PTHA 1413 Functional Anatomy – F2F

Course Syllabus: Fall 2023

"Northeast Texas Community College exists to provide personal, dynamic learning experiences empowering students to succeed."

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Office Hours	Monday	Tuesday	Wednesday	Thursday	Friday	Online
	1:30 – 4:30	9:00 – 11:00	1:30 – 4:30	9:00 – 11:00	By appointment	

This syllabus serves as the documentation for all course policies and requirements, assignments, and instructor/student responsibilities.

Information relative to the delivery of the content contained in this syllabus is subject to change. Should that happen, the student will be notified.

Course Description: 4 credit hours. The relationship of the musculoskeletal and neuromuscular systems to normal and abnormal movement. Two hours lecture and six hours lab each week.

Prerequisite(s): Admission to program

GENERAL COURSE LEARNING OUTCOMES

The student will identify, conceptualize, locate, and categorize the musculoskeletal and neurological structures of the human body; define, analyze normal and abnormal movement. The student will also learn and understand the complexity of human musculoskeletal function by examining the role of the bony segments, joint-related connective tissue structure, muscles and the external forces applied to those structures.

GENERAL OBJECTIVES

Objectives will be evaluated using self and instructor assessment rubrics targeting professional behaviors.

The student:
1. Attends all classes and arrive on time.
2. Listens attentively to instruction in class and lab
3. Projects professional image (dress/hygiene) in class, lab, field trips and field experiences
4. Discusses the potential implications of non-attendance and tardiness in the classroom.
5. Participates voluntarily in class and lab sessions.
6. Demonstrates professional behavior in interactions with instructors/students during classroom and lab activities.
7. Demonstrates acceptance and application of faculty feedback on written, oral and practical exams.
8. Participates in the professional organization through attendance of a national, state, or district

activity.
9. Recognizes the need for participation in events to promote access to or awareness of physical therapy.
10. Acknowledges and describes errors and discuss correct responses upon completion of practical exam and skill check.

SPECIFIC OBJECTIVES

On a written examination or on a lab partner and/or lab practical examination with 75% proficiency, the student will be able to:

Basic Principles of Kinesiology:

1. Describe the common movements of the body.
2. Analyze the planes of motion and axes of rotation for common motions.
3. Differentiate between osteokinematic and arthrokinematic movement.
4. Describe the arthrokinematic principles of movement.
5. Describe in general terms, the point in the range of motion at which muscles acting over that joint is biomechanically most efficient.
6. Describe the three biomechanical lever systems, and explain their advantages and disadvantages
7. Determine the class of lever in a given problem.
8. Compare motion of a convex surface moving on a concave surface versus a concave surface moving on a convex surface

Structure and Function of Joints:

1. Define the primary components found in bone.
2. Describe the five types of bones found in the human skeleton.
3. Describe the three primary classifications of joints and give anatomic example of each.
4. Identify the components of a synovial joint.
5. Describe the seven different classifications of synovial joints in terms of mobility (degrees of freedom) and stability.
6. Describe the three primary materials found in connective tissue
7. Recall the elementary principles of joint design.
8. Recall the five features common to all Diarthodial joints.
9. Recall the definitions of Arthrokinematics and Osteokinematics
10. Identify the axis of motion for any give motion at a specific joint
11. Identify the plane of motion for any given motion at a specific joint
12. Identify the structures that contribute to joint stability
13. Compare a closed kinematic chain with open kinematic chain

Structure and Function of Muscles:

1. Describe how cross-sectional area, line of pull, and shape help determine the functional potential of a muscle.
2. Describe the active length-tension relationship of muscle.
3. Describe the passive length-tension relationship of muscle.

4. Define concentric, eccentric, and isometric activation of muscle.
5. Define and differentiate agonist, antagonist, and synergist.
6. Describe the principles of stretching muscular tissue.
7. Describe the basic principles of strengthening muscular tissue.
8. Recognize normal and abnormal muscle length (contracture).

The Shoulder Complex:

1. Define the terminology unique to the shoulder complex.
2. Identify the bones and primary bony features relevant to the shoulder complex.
3. Describe the location and primary function of the ligaments that support the joints of the shoulder complex.
4. Describe accessory joint structures and the function of each.
5. Cite the normal ranges of motions for shoulder flexion and extension, abduction and adduction, and internal and external rotation.
6. Describe the planes of motion and axes of rotation for the primary motions of the shoulder.
7. Describe the normal mechanism of the GH stability in the dependent arm.
8. Describe the scapulohumeral rhythm, including contributions of each joint.
9. Describe the extent of dependent or independent function of each joint in scapulohumeral rhythm.
10. Describe how restrictions in the range of elevation of the arm may occur.
11. Explain the force-couple that occurs to produce upward rotation of the scapula.
12. Name, locate, and palpate the muscles of the shoulder complex.
13. Name, locate and palpate the major bony prominences of the shoulder complex.
14. Identify the functions of the muscles of the shoulder complex.
15. Name and visualize the locations of the various nerves of each muscle in the shoulder complex.
16. Name and identify the vascular support of the various muscles of the shoulder complex.
17. State the general function of the ligaments found in the shoulder complex.
18. Analyze normal movement of the shoulder joint

The Elbow and Forearm Complex:

1. Describe all the articulating surfaces associated with each of the following joints: humeroulnar, humeroradial, superior and inferior radioulnar
2. Describe the ligaments associated with all the joints of the elbow complex
3. Identify the axes of motion for supination and pronation and flexion and extension
4. Identify the degrees of freedom associated with each of the joints of the elbow complex.
5. Identify the structures limiting the range of motion in flexion and extension
6. Identify the structures that create the carrying angle
7. Identify the structures limiting motion in supination and pronation
8. Name, locate, and palpate the muscles of the elbow complex
9. Name, locate and palpate the major bony prominences of the elbow complex
10. Identify the functions of the muscles of the elbow complex
11. Describe the planes of motion and axes of rotation for the joints of the elbow and forearm complex.
12. Cite and visualize the locations of the various nerves of each muscle in the elbow and forearm complex
13. Name and identify the vascular support of the various muscles of the elbow complex.
14. Explain the primary muscular interactions involved in performing a pushing and pulling

motion.
15. Analyze normal movement of the elbow joint

The Wrist and Hand:

1. Define the terminology unique to the wrist and hand complexes.
2. Describe the articular surfaces of the joints of the wrist and hand.
3. Describe the ligaments of the joints of the wrist and hand, including the functional significance of each.
4. Describe the types of movements and ranges of motion of the radiocarpal joint, the midcarpal joint, and the total wrist complex.
5. Describe the planes of motion and axes of rotation for the joints of the wrist.
6. Describe the role of the wrist musculature in producing wrist motion.
7. Describe and demonstrate the motions and ranges available to joints in the wrist and hand.
8. Describe the make-up of the extensor mechanism, including the muscles and ligaments.
9. Describe and demonstrate the functional position of the wrist and hand.
10. Describe the mechanics of a "tenodesis" grasp action of the hand and wrist.
11. Name, locate, and palpate the muscles of the wrist and hand complex.
12. Name, locate and palpate the major bony prominences of the wrist and hand complex.
13. Identify the functions of the muscles of the wrist and hand complex.
14. Name and visualize the locations of the various nerves of each muscle in the wrist and hand complex.
15. Name and identify the vascular support of the various muscles of the wrist and hand complex.
16. Analyze normal movement of the hand and wrist joint

The Vertebral Column and Ventilation:

1. Define the terminology unique to the vertebral column.
2. Describe the normal curvatures and motions of the vertebral column.
3. Describe the articulations of the vertebral column.
4. Describe the unique features of the cervical, thoracic, lumbar, and sacral vertebrae.
5. Explain how the orientation of the facet joints helps determine the primary movements of the various regions of the vertebral column.
6. Describe the major ligaments of the vertebral column.
7. Describe the structure of the intervertebral disk.
8. Explain how the stability of the vertebral column is maintained.
9. Describe the articulations of the ribs with the thoracic vertebrae.
10. Cite the primary muscles of inspiration.
11. Cite the primary muscles of forced expiration
12. Identify specific muscles of inspiration and expiration, and those that contribute to both functions.
13. Describe the muscular interactions involved in forced inspiration and forced expiration.
14. Explain why accessory muscles of inspiration are often used by an individual with COPD
15. Name, locate, and palpate the muscles of the vertebral column.
16. Name, locate and palpate the major bony prominences of the vertebral column.
17. Identify the functions of the muscles of the vertebral column.
18. Name and visualize the locations of the various nerves of each muscle in the vertebral column.
19. Name and identify the vascular support of the various muscles of the vertebral column.

20. Describe the motions of the spine that decrease and increase the diameter of the intervertebral foramen.
21. Differentiate between segmental and gross stabilization of the vertebral column
22. Describe the factors that contribute to safe and unsafe lifting techniques.

The Hip and Pelvis:

1. Describe and identify the articulating surfaces of the pelvis and femur.
2. Describe the structure and function of the ligaments of the hip joint.
3. Describe the angle of inclination and angle of torsion.
4. Describe the three kinematic strategies used to produce different functional motions at the hip.
5. Describe the muscle activity that produces tilting and rotation of the pelvis.
6. Describe the planes of motion and axes of rotation for all motions of the hip.
7. Cite the normal ranges of motion for all the motions of the hip.
8. Describe the structure and function of all the muscles associated with the hip joints.
9. Describe the force-couple involved in producing an anterior pelvic tilt and posterior pelvic tilt.
10. Explain how the function of the two-joint muscles at the hip is affected by changes in the position of the knee and hip.
11. Explain the biomechanical consequences of a hip flexion contracture.
12. Explain how the position of the hip and knee affect the length and ultimate function of the multi-articular muscles of the hip.
13. Compare coxa valga with coxa vara on the basis of hip joint stability and mobility.
14. Compare anteversion with retroversion on the basis of hip joint stability and mobility.
15. Name, locate, and palpate the muscles of the hip and pelvis.
16. Name, locate and palpate the major bony prominences of the hip and pelvis.
17. Identify the functions of the muscles of the hip and pelvis.
18. Name and visualize the locations of the various nerves of each muscle in the hip and pelvis.
19. Name and identify the vascular support of the various muscles of the hip and pelvis.
20. Explain the function of the hip abductor muscles during the single-limb support phase of walking.
21. Describe why a cane is most effective when used in the hand opposite the weakened or painful hip.
22. Analyze normal movement of the hip joint

The knee:

1. Describe the articulating surfaces at the tibiofemoral and patellofemoral joints
2. Describe the planes of motion and axes of rotation for the motions of the knee
3. Describe the motion of the femoral condyles during flexion and extension in a closed kinematic chain
4. Describe the motion of the tibia in flexion and extension in an open kinematic chain
5. Compare the lateral and medial meniscus on the basis of structure and function
6. Compare the action of the quadriceps in an open kinematic chain with that of a closed kinematic chain
7. Describe the factors that contribute to excessive lateral tracking of the patella.
8. Name, locate, and palpate the muscles of the knee complex
9. Name, locate and palpate the major bony prominences of the knee complex
10. Identify the functions of the muscles of the knee complex
11. Name and visualize the locations of the various nerves of each muscle in the knee complex

12. Name and identify the vascular support of the various muscles of the knee complex
13. Describe one biomechanical consequence associated with hamstring tightness.
14. Explain the principles of active and passive insufficiency in regard to the multi-articular muscles of the knee.
15. Describe the combined movements at the hip and knee that promote the most effective force production in the hamstrings and rectus femoris.
16. Analyze normal movement of the knee joint

The Ankle – Foot Complex:

1. Define the terminology unique to the ankle-foot complex, including supination/pronation, inversion/eversion, dorsiflexion/plantarflexion, flexion/extension, and adduction/abduction.
2. Describe the compound articulations of the ankle, subtalar, talocalcaneonavicular, transverse tarsal, and tarsometatarsal joints.
3. Describe the degrees of freedom and range of motion available at the joints of the ankle and foot.
4. Describe the planes of motion and axes of rotation for dorsiflexion/plantarflexion, inversion/eversion, and adduction/abduction of the ankle and foot.
5. Describe the significant ligaments that support the ankle, subtalar and transverse tarsal joints.
6. Describe the triplanar nature of the ankle joint motion.
7. Describe the distribution of weight within the foot.
8. Describe the structure and function of the plantar arches, including the primary supporting structures.
9. Describe the general functions of the extrinsic muscles of the ankle-foot.
10. Describe the general functions of the intrinsic muscles of the ankle-foot.
11. Name, locate, and palpate the muscles of the ankle-foot complex.
12. Name, locate and palpate the major bony prominences of the ankle-foot complex.
13. Identify the functions of the muscles of the ankle-foot complex.
14. Name and visualize the locations of the various nerves of each muscle in the ankle-foot complex.
15. Name and identify the vascular support of the various muscles of the ankle-foot complex.
16. Explain why the lateral ligaments of the ankle are injured far more often than the medial ligaments.
17. Describe the common abnormal gait patterns involved with weakness of the dorsiflexors muscles.
18. Analyze normal movement of the ankle joint

METHODS OF PRESENTATION

1. Lectures
2. Group discussion
3. Demonstrations
4. Multi-media presentations
5. Anatomical models
6. Lab practice
7. Workbook assignments

Course Structure and Overview:
This is a F2F class that meets for lecture and lab twice a week. Lectures and all assignments are posted online. Pay close attention to deadlines for all assignments. Technical difficulties are no excuse for late assignments! See course schedule for all reading assignments related to course material. Required skills for completion of this course include:

- Communication – Demonstrate professionalism working with simulated patient
- Professionalism: Professional behavior demonstrated during simulated patient treatment
- Beginning skills in the performance of selected muscle and bony landmark palpation
- Demonstrate understanding of and explain the Concave-Convex principle
- Application of Concave-Convex principle for selected joints
- Demonstrate understanding of and explain planes of movement and axes of rotation
- Application of correct plane of movement and axis of rotation of selected extremity and trunk movements.
- Demonstrate understanding of open-chain and closed-chain movements
- Demonstrate open and closed-chain movements
- Demonstrate an understanding of types of muscle contractions during movements with and against gravity.

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. All emailed questions to the instructor will be responded to within 24 hours, but usually within a few hours when possible; a response to the student will be sent as acknowledgment of received inquiry with answer to follow when possible.

- TEXT MESSAGE NOTIFICATIONS: The student is required to sign up for the text message notifications via TEAMS. This will enable the student to receive important class announcements and reminders from the instructor via text message so that students will not miss out on any assignment changes or important updates. The student is encouraged to check their NTCC email daily. If a student does not own a cell phone, they can receive these same reminders via their student email; the instructions are also in the PDF instruction sheet provided at orientation.

- ANNOUNCEMENTS: These can be found in Blackboard under the course link on the Bb homepage. Students are encouraged to read any announcements thoroughly when posted.

OUTLINE OF CONTENT

1. Basic Principles of Kinesiology
2. Structure and Function of Joints
3. Structure and Function of Muscles
4. The Shoulder Complex
5. The Elbow and Forearm
6. The Wrist and Hand
7. The Vertebral Column and Ventilation
8. The Hip/Pelvis
9. The Knee
10. The Ankle and Foot

REQUIRED AND RECOMMENDED READING

1. Essentials of Kinesiology for the Physical Therapist Assistant, 3rd ed. Mansfield, Elsevier 2019
2. Trail Guide to the Body, Lab Manual, 5th ed., Biel, Books of Discovery 2014
3. Trail Guide to the Body, Student workbook, 5th ed., Biel, Books of Discovery 2014

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, and serves clients/customers); Basic Skills (reading, writing, listening, speaking); Thinking Skills (creative thinking, 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

1. Unit Tests (5). 50%
2. Pop Quizzes/Check- offs/Assignments 5%
3. Lab Practicals (2). 20%
4. Comprehensive Final Exam. 25%

GRADING SCALE

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

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.

ATTENDANCE AND ABSENTEEISM

Students are responsible for the attendance polices stated in the **Northeast Texas Community College Student Handbook and the PTA Program Student Policy and Procedure Handbook.**

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 (5) 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.

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 **may be assigned remediation** for the previously failed practical components (based on specified course lab practical rubric). Failure to complete remediation satisfactorily (demonstration of proficiency) on second attempt according to practical rubric 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 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 an 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.

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.

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.

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 SAFETY 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.
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 CLASS AND LABORATORY

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 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

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.

PROGRAM 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 any portion 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 dismissal 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 Executive Vice President for Instruction. 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.

NTCC Academic Honesty/Ethics Statement:

NTCC upholds the highest standards of academic integrity. The college expects all students to engage in their academic pursuits in an honest manner that is beyond reproach using their intellect and resources designated as allowable by the course instructor. Students are responsible for addressing questions about allowable resources with the course instructor. Academic dishonesty such as cheating, plagiarism, and collusion is unacceptable and may result in disciplinary action. This course will follow the NTCC Academic Honesty and Academic Ethics policies stated in the Student Handbook. Refer to the student handbook for more information on these subjects.

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.

Tentative Course Timeline

**Students are responsible for completing the workbook pages corresponding to the unit of content being covered.*

Dates		Topic	Reading
Aug.	28	Basic Principles of Kinesiology	M: Ch. 1
		Structure and Function of Joints	M: Ch. 2
		Structure and Function of Muscles	M: Ch. 3
Aug.	**30**	Structure and Function of the Shoulder Lecture ***Exam I Due - testing center (chs. 1-3)***	M: Ch. 4
Sept.	**4**	**Labor Day Holiday ☺**	
Sept.	6	Shoulder lab	
Sept.	11	Shoulder Lab cont'd *1:30 p.m. – Shoulder lab cont'd*	
Sept.	**13**	**Exam II**	
Sept.	18	Structure and Function of the Elbow/Forearm Lecture & Lab	M: Ch. 5
Sept.	20	Elbow/Forearm lab	
Sept.	25	Elbow/Forearm lab	
Sept.	27	Structure and Function of the Wrist/hand	M: Chs. 6/7
Oct.	2	Wrist & hand lab	
Oct.	4	Wrist & hand lab	
Oct.	**9**	***Mid-Term Lab Practical – Walk through*** ***1:30 p.m. Mid-Term Lab Practical – Palpations***	
Oct	**11**	***Exam III***	
Oct.	16	Structure and Function of the Vertebral Column	M: Chs. 8/13

		and Ventilation	
Oct.	18	Vertebral Column lab *1:30 p.m. – Vertebral Column cont'd*	
Oct.	23	Structure and Function of the Hip *1:30 p.m. – Hip Lab*	M: Ch. 9
Oct.	25	Hip lab	
Oct.	**30**	**Exam IV**	
Nov.	1	Structure and Function of the Knee	M: Ch. 10
Nov.	6	Knee Lab	
Nov.	8	Knee cont'd	
Nov.	13	Structure and Function of the Ankle & Foot	M: Ch. 11
Nov.	15	Ankle & Foot Lab	
Nov.	20	Ankle & Foot lab cont'd	
Nov	*22-24*	*Thanksgiving Holiday ☺*	
Nov.	**27**	**Final Lab Practical – Walk-through**	
Nov.	**29**	**Exam V**	
Dec. (Thurs)	**1 (9:00 a.m.)**	**Final Lab Practical – Palpations**	
Dec.	**5**	**Comprehensive Lecture Final – 9:00-12:00**	

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