

Levelland CampusCourse SyllabusCOURSE:PTHA 1413 Functional Anatomy (4:3:3)SEMESTER:Spring 2024CLASS DAYS:M/WCLASS TIMES:1:00-4:00

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"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 introduction of advance practice. Perquisites: MATH1314, ENGL 1301, HUMA, SCIT 1407

Corequisites: PHYS 1410, PTHA 1301, PTHA 1405, PTHA 1413

STUDENT LEARNING OUTCOMES

be able to: 1. Identify	v advanced human anatomy of the musculoskeletal system.
a.	
и. b.	Describe the gross anatomical components and relationships of the skeletal system.
с.	Identify joint structures and components.
d.	Define principles of joint motion.
e.	Describe normal joint end-feel for all major joints.
f.	Identify the normal curves of the vertebral column.
g.	Identify the center of gravity in standing.
h.	Explain the function of the muscular system.
i.	Describe the gross anatomical components and relationships of the muscular system.
j.	Compare and contrast the structure and function of the three major subtypes of skeletal muscles.
k.	Describe the types of muscle contractions and give functional examples for each type.
1.	Name the proximal/distal attachments and function of the major skeletal muscles.
m.	Analyze how the skeletal system and the muscular system function together to allow normal movement.
 Analyze ost	eokinematics and arthrokinematics related to the human body.
a. Def	ine planes and axes.
	tify the relationship of axes to the cardinal planes of motion and the anatomical position for individual joints.
	ine Newton's Laws applicable to physical therapy and provide examples.
	ine the terminology applicable to forces and loading.
	rerentiate between pressure and forces.
	cribe the relationship between physical laws and biomechanical principles of the musculoskeletal system.
	mine the components of levers and their use in the human body.
	cribe the mechanical property of tissues.
	cribe how the length-tension relation of muscle affects force production.
	lain the forces involved when an object is in equilibrium.
1	identify anatomical surface landmarks.
a. Des	scribe the correlation between bony structures and surface anatomy.

- b. Demonstrate the ability to palpate bony structures.
- c. Describe the correlation between muscular structures and surface anatomy.

	d. Demonstrate the ability to palpate muscular structures.
	e. Describe the correlation between connective structures and surface anatomy.
	f. Demonstrate the ability to palpate connective structures.
3.	Demonstrate manual muscle testing using correct procedure.
	a. Define manual muscle testing and measuring techniques.
	b. Demonstrate competency in performing manual muscle testing for all major muscle groups including assigning the
	appropriate grade.
	c. Demonstrate competency in the palpation of the appropriate muscle(s) related to manual muscle testing.
	d. Demonstrate competency in the ability to stabilize the appropriate joints during manual muscle testing.
4.	Demonstrate goniometry and range of motion assessment using correct procedure.
	a. Demonstrates correct use of goniometry and alternative measurement devices for range of motion assessment.
	b. Demonstrate competency in the use of appropriate landmarks for goniometry.
	c. Demonstrate competency in performing goniometry for all major joints for both active and passive range of motion.
	d. Describe the normal range of motion for all major joints.
	e. Describe normal joint end-feel for all major joints.
	f. Describe special tests used for assessment purposes.
	g. Explain common special tests used by the supervising PT to provide more in depth assessment of pathologies.
5.	Analyze the components of the normal gait cycle.
	a. Identify the components of the normal gait cycle.
	b. Delineate the muscle groups and joint motions related to the normal gait cycle.
	c. Analyze the normal gait cycle.
6.	Explain basic postural alignment and body mechanics.
	a. Differentiate between basic normal and abnormal postural alignment.
	b. Demonstrate competency related to body mechanics to meet requirements outlined in the skill check and lab exam.
7.	Analyze normal human movement.
	a. Identify boney structures and osteokinematics involved with movement.
	b. Identify muscles/groups involved with agonist/antagonist/synergistic movement.
	c. Identify nerves required for innervation of muscle groups used in movement patterns.
	d. Identify anatomy and physiology of bone, muscle, and nerve tissue as related to the creation of movement.
8.	Apply generic abilities related to course content. (Generic Abilities adapted from the Physical Therapy Program, University of
	Wisconsin-Madison, May et al. Journal of Physical Therapy Education, 9:1, Spring, 1995.)
	a. <i>Commitment to Learning</i> – Demonstrate the ability to self-assess, self-correct, and self-direct. Identify needs and
	sources of learning. Seek new knowledge and understanding.
	b. Interpersonal Skills – Demonstrate the ability to interact effectively with patients, families, colleagues, other health
	care professionals, and the community. Demonstrate the ability to effectively deal with cultural and ethnic diversity
	issues.
	c. <i>Communication Skills</i> – Demonstrate the ability to communicate effectively (i.e., speaking, body language, reading,
	writing, and listening) for a varied audiences and purposes.
	d. <i>Effective Use of Time</i> – Demonstrate the ability to obtain maximum benefit from a minimum investment of time and
1	 resources. Use of Constructive Feedback – Demonstrate the ability to identify sources and seek out feedback and to effectively
	e. Use of Constructive Feedback – Demonstrate the ability to identify sources and seek out feedback and to effectively use and provide feedback for improving personal interaction.
	f. <i>Problem-Solving</i> – Demonstrate the ability to recognize and define problems, analyze data, develop and implement
	solutions, and evaluate outcomes.
	g. <i>Professionalism</i> – Demonstrate the ability to exhibit appropriate professional conduct and to represent the profession effectively.
	h. <i>Responsibility</i> – Demonstrate the ability to fulfill commitments and to be accountable for actions and outcomes.
1	 <i>Critical Thinking</i> – Demonstrate the ability to question logically; to recognize and differentiate facts, illusions,
	assumptions, and hidden assumptions; and to distinguish the relevant from the irrelevant.
1	j. Stress Management – Demonstrate the ability to identify sources of stress and to develop effective coping behaviors.
	 k. Use a SOAP note format to document lab skills.
9.	Describe basic concepts related to the APTA <i>Guide to Physical Therapist Practice</i> .
.	a. Integrate basic concepts presented in the APTA <i>Guide to Physical Therapist Practice</i> related to course content.
	 b. Identify the parameters of the scope of practice of the PTA related to course content.

OUTCOME ASSESSMENT METHODS

Computer-based exams, written exams, written assignments, quizzes, Lab exams/quizzes, and other assignments and projects as assigned.

FORMATIVE ASSESSMENTS INCLUDE

Class room and Lab participation

- Weekly assessment
- Skills checks
- Clinical Readiness assessment
- Pop quizzes

SUMMATIVE ASSESSMENTS

✤ 4- Lecture exams GRADING FORMULA

Assignment Totals	Average of all course assignments	15%
Lecture Exam Totals	Average of Lecture Exams + Weekly & Pop quizzes	75%
Professionalism	Score based on Professionalism Rubric	10%
	Total	100%

Percentage	Grade
90-100%	Α
80-89%	В
75-79%	С
74.9% and Below	F

Grading Policy

<u>Students who fall below 75% passing requirements will not be allowed to continue in the PTA program.</u> BELOW 77% at midterm of the semester will result in the development of a learning contract and the student being responsible for meeting established goals

ASSIGNMENT POLICY

All assignments must be completed by the assigned due date. Late and/or incomplete work may be accepted, but with grade deduction per day up to 3 days and a grade of zero will be recorded at that time. Assignments, quizzes, exams, and skills checks missed due to an unexcused absence will be made up only with advanced notification of illness or emergency situation. Assignments are due by the assigned dates and times in Central Standard Time (CST) on the class schedule. Students should contact faculty prior to the due date and time if they anticipate material will be late. 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 professional 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.

EXAMS POLICY

The lecture exams will be administered via computer to prepare students for the NPTE-PTA exam. Possible pop quizzes may be handwritten which will encourage memory and mastery of the material.

Additionally, many exam questions will be constructed in the same manner as NPTE-PTA, allowing students to prepare for the licensure testing format.

ASSESSMENT USED BUT NOT LIMITED TO:

- 1. Lecture Exams
- 2. Clinical Readiness Assessments
- 3. Quizzes
- 4. Comprehensive final exam

The exam policy includes the following:

- ✤ All summative assessments will be proctored by SPC faculty/Staff
- Personal belongings are not allowed in the lab 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 and/or smart watches are not allowed in the lab during testing.
- Students must adhere to lab 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 facilitating instructor may result in immediate removal from testing lab, a zero recorded for the test grade and 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 quizzes of whatever length, as well as final examinations, to daily reports and to term papers.
- 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 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, final 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-

- o If student misses more than 30 minutes of scheduled class time the student will be counted absences.
- Excessive Absences ->3 with counseling after 2^{nd} absences
- ✤ Tardy-
 - any time after class starts or returns from break. Notification prior to official class time will be considered on an individual basis.
 - \circ 2 tardy = 1 absence
- Any absence from class should be reported to the instructor in advance whenever possible, or as soon as possible after the absence. This allows instructors to provide necessary support and address any missed coursework.

CLINICAL SKILLS

- You may <u>not</u> 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 <u>cannot</u> practice these skills on patients.
- Once you have passed the class, you <u>still cannot</u> 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. A social media policy for health sciences students should help students understand the responsible and professional use of social media platforms, especially given the sensitive nature of healthcare and patient information. Here is a sample social media policy for health sciences students:

SOCIAL MEDIA

The PTA program has a Facebook page at https://www.facebook.com/South-Plains-College-PTA-

<u>270314052992426/?ref=bookmarks</u> 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 WATCHES

- Cellphones must be put away and turned OFF or put on silent during scheduled class/lab periods unless prior approval has been given by the instructor. Cell phones are to be used outside of the classroom while class is in session. This includes text messaging and internet browsing.
- Students will be dismissed from class/lab and sent home if a phone continuously rings/vibrates or if the student is discovered texting or browsing the internet. If dismissed from class, 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 Nursing Office at (806) 716-2391 or (806) 716-2193. Class 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.
- For emergencies during clinical rotations, the student should notify their family to call and leave a message or text (identifying who they are and who they need to get in touch with for an emergency) to the number or numbers provided in the clinical course syllabus and/or on the clinical course schedule.

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.

RESOURCES

TexBook Program:

- This course is in the SPC TexBook program, so you do not need to purchase a textbook or access code for this course.
- What is TexBook? The required textbook/digital content for this course is available to you in Blackboard from the first day of class. The charge for the textbook/digital content is the lowest price available from the publisher and bookstore and is included in your tuition.
- How do I access my TexBook? Your course material is in your Blackboard course from the first day of class. Access to your course material is provided either by VitalSource or other links inside your Blackboard course. VitalSource (and many publisher's) eBook features include the ability to hear the text read aloud, highlight, take notes, create flash cards, see word definitions, build study guides, print select pages, and download 100% of the book for offline access.
- Help with TexBook issues and support: check with your professor or visit: https://support.vitalsource.com/hc/enus/requests/new (available 24/7 via chat, email, phone, and text)
- Opting out of TexBook: Participating in TexBook is not mandatory, and you can choose to opt out. However, by opting out you will lose access to the course textbook/digital content and competitive pricing, and you will need to purchase the required course material on your own. If you drop the class or opt-out before the opt-out deadline, the TexBook fee will be automatically refunded to your SPC account. The opt-out deadline for Fall and Spring is the twelfth-class day. The opt-out deadline for shorter terms varies between the second- and third-class day.
- *Please consult with your professor before deciding to opt-out. If you still feel that you should purchase the course textbook/materials on your own, send an opt-out email to: eshaffer@texasbook.com. Include your first name, last name, student ID number, and the course you are opting out of. Once you have been opted-out, you will receive a confirmation email. If you need assistance with the process, contact the SPC Bookstore:
- Email: eshaffer@texasbook.com / Phone: 806-716-2397: Store Manager
- Email: pwells@texasbook.com / Phone: 806-716-2097: Text Coordinator

Text Book

Clinical Kinesiology and Anatomy **ISBN 978-0-8036-5823-3 [Required]** *Trail Guide to the Body Workbook* **ISBN 978-0-9829786-6-5** [optional] *Trail Guide to the Body* **ISBN 978-0-9987850-6-6 [optional]**

SUPPLIES

- PTA Kit
- CPR Certification-**The CPR Certification must be from AHA and valid through May 2025.
- 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

<u>WEEK</u>	MONDAY (Classroom)	WEDNESDAY (Lab)	ACTIVITIES Pre-Lab Quizzes, Ch. Summaries (due Sun. by 11:59PM BEFORE class) Lecture Quizzes (due Sun. by 11:59PM AFTER class)	
<u>WEEK 1</u> 1/15 – 1/21	MLK Day NO CLASS	Syllabus Review Introduction to FA Basic Information & Biomechanics (<u>CKA</u> Ch. 1 & 2)	Syllabus Acknowledgement Quiz Ch summary 3 & 4	
<u>WEEK 2</u> 1/22 – 1/28	Skeletal System (<u>CKA</u> Ch. 3 & 4)	Introduction to Data Collection Skills Check-Off Instructions	Weekly Lecture Quiz 1 Ch summary 5 & 6	
<u>WEEK 3</u> 1/29 – 2/4	Nervous & Muscular Systems (<u>CKA</u> Ch. 5 & 6)	(This will be on Thursday) Palpation Lab w/ Guest Clinicians Melodi Reeder (PT) & Madison Lynskey (PTA)	Sign-Up for Final Project Topic Weekly Lecture Quiz 2 Ch summary 10	
<u>WEEK 4</u> 2/5 – 2/11	LECTURE EXAM 1 1:00-2:00 Clinical Kinesiology & Anatomy of Pelvis (CKA Ch. 10)	LOWER EXTREMITY Goniometry LE ROM Skills Check-Off	Weekly Lecture Quiz 3 Ch summary 17 LE ROM Pre-Lab Quiz	
<u>WEEK 5</u> 2/12 – 2/18	Clinical Kinesiology & Anatomy of LE CH 17	LE MMT LE MMT Skills Check-Off	Weekly Lecture Quiz 4 Ch summary 18 & 19 LE MMT Pre-Lab Quiz	
<u>WEEK 6</u> 2/19 – 2/25	Clinical Kinesiology & Anatomy of LE Knee and foot (<u>CKA</u> Ch. 18-19)	Clinical Readiness Assessment (LE ROM/MMT Skills) LE Special Tests	Weekly Lecture Quiz 5 Ch summary 12 & 13 CRA Wed., Feb. 21 st 1PM	
<u>WEEK 7</u> 2/26 – 3/3	Clinical Kinesiology & Anatomy of Shoulder (<u>CKA</u> Ch. 12 & 13)	UPPER EXTREMITY Goniometry UE ROM Skills Check-Off	Weekly Lecture Quiz 6 Ch summary 14 UE ROM Pre-Lab Quiz	
<u>WEEK 8</u> 3/4 - 3/10	LECTURE EXAM 2 1:00-2:00 Clinical Kinesiology & Anatomy of Elbow & Forearm (CKA Ch. 14)	UE MMT UE MMT Skills Check-Off	Weekly Lecture Quiz 7 Ch summary 15 & 16 UE MMT Pre-Lab Quiz	
3/11 - 3/17		SPRING BREAK		
<u>WEEK 9</u> 3/18 – 3/24	Clinical Kinesiology & Anatomy of Wrist and Hand (<u>CKA</u> Ch. 15 & 16)	Clinical Readiness Assessment (UE ROM/MMT Skills) UE Special Tests	Weekly Lecture Quiz 8 Ch summary 8 CRA Wed., Mar. 20 th 1PM	
<u>WEEK 10</u> 3/25 – 3/31	Clinical Kinesiology & Anatomy of Trunk Head & TMJ (<u>CKA</u> Ch. 8)	NECK & TRUNK ROM Neck & Trunk ROM Skills Check- Off	Weekly Lecture Quiz 9 Ch summary 9 Neck & Trunk ROM Pre-Lab Quiz	
<u>WEEK 11</u> 4/1 – 4/7	LECTURE EXAM 3 1:00-2:00 Clinical Kinesiology & Anatomy of Neck and Trunk (CKA Ch. 9)	Trunk Strength Trunk Strength Skills Check-Off	Weekly Lecture Quiz 10 Ch summary 20 Trunk MMT Pre-Lab Quiz	
<u>WEEK 12</u> 4/8 – 4/14	Posture (<u>CKA</u> Ch. 20)	Clinical Readiness Assessment (Neck & Trunk ROM/Strength Skills) Neck & Trunk Special Tests	Weekly Lecture Quiz 11 Ch summary 21 Spot-Check of Final Project Assignment CRA Wed., Apr. 10 th 1PM	
<u>WEEK 13</u> 4/15 – 4/21 WEEK 14	Gait (<u>CKA</u> Ch. 21) LECTURE EXAM 4	ASSESSMENT CARNIVAL ASSESSMENT	Lecture Quiz 12 DUE April 23 rd 11:59 PM	
<u>WEEK 14</u> 4/22 - 4/28 <u>WEEK 15</u>	1:00-2:00 MOCK	CARNIVAL		
$\frac{1}{4/29} - \frac{5}{5}$	Spring	Spring	CRA Wed., May 1st at 12:30PM	

	Clinical Readiness Assessment	Clinical Readiness Assessment (BPC & FA Skills)	
WEEV 16	Movement Analysis	Movement Analysis	Cumulative Take-Home Exam
<u>WEEK 16</u> 5/6 - 5/10	Final Project	Final Project	Replacement Opportunity
3/0 - 3/10	Presentations	Presentations	DUE Wed., May 8th at 11:59P