written examinations are criterion referenced scored.

Homework assessed based upon departmental rubric.

Lab practical examinations are scored based upon departmental rubric.

Materials and Technological Requirements

Physical Rehabilitation for the Physical Therapist Assistant, by Cameron & Monroe, Elsevier Publishing, 2011.

Physical Agents: Theory and Practice for the Physical Therapist Assistant, 3rd edition, by Barbara J. Behrens and Susan L. Michlovitz, F.A. Davis Publisher, 2014.

Pathology for the PTA, by Catherine Goodman and Kendra Fuller, Elsevier / Saunders Publisher, 2012.

Class Attendance Policy

Students are expected to attend all classes in which they are enrolled. If a student is absent from a class session, it is the student's responsibility to make arrangements to complete or make up any work missed. No make-up work for missed classes will be allowed without the approval of the instructor. Students who enroll late must assume all responsibility for work missed. Classes not attended as a result of late enrollment may be counted toward excessive absences. Students not attending the entire class period may be counted absent for that period. An instructor may drop students with a grade of "WE" if students have been absent for an excessive number of days. Warning letters will be sent to the students advising them of the consequences of nonattendance and urging them to contact their instructors immediately. Excessive absences are defined as follows:

Regular Semester

Courses which meet once a week.....	2 absences
Courses that meet twice per week	3 absences
Courses that meet four times per week.....	5 absences

Summer Session

Courses that meet four times per week in a five week session	3 absences
Courses which meet two evenings per week in a 10 week session.....	3 absences

Students enrolled in special programs or individualized instruction should contact their program director/instructor regarding specific attendance requirements for the program/course. Some of the selective-admission, health-science programs have specific criteria regarding attendance. Students are encouraged to refer to program policies in these matters.

Jury Duty/Military/Official School Function

Scheduled absences are those that occur due to college-related activities or as a result of summons to jury duty or military duty. Classes missed as a result of scheduled absences will not be counted as excessive absences if the instructor is notified and provided documentation prior to the absence(s). Make-up work for scheduled absences will be at the discretion of the instructor.

In all instances, documentation must be provided to the instructor within 24 hours of receipt. Documentation should come from an appropriate party on letterhead or other official stationery with a signature and contact information.

Documentation should list the corresponding dates of the leave.

Medical leave

For medical-related absences, documentation must include written notice from the treating medical professional documenting time needed off related to medical reasons and time student may resume classes. The medical reason does not need to be listed on the documentation; the documentation must include only that there is a medical reason, the amount of time the student needs to be absent, and the time the student should be able to return to classes. Students who elect to work at home while on excused leave must meet with their instructors to make arrangements to do so. Working on coursework while on medical leave is not a requirement but can be requested by students. If students request that they be allowed to work at home while on an excused leave, the instructor will make every reasonable effort to ensure that the student is able to do so.

For students who have a medical condition necessitating time off or accommodation:

- 1) They may work at home on assignments if they choose to if on medical leave approved by a medical professional

- 2) Receive appropriate accommodations related to coursework (i.e., excused from labs with potentially harmful chemicals, have a larger desk, etc.)
- 3) Resume their studies where they left off once they return to classes
- 4) Be allowed to make up any missed work related to medical leave
- 5) Receive incompletes on their transcripts until coursework is completed, according to the incomplete grade contract.
- 6) Be given a reasonable time frame in which to complete missed coursework

Academic Honesty Policy

Students enrolled at South Arkansas Community College are expected at all times to uphold standards of integrity. Students are expected to perform honestly and to work in every way possible to eliminate academic dishonesty. Academic dishonesty includes cheating and plagiarism, which are defined as follows:

- Cheating is an attempt to deceive the instructor in his/her effort to evaluate fairly an academic exercise. Cheating includes copying another student's homework, class work, or required project (in whole or in part) and/or presenting another's work as the student's own. Cheating also includes giving, receiving, offering, and/or soliciting information on a quiz, test, or examination.
- Plagiarism is the copying of any published work such as books, magazines, audiovisual programs, electronic media, and films or copying the theme or manuscript of another student. It is plagiarism when one uses direct quotations without proper credit or when one uses the ideas of another without giving proper credit. When three or more consecutive words are borrowed, the borrowing should be recognized by the use of quotation marks and proper parenthetical and bibliographic notations.

If, upon investigation, the instructor determines that the student is guilty of cheating or plagiarism, the following penalties will apply:

- The student will receive a penalty of no less than a zero on the work in question.
- The instructor will submit a Student Academic Misconduct Form, written report of the incident, to the appropriate dean.
- The dean will submit form to Vice President for Learning to determine disciplinary action.
- The Vice President for Learning will determine whether further disciplinary action will be taken.
- All decisions may be appealed for review through the college's academic appeals procedure.

Equal Opportunity-Affirmative Action Statement

South Arkansas Community College does not discriminate on the basis of age, race, color, creed, gender, religion, marital status, veteran's status, national origin, disability, or sexual orientation in making decisions regarding employment, student admission, or other functions, operations, or activities.

Library Services

Library Homepage: <http://southark.libguides.com/homepage> Library Contact: LibraryStaff@southark.edu or 870.864.7115

Procedures to Accommodate Students with Disabilities:

If you need reasonable accommodations because of a disability, please report this to the Vice President of Student Services with proper documentation. . VPSS Contact: 870.875.7262

The Early Alert System

In an effort to ensure student retention and success, South Arkansas Community College employs an Early Alert System to identify and support at-risk students as soon as possible in a given semester. The intent of Early Alert is to provide this assistance while there is still time to address behaviors or issues that have the potential of preventing students from completing their courses and degree plans. Students referred through the Early Alert System will be required to work on a corrective action plan with their student advising coach and to include attendance accountability and mandatory academic tutoring either in the academic division or in the Testing and Learning Center (TLC).

Once the Student Advising Coach has met with the referred student, and again when the student has met the prescribed corrective actions, the coach will update the Early Alert System so that the instructor is kept informed of the progress in resolving issues.

Behavioral Review Team

At South Arkansas Community College (SouthArk), we are committed to proactive leadership in student wellbeing and campus safety. By focusing on prevention and early intervention with campus situations that involve any person experiencing distress or engaging in harmful or disruptive behaviors, the BRT will serve as the coordinating hub of existing resources to develop intervention and support strategies and offer case management. Students, faculty, staff, and campus guests are encouraged to report any person on campus who is a concern. BRT Contact: 870.875.7262
BRT@southark.edu

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