

Course Syllabus

LEVELLAND CAMPUS

COURSE: PTHA 1431 Biophysical Agents (BPA) (3:3:3)
SEMESTER: Fall
CLASS DAYS: Monday & Wednesday
CLASS TIMES: 9:00AM-4:00PM

INSTRUCTOR INFORMATION

Name	Phone Number	Email	Office	Office Hours
Kevin Beaugh	(806) 716-2518	kbeaugh@southplainscollege.edu	AH 103F	As Posted

“South Plains College improves each student’s life.”

GENERAL COURSE INFORMATION

**It is the responsibility of each student to be familiar with the content and requirements listed in the course syllabus. **

COURSE DESCRIPTION

This course includes a detailed study of the knowledge and skills necessary to reach competence in using biophysical agents in the provision of physical therapy treatment.

PREREQUISITE COURSES: PTHA 1309, PTHA 1405, PTHA 1313, PTHA 1321, PTHA 2201, PTHA 2409, PTHA 2260

PARTICIPATION

This course is a student-centered class which consists largely of learning and practicing skills in lab and providing peer review of each others’ practice. I believe you will gain a solid understanding of the learning objectives by participating in these activities. Your unique perspective and ideas are valuable and might bring to the conversation something nobody else has considered (including me). Many opportunities have been provided for individual students to participate. Everyone is expected to challenge themselves to participate fully and constructively. If this represents a concern for you for any reason, please reach out and we’ll find a way to get you involved. I will do my best to create a welcoming space for your good ideas and questions to be heard.

STUDENT LEARNING OUTCOMES

Upon successful completion of the course, following a given plan of care and under the supervision of the PT, the student will have the cognitive, psychomotor, and affective competencies to:	
1.	Synthesize the indications, contraindications, and physiological response related to - Thermal agents (cold packs, ice massage, hot packs, paraffin bath) - Soft tissue mobilization techniques (effleurage, petrissage, tapotement, trigger point release, transverse friction massage, myofascial release techniques, retrograde massage, scar tissue mobilization) - Traction (manual (cervical), mechanical (cervical and lumbar)) - Ultrasound - Electrotherapy (neuromuscular electrical stimulation, transcutaneous electrical nerve stimulation, interferential current, biofeedback)
2.	Demonstrate safe and competent application that meets requirements outlined in the skill check-off and clinical readiness assessment of the above-listed biophysical agents. - Selects, justifies, and competently performs appropriate data collection techniques to determine the safety of the biophysical agent prior to application - Safely and competently performs application of the biophysical agent - Selects, justifies, and competently performs appropriate data collection techniques to determine the patient’s response(s) to the intervention after application
3.	Design and justify a treatment session based on case scenarios that appropriately includes : - the biophysical agents listed above - airway clearance techniques - compression (intermittent pneumatic compression and cold compression) - iontophoresis - hydrotherapy (including contrast bath) - ultrasound-electrical stimulation combination therapy - electromagnetic radiation agents (infrared, ultraviolet, diathermy, LASER)
4.	Based on case scenarios indicating the need for various biophysical agents, integrate the following basic concepts presented in the APTA <i>Guide to Physical Therapist Practice</i> : Identify and perform applicable physical therapy tests and measures

Upon successful completion of the course, following a given plan of care and under the supervision of the PT, the student will have the cognitive, psychomotor, and affective competencies to:

- b. Understand applicable clinical practice guidelines
 - c. Understand applicable intervention goals
 - d. Infer and perform applicable education and procedural intervention
5. Use a SOAP note format to document interventions provided and data gathered related to those interventions.
6. Demonstrate the following defined professional behaviors at an intermediate level by the end of the course.
- a. Critical Thinking - The ability to question logically; identify, generate and evaluate elements of logical argument; recognize and differentiate facts, appropriate or faulty inferences, and assumptions; and distinguish relevant from irrelevant information. The ability to appropriately utilize, analyze, and critically evaluate scientific evidence to develop a logical argument, and to identify and determine the impact of bias on the decision-making process.
 - b. Communication - The ability to communicate effectively (i.e. verbal, non-verbal, reading, writing, and listening) for varied audiences and purposes.
 - c. Problem Solving - The ability to recognize and define problems, analyze data, develop and implement solutions, and evaluate outcomes.
 - d. Responsibility - The ability to be accountable for the outcomes of personal and professional actions and to follow through on commitments that encompass the profession within the scope of work, community and social responsibilities.
 - e. Professionalism - The ability to exhibit appropriate professional conduct and to represent the profession effectively while promoting the growth/development of the Physical Therapy profession.
 - f. Use of Constructive Feedback - The ability to seek out and identify quality sources of feedback, reflect on and integrate the feedback, and provide meaningful feedback to others.
 - g. Effective Use of Time and Resources - The ability to manage time and resources effectively to obtain the maximum possible benefit.
 - h. Stress Management - The ability to identify sources of stress and to develop and implement effective coping behaviors; this applies for interactions for: self, patient/clients and their families, members of the health care team and in work/life scenarios.
 - i. Commitment to Learning - The ability to self-direct learning to include the identification of needs and sources of learning; and to continually seek and apply new knowledge, behaviors, and skills.

OUTCOME ASSESSMENT METHODS

Computer-based exams, written assignments, quizzes, clinical readiness assessments, and other assignments and projects as assigned.

FORMATIVE ASSESSMENTS

- ❖ Lab Participation
- ❖ Information Literacy Checks
- ❖ Skills Check-offs
- ❖ Clinical Readiness Assessment

SUMMATIVE ASSESSMENTS

- ❖ Written Exams

GRADING FORMULA

Written Exam Totals	Average of Written Exams (Midterm and Final)	75%
Quiz Totals	Average of all Information Literacy Checks & Re-Checks	10%
Lab Participation	Lab Worksheet totals	10%
Professionalism	Professionalism Rubric score	5%
	Total	100%
FALL CLINICAL READINESS ASSESSMENT : PASS/FAIL, and must PASS to pass the course		

Percentage	Grade
90-100%	A
80-89.99%	B
75-79.99%	C
74.99% and below	F

GRADING POLICY

Any student whose final course grade is below the passing requirement (75% or greater) will not be allowed to continue in the PTA Program. Any student whose course grade is below a 77% at any time during the semester will be responsible for initiating a meeting with the course instructor to discuss adding action plan(s) to the student's Success Plan to improve the student's performance. It will outline the student's academic issues, list interventions to address these issues, and will assess the student's participation/completion of these interventions. The student will be responsible for completing their Success Plan action plans.

ASSIGNMENT POLICY

All assignments must be completed by the assigned due date and time (as listed in Central Standard Time on the class schedule). Students should contact faculty prior to the due date and time if they anticipate material will be late. Late and/or incomplete work may be accepted, but with grade deduction per day up to 3 days, after which a grade of zero will be recorded. Assignments, quizzes, exams, and skills checks missed due to an absence will be made up promptly as arranged by student. Please note contacting faculty will not guarantee the receipt of an extension for the assignment. Please allow enough time for preparation and submission of each assignment prior to the scheduled due date to avoid issues with technology. Failure to complete any assignment by due date will result in professionalism point deductions on final grade. Assignments must be uploaded to BlackBoard Ultra as a Word Doc or PDF and labeled with assignment title and student name.

ASSESSMENTS PLANNED (BUT NOT LIMITED TO):

1. **Written Exams**, including a Midterm and a Final Written Exam
2. **Fall Clinical Readiness Assessment** : PASS/FAIL, with no impact on course grade (but must pass to pass the course)
3. **Skills Check-Offs** : PASS/FAIL, with no impact on course grade (but must pass to participate in Fall CRA)
4. **Quizzes**
5. **Lab Worksheets**

EXAM POLICY

Exam Completion : The written exams will be administered via computer to prepare students for the NPTAE. Additionally, many exam questions will be constructed in the same manner as NPTA, allowing students to prepare for the licensure testing format.

- ❖ All summative assessments will be proctored by SPC Faculty/Staff and by Honorlock. The following will be monitored : your computer screen and web traffic (including URL(s) visited) (to verify that only one tab of one web browser is being open/running/in use, for the sole purpose of displaying your exam). The following will be disabled and not allowed : copying and pasting, printing, ability to open any applications/programs.
- ❖ Personal belongings are not allowed in the testing area during testing.
- ❖ Pencils and scratch paper will be issued to students prior to exam. These items must be returned prior to exiting testing area.
- ❖ Cell phones, smart watches, and smart glasses are not allowed in the testing area during testing.
- ❖ Students must adhere to classroom rules.
- ❖ Hats or hoodies may not be worn.
- ❖ Talking will not be permitted; questions will be answered by an instructor.

Any action interpreted as cheating by proctoring instructor may result in immediate removal from testing area, a zero recorded for the test grade, and/or possible removal from SPC PTA Program.

SPC CAMPUS STATEMENTS

For information regarding official South Plains College statements about intellectual exchange, disabilities, non-discrimination, Title V Pregnancy Accommodations, CARE Team, and Campus Concealed Carry, please visit: <https://www.southplainscollege.edu/syllabusstatements/>

STUDENT CONDUCT

Academic Integrity

It is the aim of the faculty of South Plains College to foster a spirit of complete honesty and a high standard of integrity. The attempt of any student to present as his or her own any work which he or she has not honestly performed is regarded by the faculty and administration as a most serious offense and renders the offender liable to serious consequences, possibly suspension.

- ❖ **Cheating** - Dishonesty of any kind on examinations or on written assignments, illegal possession of examinations, the use of unauthorized notes during an examination, obtaining information during an examination from the textbook or from the examination paper of another student, assisting others to cheat, alteration of grade records, illegal entry or unauthorized presence in the office are examples of cheating. Complete honesty is required of the student in the presentation of any and all phases of coursework. This applies to everything : quizzes of whatever length, examinations, daily reports, term papers, etc..
- ❖ **Plagiarism** - Offering the work of another as one's own, without proper acknowledgment, is plagiarism; therefore, any student who fails to give credit for quotations or essentially identical expression of material taken from the internet, artificial intelligence, books, encyclopedias, magazines and other reference works, or from themes, reports or other writings of a fellow student, is guilty of plagiarism.
- ❖ Complete honesty is required throughout all aspects of coursework, including quizzes, examinations, and any assignment/work used to assess knowledge and skill. Any assessment receiving a score of 0 or F due to cheating may result in the student being dropped from the course.

Class/Lab Attendance Policy

Students are expected to attend all classes in order to be successful in a course. The student may be administratively withdrawn from the course when absences become excessive as defined in the course syllabus.

- ❖ When an unavoidable reason for class absence arises, such as illness, an official trip authorized by the college or an official activity, the instructor may permit the student to make up work missed. It is the student's responsibility to complete work missed within a reasonable period of time as determined by the instructor. Students are officially enrolled in all courses for which they pay tuition and fees at the time of registration. Should a student, for any reason, delay in reporting to a class after official enrollment, absences will be attributed to the student from the first-class meeting.
- ❖ Students who enroll in a course but have "Never Attended" by the official census date, as reported by the faculty member, will be administratively dropped by the Office of Admissions and Records. A student who does not meet the attendance requirements of a class as stated in the course syllabus and does not officially withdraw from that course by the official census date of the semester, may be administratively withdrawn from that course and receive a grade of "X" or "F" as determined by the instructor. Instructors are responsible for clearly stating their administrative drop policy in the course syllabus, and it is the student's responsibility to be aware of that policy.
- ❖ It is the student's responsibility to verify administrative drops for excessive absences through Texan Connect using his or her student online account. If it is determined that a student is awarded financial aid for a class or classes in which the student never attended or participated, the financial aid award will be adjusted in accordance with the classes in which the student did attend/participate and the student will owe any balance resulting from the adjustment.
http://catalog.southplainscollege.edu/content.php?catoid=47&navoid=1229#Class_Attendance
- ❖ Absence-
 - ❖ If student misses more than 30 minutes of scheduled class time the student will be counted absent.
 - Excessive Absences : Three absences are considered excessive (with counseling after 2nd absence)
 - ❖ Tardy-
 - any time after class starts or returns from break. Notification prior to official class time will be considered on an individual basis.
 - 2 tardies = 1 absence
 - ❖ Any absence or tardy should be reported to the instructor in advance whenever possible. This allows instructors to adjust scheduled class activities, provide necessary support, and address any missed coursework.

Success Plan Expectation

Students are expected to schedule an appointment with their Faculty Mentor at least once a month to discuss progress on their Success Plan and develop strategies for the successful completion of the PTA Program and preparation for the NPTE.

CLINICAL SKILLS

- ❖ **You may not apply clinical skills you are learning to the general public because you are a student PTA and are learning physical therapy techniques.**
- ❖ **You will be practicing these skills on each other when you are in lab under the instructor's supervision.**
- ❖ **If you are presently working in a clinic as a tech, you cannot practice these skills on patients.**
- ❖ **Once you have passed the class, you still cannot practice the acquired skills in a clinic except during official clinical experiences.**
- ❖ **You will only be permitted to apply these skills to the general public under a clinical instructor's supervision once you begin your clinical experiences.**

Additionally, enrollment in this course does not guarantee a passing grade, successful completion of the PTA curriculum, or licensure.

COMMUNICATION

Electronic communication between the instructor and students in this course will utilize the South Plains College "My SPC" and email systems. Text messaging may also be used for communication. The instructor will not initiate communication using private email accounts. Students are encouraged to check their SPC email on a regular basis, ideally daily, and respond to emails and text messages promptly, within 24 hours. Students will have access to assignments, web links, handouts, and other vital course material delivered via BlackBoard and other electronic means.

- ❖ In the event that any student encounters difficulties accessing the BlackBoard or their email, they should promptly contact the instructor for guidance. The instructor is committed to working with students to ensure they have access to the necessary class content located on the course website and other electronic platforms.
- ❖ This policy aims to facilitate effective and efficient communication between the instructor and students, promoting a seamless learning experience.
- ❖ If experiencing technical issues, the student can contact the Help Desk by calling 806-716-2600

EMAIL

Students are required to use their official South Plains College (SPC) email addresses for all college-related communications. Official SPC email addresses are provided to each student upon enrollment and are the primary means of communication between students, faculty, and the college.

❖ Email Etiquette:

- Students are expected to maintain a professional and respectful tone in all email communications with faculty, staff, and fellow students. Offensive, disrespectful, or inappropriate language in emails is strictly prohibited.

❖ Email Security:

- Students should take steps to protect their email accounts. This includes using strong, unique passwords and not sharing email login credentials. If students suspect their email accounts have been compromised, they should report it immediately to the college's IT department.

❖ Check Email Regularly:

- Students are encouraged to check their official SPC email accounts regularly. Important announcements, updates, and notices from instructors, administrative departments, and the college as a whole are communicated through these accounts.

❖ SPC Alerts:

- Students are automatically enrolled in SPC Alerts, which is an emergency notification system. Students are encouraged to ensure their contact information is up to date in SPC Alerts to receive important safety and emergency notifications.

❖ Email Support:

- If students encounter technical issues with their SPC email accounts or need assistance with email-related concerns, they should contact the college's IT support services for assistance.

PATIENT CONFIDENTIALITY:

- ❖ Students must uphold the highest standards of patient confidentiality. Do not discuss specific patients, cases, or share any patient-related information on social media platforms, even if patient names or identifiers are not disclosed. Be cautious about sharing any content that might indirectly reveal patient information, such as photos or stories taken in clinical settings.

SOCIAL MEDIA

The PTA program has a Facebook page at <https://www.facebook.com/South-Plains-College-PTA-270314052992426/?ref=bookmarks>. In addition to the South Plains College website; this Facebook page will be used to keep students up-to-date on program activities, weather delays, South Plains College announcements and will help with program recruitment. "Liking" the South Plains College PTA Facebook page is not mandatory, nor are personal Facebook accounts, in order to access this page.

- ❖ Clinical site and patient information should not be shared on any social media platform. Sharing this information can lead to dismissal from the PTA Program.

CELL PHONE/SMART WATCH/SMART GLASSES

- ❖ Cell phones must be **silenced** during scheduled lab periods unless prior approval has been given by the instructor. Outside of timekeeping, cell phone, smart watch, and smart glasses are to be used **outside** of the classroom. This includes text messaging, calling, social media use, outside Blackboard internet browsing, etc.
- ❖ Students will be dismissed from lab if the student is distracted by cell phone, smart watch, and/or smart glasses from learning/monitoring duties. If dismissed from lab, the student will receive an **absence** for the day.
- ❖ **EMERGENCY MESSAGES:** In the event of an emergency during normal class schedule, the student should notify their family to call the front desk at (806) 716-2391 or (806) 716-2193. Lab will not be interrupted unless it is an emergency, so the family members must identify themselves and state that it is an emergency to get immediate action.

RESOURCES

Course Supplies:

- ❖ PTA Kit
- ❖ CPR Certification - **must be from AHA and valid through the end of the 2nd Spring semester.**
- ❖ Minimum of 1 Program Polo, slacks and close-toed shoes
- ❖ Lab clothes- Shorts with at least a 7-in. inseam, tee shirt
- ❖ Technology and access to internet

COURSE SCHEDULE

WEEK	DATE	TOPICS	FRIDAY ASSESSMENTS
WEEK 1	Monday Aug. 24 th	Introduction to PTHA 1431 Pain and Inflammation Physiology Pain Lectures (9A - Clarice Long, PT; 10A- John Cole, PTA; 12noon - Spencer McCombs, PT) Inflammation Review	
	Wednesday Aug. 26 th	Assessment Lab : Ortho-Specific	
WEEK 2	Monday Aug. 31 st	Soft Tissue Management (Manual Therapy) Day 1 Intro to Techniques (John Cole, PTA)	STM ICOs (John Cole, PTA)
	Wednesday Sept. 2 nd	Soft Tissue Management (Manual Therapy) Day 2 Practice Techniques (John Cole, PTA)	
WEEK 3	Monday Sept. 7 th	LABOR DAY HOLIDAY	TPTA ANNUAL CONFERENCE
	Wednesday Sept. 9 th	Soft Tissue Management (Manual Therapy) Day 3 Clinical Application of Techniques (John Cole, PTA)	
WEEK 4	Monday Sept. 14 th	Thermal Agents (Superficial Heat & Cold Modalities)	TTUHSC IPE "DO NO HARM"
	Wednesday Sept. 16 th	Thermal Agents & Compression (GameReady, IPC, Contrast Bath)	
WEEK 5	Monday Sept. 21 st	Therapeutic Ultrasound & Diathermy	Thermal Agents ICOs
	Wednesday Sept. 23 rd	Thermal Agents Rodeo	
WEEK 6	Monday Sept. 28 th	Soft Tissue Management (Traction)	Traction ICOs
	Wednesday Sept. 30 th	Electrical Stimulation for Pain (TENS, IFC)	
WEEK 7	Monday Oct. 5 th	Electrical Stimulation for Muscles (NMES, Biofeedback)	ES ICOs
	Wednesday Oct. 7 th	E-Stim Rodeo	
WEEK 8	Monday Oct. 12 th	Modalities for Healing : Pulsed US, Pulsed Diathermy, LASER, E-Stim	FALL BREAK
	Wednesday Oct. 14 th	Modalities for Ortho Exam Modalities for Ortho Rodeo	

WEEK	DATE	TOPICS	FRIDAY ASSESSMENTS
WEEK 9	Monday Oct. 19 th	Midterm Debrief Assessment Lab : Neuro-Specific	
	Wednesday Oct. 21 st	Motor Control Physiology Neuroplasticity Review	
WEEK 10	Monday Oct. 26 th	Neuro-Applied STM : Facilitation and Inhibition	
	Wednesday Oct. 28 th	Neuro-Applied Thermal Agents	
WEEK 11	Monday Nov. 2 nd	Neuro-Applied Compression	TTUHSC IPE FALL SYMPOSIUM
	Wednesday Nov. 4 th	Modalities for Normalizing Sensation	
WEEK 12	Monday Nov. 9 th	E-Stim for Motor Control (FES, Biofeedback)	Modalities for Neuro- ICOs
	Wednesday Nov. 11 th	Modalities for Neuro- Rodeo	
WEEK 13	Monday Nov. 16 th	Modalities for Neuro Exam	Performance Improvement (Fall CRA) DUE Sunday, November 29 th by 11:59P
	Wednesday Nov. 18 th	Final Refresh Day 1	
WEEK 14	Monday Nov. 23 rd	Final Refresh Day 2	THANKSGIVING HOLIDAY
	Wednesday Nov. 25 th	THANKSGIVING HOLIDAY	
WEEK 15	Monday Nov. 30 th	Final Refresh Day 3	
	Wednesday Dec. 2 nd	FALL CRA TUESDAY & WEDNESDAY, DECEMBER 1 st & 2 nd	
W16	Monday Dec. 7 th	Final Exam 9A-11A	Clinical Acknowledgements DUE Monday, December 7 th by 12noon