Physical Agents PTHA 1531 (F2F Format)

Course Syllabus: Spring 2025

"Northeast Texas Community College exists to provide responsible, exemplary learning opportunities."

Dr. Nancy R. Wilson, PT, DPT

Office: UHS 105
Phone: 903-434-8323
Email: nwilson@ntcc.edu

Lecture: M-W 8:00-9:20
Lab: M-W 9:30-12:20
Credit hours: 5

Office Hours	Monday	Tuesday	Wednesday	Thursday	Friday	Online
	1:00-3:00	8:00-11:00	1:00-3:00	8:00-11:00	TBA	

The information contained in this syllabus is subject to change without notice. Students are expected to be aware of any additional course policies presented by the instructor during the course.

Catalog Course Description: Study of the biophysical principles, physiological effects, efficacy, and application of therapeutic physical agents.
Pre-requisite(s): Successful completion of PTHA courses up to his point in the curriculum.

GENERAL COURSE LEARNING OUTCOMES

The student will be able to describe the biophysical principles and efficacy of physical agents; relate knowledge of indications, contraindications and precautions to interventions; apply physical agents; demonstrate communication skills.

GENERAL OBJECTIVES

1. Attend all classes and arrive on time.
2. Discuss the potential implications of non-attendance and tardiness in the classroom.
3. Behave in a professional manner appropriate to clinical setting during lab practicals.
4. Demonstrate professional behavior in interactions with instructors/students during classroom and lab activities.
5. Project professional image (dress/hygiene) on field trips and field experiences.
6. Demonstrate acceptance and application of faculty feedback on written, oral and practical exams.
7. Describe errors and discuss correct responses upon completion of practical exam or skill check.
8. Discuss ways to demonstrate empathy in dealing with a patient in pain or under stress.
9. Integrate the problem-solving process for determining techniques for the application of a modality.
10. Identify basic concepts in credible professional literature including, but not limited to, validity, reliability and level of statistical significance of assigned modality.

SPECIFIC OBJECTIVES

On a written examination with 75% proficiency, the student will be able to identify, describe, and assess the physiological effects, indications, contraindications, and precautions of, and principles associated with:

1. Superficial Heat Agents/ Cryotherapy
2. Therapeutic Massage
3. Hydrotherapy/ Aquatic therapy
4. Ultrasound/ Phonophoresis/SWD
5. Various electrical stimulation agents
6. Laser (LLLT)
7. Cervical and pelvic mechanical traction
8. Intermittent compression
9. Various electromagnetic radiation agents
10. Electrotherapy
11. Volumetric measurement and anthropometrical methods
12. Blood Flow Restriction

On a lab partner and/ or on a lab practical examination with 75% proficiency (accurate, safe, and timely), the student will:

1. Perform therapeutic massage to extremities and trunk; friction massage for scar mobilization
2. Apply various thermal modalities Moist heat, Paraffin, Fluidotherapy, Hydrotherapy and recognize integumentary changes
3. Apply various cryotherapy modalities including ice massage, ice packs/ cold packs, cryocuff and recognize integumentary changes
4. Apply Contrast bath and appropriate anthropometrics
5. Perform the application of Ultrasound
6. Perform the application of Phonophoresis and Iontophoresis
7. Apply Shortwave diathermy to various areas of the body
8. Apply various electrical stimulation modalities including portable NMS, TENS, Russian E-Stim, High volt pulsed current, Interferential/Pre-modulated current, and Biofeedback
9. Apply Cervical traction and Pelvic traction in supine and prone positions
10. Apply Intermittent compression to upper and lower extremities
11. Communicate an understanding of the plan of care developed by the physical therapist to achieve goals and intended outcomes.
12. During student patient interview, administer appropriate questionnaires, graphs, or visual analog scales for pain.
13. During interview, gain a pain rating from student patient before and after application of modalities
14. Explain the main theories of pain control and select appropriate physical agent to relieve various types of pain
15. Given a Plan of Care, implement treatment using appropriate modalities
16. Measure sensory responses to light touch and heat/cold prior to the application of a modality
17. Construct accurate descriptions of the sensations associated with the application of a modality
18. Perform girth and volumetric assessments to determine limb volume and edema when using intermittent compression.
19. Demonstrate adequate monitoring of the patient's response before and after application of intermittent compression
20. Demonstrate safety before, during and after all labs/practical tests.
21. Perform proper body mechanics when applying or setting up modalities.
22. Explain/communicate to the student patient/lab partner the purpose of modality and application.

23. Describe basic principles of electricity to include sound, light, electricity, thermodynamics, electromagnetics, and electronic circuitry
24. Explain to the student patient/lab partner the precautions and physiological effects of modality application
25. Identify and demonstrate safety aspects/measures to be used in the application of all agents.
26. Perform adequate monitoring and differentiation of patient's physiological and integumentary responses/changes to treatment before, during and after application of all agents.
27. Screen for absent or altered sensation prior to application of specific agent.
28. Demonstrate efficient time management as required during lab practical testing.
29. Perform various data collection methods for recognizing changes in the direction and magnitude of patient's state of arousal, mentation, and cognition.
30. Recognize cognitive changes in patient status and inform the supervising physical therapist.
31. Recognize significant physiologic changes in patient status and inform the supervising physical therapist.
32. Make appropriate adjustments to interventions within the POC upon recognizing changes in patient status and consults with PT.
33. Interview student patient in lab practical for pertinent and current information regarding health status (fatigue, pain, dysfunction, fever, etc.) prior to, during, and after implementing treatment
34. Educate the student patient/lab partner on the application of various home modalities (TENS, Home traction, heating pad, ice pack, etc.) and determine patient comprehension and safety with application.
35. Write a SOAP note for each mock treatment performed and after each lab practical exam.
36. Document accurate billing charges for modalities per case scenario.

METHODS OF PRESENTATION

1. Lecture
2. Assigned Reading/Assignments
3. Demonstrations
4. Multi Media
5. Group activities
6. Laboratory Practice

MINIMUM TECHNOLOGY REQUIREMENTS

- Daily high speed internet access
- Microsoft Word
- Power point
- Portable storage device such as a Jump drive/Thumb drive

REQUIRED COMPUTER LITERACY SKILLS

- Word Processing skills
- Email skills

COMMUNICATION

- EMAIL: Please check your NTCC email EVERYDAY. Email is the official form of communication used here at NTCC. All emailed questions to the instructor will be responded to within 24 hours, but usually within a few hours when possible. I will normally respond to you at least acknowledging that I received your inquiry and will answer as soon as possible.

• TEXT MESSAGE NOTIFICATIONS: You are required to sign up for the text message notifications via Remind. This will enable you to receive important class announcements and reminders from me via text message so that you will not miss out on any assignment changes or important updates. Please continue to check your NTCC email daily. If you do not own a cell phone, you can receive these same reminders through your email... the instructions are also in the PDF instruction sheet you received at orientation.

• ANNOUNCEMENTS: These can be found in Blackboard under the course link on your Bb homepage. Please make sure you are reading any announcements thoroughly when they are posted there.

OUTLINE OF CONTENT

1. Physiology of Physical Agents
2. Inflammation and Tissue Repair and Pain
3. Introduction to Thermal Agents
4. Intermittent Compression and Anthropometrics
5. Hydrotherapy/Aquatic Therapy
6. Massage
7. Mechanical Cervical and Pelvic Traction
8. Ultrasound/Phonophoresis/Diathermy
9. Blood Flow Restriction
10. Electromagnetic Agents – Laser Light therapy, UV radiation
11. Introduction to Electrical Currents
12. Electrical Currents and Muscle Contraction
13. Electrical Current for Pain Control
14. Electrical Currents for Tissue Healing

REQUIRED AND RECOMMENDED READING

1. Physical Agents in Rehabilitation, Cameron, 5th Ed., Elsevier/Saunders 2018.

SCANS:

Scans addressed as follows: Information (acquires and evaluated information, organizes and maintains information, interprets and communicates information); Interpersonal (participates as a team member, teaches others, serves clients/customers, exercises leadership, negotiates to arrive at a decision); Technology (selects technology, applies technology, maintains & troubleshoots technology); Basic Skills (reading, writing, arithmetic, listening, speaking); Thinking Skills (decision making, problem solving, seeing things in the mind's eye, knowing how to learn, reasoning); Personal Qualities (responsibility, self-esteem, sociability, self-management, integrity/honesty).

EVALUATION

Lecture Exams (4)… 50%
Mid-Term Lab Practical 10%
Comprehensive Lecture Final Exam 25%
Lab Practical Final..... 15%

GRADING

A – 92-100
B – 83-91
C – 75-82
D – 66-74
F – 65 and below

Specific objectives are established for each of the PTHA courses. These may be found in the course syllabus provided to the student on Blackboard under the specific course number. The student should refer to the specific objectives frequently throughout the course of study.

The PTA program designates 75% as the minimum passing level of achievement. A student must have a 75% course exam average to be eligible to sit for the final exam. In addition, the student must have a 75% lab component average to be eligible to sit for the final exam. Any student receiving a final course average below 75% will not pass the course and subsequently dismissed from the program. If a student does not meet either the exam average or the lab component average of 75%, he/she will not be eligible to sit for the final exam and will fail the course. In addition, the student must pass the course final exam with a score of 70 or greater to progress in the program.

ATTENDANCE AND ABSENTEEISM

TARDIES AND ABSENCES ARE STRONGLY DISCOURAGED

The PTA faculty believes that the habits and work patterns established in school will be carried over to the work setting. Therefore, every effort should be made to establish patterns of good attendance and promptness. This applies not only to the technical courses but also the general education and support courses. Student attendance is addressed under student responsibilities in the school catalog. In addition, student attendance and participation is also addressed utilizing the Professionalism Development Rubric. This document provides the student a means to identify and track any area(s) of deficiency regarding professional behaviors; and, to improve in the area(s). For the PTA Program, the following guidelines concerning attendance will be enforced:

1. For every class period missed, one (1) absence is accumulated.
2. A student more than five minutes late or leaving class early with or without instructor permission is considered tardy.
3. Three (3) tardies constitute one (1) absence.
4. After absences (excused or unexcused) in any 4 class periods per semester, the student will be placed on probation. Stipulations of probation will be developed based on the student's history and circumstances surrounding the absences; and conditions for dismissal in the event of a future absence will be included in the probationary contract.
5. Make-up work is required for all absences in order to ensure that the student acquires information and skills presented during his/her absence (see Make-up work section). It is the **student's responsibility** to meet with instructor(s) on the first day back to schedule make-up work and/or lab check-off.
6. Students must notify (voicemail or e-mail) the PTA office in **advance** whenever excessive (>5 minutes) tardiness or absence is unavoidable. **Notification of the student's absence by classmates is not acceptable!**

*Note: An absence will be excused by provision of a note written and signed by a medical professional and by uncontrollable or unavoidable extenuating circumstances as documented below. All other absences/tardies will be considered unexcused.

Further explanation of **excused absences** is as follows:

- "A student's serious illness" shall mean a condition such as pneumonia, surgery, hospital confinement, or valid documented medical reason. A physician's documentation verifying illness must be provided.
- "Death in the immediate family" shall be interpreted to mean mother, father, mother-in-law, father-in-law, spouse, child, brother, sister, grandparents, or significant other. Documentation must be provided.
- "Statutory government responsibilities" refer to such matters as jury duty or subpoena for court appearance. Documentation must be provided.
- Inclement weather – see policy below.

INCLEMENT WEATHER/DESIGNATED HOLIDAYS

Students scheduled for class during inclement weather conditions in which NTCC designates travel hazardous and closes the campus, will not be expected to attend class that day. However, in the event that NTCC remains open for classes, but the local school district in which the student resides closes and the student deems travel as hazardous, the student will not be expected to attend class that day. All class and lab work missed in this situation must be made up. If NTCC is open and the local school district in which the student resides remains open, the student must attend class that day. If the student does not attend class in the event that NTCC remains open, both the course instructor and program director must be notified in advance as with any other absence. The absence will be unexcused.

MAKE-UP WORK

Due to Absence:

Each student is responsible for all material and techniques presented in class and labs. If a class is missed, the student is responsible for obtaining from a classmate, information/ notes, handouts, lab work, covered during that absence. It is the **student's responsibility** to schedule a time with the instructor to complete lab check-offs for content missed. Lab check-offs must be made up within one week of the date absent. The student's grade will be lowered **10 points** on the corresponding lab practical for each lab session and check-off not made up within the allocated timeframe. If the student has not "checked-off", any missed lab material/techniques; they will **NOT** be allowed to take the corresponding lab practical and a grade of "0" will be assigned. If a test, lab practical, or special assignment is missed due to an **excused** absence, it is the student's responsibility to consult the instructor the next time the student is on campus about making up a test or turning in an assignment. The student must make-up the missed test or lab practical within one week from the date missed providing **appropriate notification of absence was made prior** to the original test time. Lack of notification prior to exam time will result in a grade of "0" for the missed exam; ***notifying classmates to relay the student's absence is not acceptable!*** Assignments due on the date of the excused absence must be turned in the next time the student is on campus; otherwise, the student will receive a "0" for the work missed. An **unexcused** absence will result in a "0" on a test, lab practical, or special assignment missed; the student will not have the opportunity to make up the work missed work.

One make-up test and/or lab practical due to excused absence, per class, per semester is allowable without penalty. **It is the student's responsibility to set up a time with the instructor to make up the test or lab practical missed.**

Remediation:

In the event a student scores less than a 75 on a lab practical exam, the student **will be assigned remediation** for the previously failed practical components (based on specified course lab practical rubric). Failure to complete remediation satisfactorily (demonstration of proficiency) will result in failure of the course.

Due to failure of safety criteria on lab practicals:

On lab practical exams several areas on each exam are considered to be patient safety criteria or "critical elements"; if a student **fails a patient safety element/criteria, he/she will be required to re-do the lab practical**. The re-do (2^{nd}) lab practical cannot be taken on the same day as the failed lab practical. It is the **student's responsibility** to schedule a time with the instructor to re-do the practical and must be scheduled and completed during the instructor's office hours or other established time within the next week. The highest grade that a student can receive on the "re-do" is 75. If a student fails the safety criteria on the lab practical "re-do", the student is given a grade of "0" and automatically fails the course. Only one lab re-do per course, per semester, will be permitted for failure of safety criteria.

CLASS PREPAREDNESS

Students are expected to complete all reading assignments, as outlined in the course schedule or assigned by the instructor, prior to class time. It is the responsibility of the student to turn in assignments on time. Assignments are due at the beginning of the class period. Late assignments received by the next class period will result in a maximum grade of 75. If assignment is not turned in by the next class period the student will receive a grade of "0" for that assignment.

Students are expected to participate in and perform a variety of physical therapy procedures on each other in lab and the classroom for educational purposes; after practicing each laboratory skill, the student will be asked to present a return demonstration to the instructor at some point prior to the conclusion of the lab.

Alternate Operations During Campus Closure and/or Alternate Course Delivery Requirements:

In the event of an emergency or announced campus closure due to a natural disaster or pandemic, it may be necessary for Northeast Texas Community College to move to altered operations. During this time, Northeast Texas Community College may opt to continue delivery of instruction through methods that include, but are not limited to, online through the Blackboard Learning Management System, online conferencing, email messaging, and/or an alternate schedule. It is the responsibility of the student to monitor NTCC's website (http://www.ntcc.edu/) for instructions about continuing courses remotely, Blackboard for each class for course-specific communication, and NTCC email for important general information.

Additionally, there may be instances where a course may not be able to be continued in the same delivery format as it originates (face-to-face, fully online, live remote, or hybrid). Should this be the case, every effort will be made to continue instruction in an alternative delivery format. Students will be informed of any changes of this nature through email messaging and/or the Blackboard course site.

Statement Regarding the Use of Artificial Intelligence (AI) Technology:
Absent a clear statement from a course instructor, use of or consultation with generative AI shall be treated analogously to assistance from another person (collusion). Generative AI is a subset of AI that utilizes machine learning models to create new, original content, such as images, text, or music, based on patterns and structures learned from existing data (Cornell, Center for Teaching Innovation). Unauthorized use of generative AI tools to complete an assignment or exam is not permitted. Students should acknowledge the use of generative AI and default to disclosing such assistance when in doubt. Individual course instructors may set their own policies regulating the use of generative AI tools in their courses, including allowing or disallowing some or all uses of such tools. Students who are unsure of policies regarding generative AI tools are encouraged to ask their instructors for clarification. **(Adapted from the Stanford University Office of Community Standards--accessed August 31, 2023)**

SAFETY

College faculty, staff, and students participating in clinical and laboratory experiences that require the handling of blood, blood products, or body fluids are required to observe standard precautions and safety guidelines prescribed by the U.S. Public Health Service.

To ensure safety of the student in lab and in clinical practicum, informed consent to participate will be appropriately documented upon entry to the PTA Program. All measures are taken to protect the health and welfare of students and faculty participating in laboratory and clinical practicum. To ensure safety during student interactions, students receive comprehensive information on indications, contraindications, precautions, physiological effects, potential risks, and the appropriate application of various modalities; and, techniques prior to laboratory practice or clinical practicum. Program faculty or staff members supervise all lab sessions. PTA students have the right to reasonable accommodations to allow full participation in laboratory and clinical practicum. Students also have the right to defer participation in select laboratory activities in the event that the student presents with a documented medical condition that would predispose them to negative effects (i.e. pregnancy, post-surgical, acute illness). Students have the right to terminate treatment applications received during laboratory sessions should they experience negative effects.

In the event of a minor accident, a small first aid box is located in the LAB room UHS 236. An incident/accident report is then completed by the student(s) involved and an investigation will be conducted by the program director or faculty member. The incident/accident report will be kept in the student's file. In the event of a serious accident, NTCC utilizes the 911 system. NTCC has an Emergency Preparedness Flip Manual which is located in the PTA Lab room 236. A copy of this flip manual is also located in the office of the Director of the PTA Program.

NTCC offers no health services and **is not responsible for costs for hospitalizations, special health care such as consultations with specialists, nursing care, surgical operations or dental treatment.** The next of kin on record may be notified in uncertain or emergency situations or serious illness. Students may be transported to a general hospital (by ambulance at their own expense) when such action is deemed necessary by college officials.

Safety of lab equipment

All laboratory equipment used for skill development must be used under the supervision and/or approval of faculty members. This equipment is inspected and calibrated annually. In the event a student finds a piece of equipment in need of repair or identifies damaged equipment, he/she must immediately inform the program faculty for removal. All relevant operating instructions and calibration reports may be found in the Equipment Notebook kept in the director's office.

General Lab Rules:

1. All shoes, pens, and pencils must be removed when utilizing the plinths.
2. Do not use the plinths as a writing surface without a clipboard (the ink does not come off).
3. Food will be eaten at the desks only.
4. Please use trash containers to dispose of all drinks, food and related trash.
5. Food placed in the refrigerator must be labeled with your name and date. Food that is in the refrigerator for **more than one week** should be disposed of by anyone deeming the food "harmful" for consumption.
6. Clean out the microwave and surrounding area after each use.
7. The lab must be put back in its original condition after each lab.
    - All stools must be placed along each plinth or out of high traffic areas.
    - All equipment must be placed back in its original storage area after each lab session - this includes wheelchairs, BP cuffs, ADL equipment, ultrasound gel bottles, exercise equipment, etc.
    - The storage areas/practice areas must be left neat

General Safey Rules

1. Learn and be familiar with the evacuation procedures and the location of fire extinguishers and emergency defibrillators.
2. Immediately report hazardous conditions, broken equipment, and defective tools to instructors, or the PTA program secretary.
3. Do not overload electrical circuits.
4. College property is no place for horseplay, fighting, teasing, and /or practical jokes; therefore, refrain from initiating or participating in any of the previously mentioned behaviors.
5. Do not use chairs, carts, tables, counters, boxes, rolling stools, or other substitutes for ladders or work platforms.
6. Disconnect all electrical cords by grasping the plug and carefully disengaging; NEVER yank the cord. Report any equipment that is damaged or in immediate need of repair to program faculty or program secretary.
7. Wipe up all spills immediately, regardless of who caused the spill. If unable to completely clean up the spill or if the floor remains slick after cleaning, report the area to the secretary so that she may contact Plant Services for clean-up.
8. Use proper body mechanics at all times. Instruction in proper body mechanics will be introduced in the first semester and strongly encouraged to begin implementing these practices throughout.
9. The use of alcoholic beverages, narcotic drugs, or derivatives thereof on college property or at a college and program functions is strictly prohibited; therefore, do not partake!

Laboratory Policies

The PTA laboratory will be the students' "second home" for the next 17 months. A few lecture sessions and the majority of laboratory sessions will be held in the lab. In addition, open practice/lab time will be allowed at the discretion of the program faculty; the lab key can be obtained from program faculty or from the program secretary. Rules regarding unsupervised "open" lab times are as follows:

1. The student must sign-in and sign-out
2. No student is to work alone in the laboratory.
3. No use of electrical equipment, except through simulation, is allowed when a faculty member is not available.
4. No horseplay or rough-housing is allowed in the laboratory.
5. All equipment should be cleaned and returned to its proper place, the area

cleaned after use, lights turned off, and the door locked by the last person to leave.

6. Safety guidelines are to be followed at all times.

Dress for Lab and class

Students should be dressed appropriately for lab **prior to the beginning** of each lab session **unless specified differently**. Students not dressed properly for lab will receive a "0" for any lab work for that lab period. Students **not dressed properly for** lab practicals will **not be permitted to take the lab practical test and will receive a "0" for that test.** If appropriate attire is not available, a student may be asked to wear a patient gown for that lab period and will receive a "0" for that lab period. *Remember, when not dressed properly for lab one deprives himself/herself and a partner of valuable learning opportunities.

Option 1: NTCC PTA Program Polo, khaki pants and appropriate closed-toed shoes
Option 2: NTCC PTA Program Scrubs and appropriate closed-toed shoes
Option 3: NTCC PTA Program approved t-shirt and black athletic shorts and appropriate closed-toed shoes

Instructors will determine appropriate options per class/lab period.

Additional clothing requirements:

WOMEN: Back-fastening halter-type tops are required for some labs. Tops must allow for the back to be fully exposed. T-shirts will be worn over the clothes when practicing on a partner.

MEN: Tanks or bare torso are required for some labs.

HAIR& NAILS:

Nails must be short, clean and void of nail polish. Nails should be shorter than the fingertips when observed from the palm side. Hair should be clean and out of the way with rubber bands or hair clips as necessary. **Personal hygiene is very important since many of the lab techniques require close contact**.

Cleanliness in the PTA lab and classroom

Thank you in advance for your cooperation and participation in keeping our facilities neat and attractive. At the end of each semester, faculty and students will perform a thorough cleaning of the lab and equipment. In order to maintain a clean and orderly work environment for all students using the PTA lab, the following outline of student responsibilities is provided and should be followed by all.

It is essential that all students work together to maintain an optimal learning environment so that time is not wasted during lab classes. While the maintenance department handles the floors and the garbage, they do not clean specific equipment in a specialized labs; this will be the students' responsibility.

Linen

A limited amount of linen is available for use in the laboratory; and, conservative use is strongly encouraged. This linen includes sheets, towels, pillow cases, and patient gowns. NTCC does not have a laundry service or laundry facilities available therefore, it is the responsibility of the students in the program to maintain clean linen. Each student will have the responsibility of taking the linen home and

washing it 1-2 times during each semester. If a student does not have laundry facilities, he/she may pay another student to take his/her place; however, **the student is ultimately responsible for making sure the linen gets cleaned, folded, and restocked during his/her designated time.** All first year students are responsible for doing the laundry created by the PTA program.

POLICY ON CIVILITY AND CELL PHONES IN THE CLASSROOM AND LABORATORY

Students are expected to assist in maintaining a classroom environment that is conducive to learning. Inappropriate or distractive classroom behavior is prohibited in order to assure that everyone has opportunity to gain from time spent in class. Inappropriate or distractive language is also prohibited. Should a disruptive classroom incident occur, the faculty member in charge may remove a student. The student has the right to appeal through appropriate channels.

Use of cell phones is **prohibited** in class/lab. Phones are **NOT** allowed and should be kept out of sight during class time. If the student is observed using the phone (texting, calling) during class he/she will be asked to turn the phone off and surrender it to the instructor. If the student desires to use the phone to access course materials, the student is asked to inform the instructor prior to class for approval. If a student's cell phone rings in class, the student will be required to turn off the phone immediately. If a student is expecting a very important call, he/she is to notify the instructor prior to class regarding the nature of the situation. The student will be asked to keep the phone silent, and upon receiving the call he/she must step out of the room to answer.

POLICY ON DISHONESTY

It is the responsibility of students and faculty to help maintain scholastic integrity at the College by refusing to participate in or tolerate scholastic dishonesty. **Plagiarism** and other **forms of dishonesty** undermine the very purpose of the college and diminish the value of an education. Specific sanctions for academic dishonesty are outlined in the Northeast Texas Community College Student Handbook and in this manual. Personal and professional ethics are inherent in the field of physical therapy therefore; the highest standards of honesty and integrity must be adhered to. This Honor Code, in its simplest form means that you will neither give nor receive any unauthorized assistance from any person, paper, or object on any examination, lab practical, paper, or project. This includes talking about lab practical exams, regular exam questions, looking at copies of old tests from previous students, copying or allowing anyone to copy off of your test or assignment, and discussing any aspect of an exam or practical with a student who has not yet taken the test and/or practical (this includes the State Board exam).

With regards to research papers, in-services, group projects, etc. the use of another person's words or ideas must be cited and credit given to the source(s). Examples of plagiarism include:

- The inclusion of another person's exact words in a paper or assignment without placing quotation marks around the words to indicate an exact quote, *even if the source is cited*;
- Using **several** consecutive sentences written by another person, changing the words somewhat to keep the passage from being an exact quote, *even if the source is cited*;
- Presenting someone else's ideas without citing that person as the original thinker;
- Submitting a paper written in part or in whole by another person;
- Any other act intended to circumvent the process of performing and presenting original academic research in completion of a course assignment.

Violations of this policy will be brought to the attention of the student by the instructor. If there is suspicion of wrongdoing without corroborating evidence, the matter will be discussed with the student and a written warning/contract will be issued if warranted. If there is clear evidence that a violation has taken place, the student will receive a grade of "0" for that test/assignment in question; and the instructor will impose a sanction ranging from a written warning to expulsion from the course with a failing grade.

If the student does not feel that the issue is satisfactorily resolved, the student should contact the PTA Program Director to discuss the matter. If the matter cannot be resolved at that level, the student may contact the Dean of Allied Health, followed by the Vice President for Instruction and Student Development. If the issue in not satisfactorily resolved at the end of this process, the student may initiate a formal grievance procedure outlined in the NTCC Student Handbook and in this manual.

ADA STATEMENT

It is the policy of NTCC to provide reasonable accommodations for qualified individuals who are students with disabilities. This College will adhere to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations as required to afford equal educational opportunity. It is the student's responsibility to request accommodations. An appointment can be made with the Academic Advisor/Coordinator of Special Populations located in Student Services and can be reached at 903-434-8264. For more information and to obtain a copy of the Request for Accommodations, please refer to the NTCC website - Special Populations.

FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT (FERPA):

The Family Educational Rights and Privacy Act (FERPA) is a federal law that protects the privacy of student education records. The law applies to all schools that receive funds under an applicable program of the U.S. Department of Education. FERPA gives parents certain rights with respect to their children's educational records. These rights transfer to the student when he or she attends a school beyond the high school level. Students to whom the rights have transferred are considered "eligible students." In essence, a parent has no legal right to obtain information concerning the child's college records without the written consent of the student. In compliance with FERPA, information classified as "directory information" may be released to the general public without the written consent of the student unless the student makes a request in writing. Directory information is defined as: the student's name, permanent address and/or local address, telephone listing, dates of attendance, most recent previous education institution attended, other information including major, field of study, degrees, awards received, and participation in officially recognized activities/sports.

PHYSICAL AGENTS
PTHA 1531
Tentative Lecture & Lab Schedule 2025

Instructor: Nancy R. Wilson, PT, DPT
Office: UHS 105
Office Hours: Posted
Office Phone: (903) 434-8323 or (903) 434-8124
Class Hours: M-W lecture: 8:00-9:20; lab: 9:30-12:20

Reading Legend:
Cameron's Physical Agents in Rehabilitation, 6th ed.

DATE	LECTURE	READING
January 22	Physiology of Physical Agents Inflammation and Tissue Repair & Pain Introduction to Thermal Agents	Ch. 1, 3 & 4

January 27	Introduction to Thermal Agents: Superficial Cold and Heat	Ch. 7 & 8
January 29	Heat and Cold Modalities Lab	
February 3	Heat and Cold Modalities Lab cont'd	
February 5	Intermittent Compression & Anthropometrics Lab ***Exam I available 2/6*** *(Chs. 1, 3, 4, 7, 8 & 21) –* ***Due 2/10 Monday***	Ch. 21
February 10	Intermittent Compression & Anthropometrics Lab cont'd	
February 12	Hydrotherapy and Massage audio lectures Massage Lab	Ch. 19 & Powerpoint
February 17	Mechanical Traction & CPM Lectures Mechanical traction lab	Ch. 20
February 19	Mechanical Traction Lab cont'd ***Exam II*** *available 2/20 (Chs. 19, 20, & Massage)* ***Due 2/27 Thursday***	
February 24	Ultrasound & Phonophoresis, Diathermy Lecture	Ch. 9 & 10
February 26	Ultrasound & Phonophoresis, Diathermy labs	
March 3 8:30 Darin Powell, PTA	Blood Flow Restriction lecture and lab	
March 5	Electromagnetic Agents – Lasers and Light & Ultraviolet Radiation (Audio Lectures) Laser lab and wrap up previous labs ***Exam III available 3/6 (Chs. 9, 10, 15, 16, 17 & BFR) Due 3/12***	Ch. 15 Ch. 16 Ch. 17
March 10	MIDTERM LAB PRACTICALS	
March 12	MIDTERM LAB PRACTICALS	
March 17 – 21	***SPRING BREAK ☺***	
March 24	Introduction to Electrical Currents	Ch. 11
March 26	Electrical Currents for Muscle Contraction (strengthening)	Ch. 12
March 31	FES/NMES, Russian e-stim labs	
April 2	FES/NMES, Russian e-stim labs	
April 7	Electrical Currents for Pain Control	Ch. 13

April 9	TENS/ Interferential and Pre-modulated currents labs	
April 14	Electrical Currents for Tissue Healing Iontophoresis	Ch. 14
April 16	Iontophoresis, HVPC (High Volt Pulsatile Current) labs	
April 21	Iontophoresis, HVPC (High Volt Pulsatile Current) labs	
April 23	Review & lab wrap-up ***Exam IV available 4/24 (Chs. 11, 12, 13, 14); Due 4/28***	
April 29	**Ther. ex., Data collections & Phys. Agents lab final (all day)**	
May 1	**Ther. ex., Data collections & Phys. Agents lab final (all day)**	
May 8	***Comprehensive Final Exam***	

****The instructor reserves the right to make modifications in content and schedule as necessary to provide the best education possible within prevailing conditions affecting this course.**