



**PHYSICAL THERAPIST ASSISTANT PROGRAM**

**Fall 2017**

**PTHA 1413: FUNCTIONAL ANATOMY**

CRN #: 35116, 35329, 37198, 37295

<b>Lecture:</b>	<b>Mon/Wed</b>	<b>8:00 am – 9:50 am</b>	<b>Room 473</b>
<b>Lab 1:</b>	<b>Tues/Fri</b>	<b>8:00 am – 9:50 am</b>	<b>Room 452</b>
<b>Lab 2:</b>	<b>Tues/Fri</b>	<b>10:00 am – 11:50 am</b>	<b>Room 452</b>

4 credit hours: 3 hours lecture and 4 hours lab/16 weeks (112 contact hours)

**INSTRUCTORS**

**Lead: Laura S. Kabiri, PT, DPT, PhD, CSCS, FTPTA**  
CRN #: 35116, 35329, 37198, 37295  
Telephone: 713-718-7388  
Email: laura.kabiri@hccs.edu  
Office Hrs: M 2:00 - 4:00 pm; Th 9-11 am  
Room 417

**Adjunct: Alan Park, PT, DPT**  
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**Adjunct: Mica Smith, PT, MS**  
CRN #: 37198  
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**COURSE DESCRIPTION**

This course covers the relationship of the musculoskeletal and neuromuscular systems to normal and abnormal movement.

**END-OF-COURSE OUTCOMES**

Identify and locate the musculoskeletal and neurological structures of the human body; and differentiate between normal and abnormal movement.

**CREDIT**

4 semester hours

**PREREQUISITES**

Admission to the program

**COREQUISITES**

BIOL 2401

**REQUIRED TEXTBOOKS**

- |  |           |
|--|-----------|
| 1. Class materials and Eagle Online  | (EO)      |
| 2. <u>Clinical Kinesiology and Anatomy</u> , Fifth (5 <sup>th</sup> ) Edition;<br>ISBN: 978-0-8036-2363-7; Lynn S. Lippert, MS, PT | (Lippert) |
| 3. <u>Grant's Atlas of Anatomy</u> , Fourteenth (14 <sup>th</sup> ) Edition; ISBN: 978-1-4698-9068-5<br>Agur and Dalley            | (Grant)   |

**ABBREVIATION**

## **RECOMMENDED TEXTBOOKS:**

1. The Anatomy Coloring Book, Fourth (4<sup>th</sup>) Edition; ISBN: 978-0-321-83201-6 (CB)  
Wynn Kapit and Lawrence M. Elson, PhD
2. Muscles: Testing and Function, Fifth (5<sup>th</sup>) Edition; ISBN: 0-7817-4780-5 (Kendall)  
Florence Peterson Kendall, Elizabeth Kendall McCreary, et al

## **STUDENT LEARNING OUTCOMES AND OBJECTIVES**

All outcomes, objectives, instruction, and activities assume that the student is working under their direction and supervision of a licensed physical therapist. Utilizing information taught and demonstrated in lecture and laboratory classes, assigned readings and assignments, the student will be able to demonstrate the following on tests and assignments with at least 75% accuracy by the end of the course:

### **Global Objectives**

- 1.0 Communicate using basic medical terminology.
- 2.0 Explain the basic function, organization and purpose of the gastrointestinal system, reproductive system, hepatic system, and urologic system.
- 3.0 Explain the function, organization, and purpose of the nervous system.
- 4.0 Explain the function, organization, and purpose of the musculoskeletal system.
- 5.0 Distinguish between normal and abnormal human movement.
- 6.0 Analyze the systems and structures involved in a given motion for functional activity.
- 7.0 Locate muscles and key boney landmarks on 2D and 3D models or a live human by palpation.

### **Enabling Objectives**

- 1.0 **Communicate using basic medical terminology**
  - 1.1 Use medical terminology in oral and written form to describe patient positioning, anatomical directions, trunk and limb alignment at rest and with movement, and anatomical structures with correct pronunciation and spelling.
  - 1.2 Demonstrate anatomical position and describe movements and structure locations based upon anatomical position.
  - 1.3 Define the anatomical planes.
    - 1.3.1 Classify normal joint movements and axes based upon their location within the anatomical planes.
- 2.0 **Explain the basic function, organization and purpose of the gastrointestinal system, reproductive system, hepatic system, and urologic system.**
  - 2.1 Identify organs involved in the gastrointestinal, reproductive, hepatic, and urologic systems.
  - 2.2 Relate knowledge of the gastrointestinal, reproductive, hepatic, and urologic systems to physical therapy treatment.
- 3.0 **Explain the function, organization, and purpose of the nervous system.**
  - 3.1 Classify nervous system structures as central, peripheral, and/or autonomic.
  - 3.2 Describe the basic function of the central, peripheral, and autonomic nervous systems.
  - 3.3 Appraise the effect of lesions to the central or peripheral nervous system.
  - 3.4 Identify and label key components of the nervous system.
    - 3.4.1 Identify and label peripheral and cranial nerves.
      - 3.4.1.1 Name the purpose of and muscles innervated by each nerve.
      - 3.4.1.2 Explain the effect of a lesion to a given nerve.
    - 3.4.2 Identify and label the lobes, fissures/sulci, and circulation of the brain.
      - 3.4.2.1 Explain the purpose of each major lobe or area of the brain.
      - 3.4.2.2 Evaluate the effect of damage to a particular portion of the brain.
  - 3.5 Diagram the brachial plexus including roots, trunks, divisions, cords, and branches.
    - 3.5.1 Assess the neurological effect(s) of a lesion at any location of the brachial plexus.

## **STUDENT LEARNING OUTCOMES AND OBJECTIVES (continued)**

All outcomes, objectives, instruction, and activities assume that the student is working under their direction and supervision of a licensed physical therapist. Utilizing information taught and demonstrated in lecture and laboratory classes, assigned readings and assignments, the student will be able to demonstrate the following on tests and assignments with at least 75% accuracy by the end of the course:

### **Enabling Objectives (continued)**

- 4.0 Explain the function, organization, and purpose of the musculoskeletal system.**
  - 4.1 Identify the axial and appendicular skeleton.
  - 4.2 Name the bones of the skeletal system.
    - 4.2.1 Identify boney articulations for each joint in the appendicular skeleton.
      - 4.2.1.1 Classify joints by joint type and degrees of freedom.
      - 4.2.1.2 Identify joint surfaces as concave or convex.
  - 4.3 Name the muscles of the musculoskeletal system.
    - 4.3.1 Recite the action, origin, insertion, muscle fiber direction, and innervation of a given muscle.
    - 4.3.2 Demonstrate the action of a given muscle.
    - 4.3.3 Teach the action of a given muscle to a patient.
- 5.0 Distinguish between normal and abnormal human movement.**
  - 5.1 Name normal motions and range of motion for each joint in the body using given references.
    - 5.1.1 Identify a joint as hypo- or hypermobile based upon normal range of motion.
  - 5.2 Describe the normal excursion and expansion of the chest wall with respiration.
- 6.0 Analyze the systems and structures involved in a given motion for functional activity.**
  - 6.1 Evaluate the key joints, muscles, and motions needed for the activity.
    - 6.1.1 Assess if the motion is against gravity, gravity assisted, or gravity eliminated.
  - 6.2 Identify the prime mover, antagonist, and stabilizing muscles at each joint.
  - 6.3 Decide if muscular contractions are concentric, eccentric, or isometric during the activity.
- 7.0 Locate muscles and key boney landmarks on 2D and 3D models or a live human by palpation.**
  - 7.1 Identify the presence of absence of muscle mass.
  - 7.2 Show the boney origin and insertion of a given muscle as well as muscle belly and fiber direction.

## **ATTENDANCE POLICY**

Students are expected to be on time and remain present for the entire class. Being on time, staying throughout the entire class, and exemplary attendance go hand in hand with professionalism. Students who do not abide by course attendance requirements show a lack of strong personal commitment. Each student is allowed one (1) absence per course per semester without penalty. For each additional absence per class, the final overall course grade will be lowered by five (5) points. Three (3) tardy arrivals (up to 20 minutes late) or early departures (less than 20 minutes) will equal one absence. Students who arrive more than 20 minutes after the start of class or leave more than 20 minutes before the end of class will be considered absent. Lab and lecture classes of the same course are considered separate for the purpose of attendance. Only one (1) absence can be accrued per course per day. All absences will be treated equally, regardless of the reason, and if any absence occurs, the student is responsible for the missed class content and assignments. Professional courtesy means the student should call the program department (713-718-7391) and leave a voicemail or email the lead instructor if they will be late or absent for class.

A student who is absent for a lab class may be required to take a lab exam covering the material taught on the day of the absence. This exam would be a second lab exam on the day of the scheduled lab exam.

**\*\*\* This means, if you have a “79” average at the end of the semester and you have more than one (1) absence, you will fail the class.**

## **GRADING POLICIES**

**Grade Ranges**      90 – 100 = A                      80 – 89 = B                      75 – 79 = C                      0 – 74 = F

### ***Withdrawal***

The last day for administrative/student withdrawal is posted on the HCC website. Any student not withdrawn by the posted date will receive the grade earned.

### ***Score Computation***

For individual exams, grades will be rounded according to standard principles as follows:

- A grade of 74.4 will be recorded at 74
- A grade of 74.5 will be recorded at 75

### ***Academic Honesty***

Students can be dismissed from the program for cheating on any graded exams or assignments. Students dismissed for cheating will not be allowed readmission to the PTA Program. Cheating includes the following, but not limited to:

- Videotaping or taking pictures of any exam or during class or lab times without express consent of the instructor
- In possession of a cell phone during an exam or during class or lab times without express consent of the instructor
- Using skill sheets or outcomes sheets in the lab test “draw & think” area
- Cueing a student during a lab test while performing as a patient
- Sharing information about how you or someone else performed on a lab test **BEFORE ALL** lab exams are fully completed is considered cheating. This includes **ANY** form of communication to another student including, but not limited to, texting, phoning, email, etc.
- Copying answers from another student
- Using any technology to look up answers during an exam
- Any homework or class assignment specified to be completed individually is subject to the Academic Honesty Policy

## **TESTING, GRADING & COURSE REQUIREMENTS**

The grand average grade for this course is based on the following components:

<b>Grade Basis</b>	<b>% of 100</b>	<b>Comments</b>
<u>Theory (60% of overall grade)</u>		
Exams (9 exams at 5% each including palpations as applicable)	45%	Average of all categories under Theory <b>must be ≥ 75% to pass the course</b>
In-Class Quizzes	2%	
Homework (EO, in-class, CB, additional assignments as assigned)	3%	
Comprehensive Final	10%	
<u>Lab (40% of overall grade)</u>		
Exams (6 exams at 5% each)	30%	Average of all categories under Lab <b>must be ≥ 75% to pass the course</b>
Comprehensive Final	10%	

In order to pass the course a student must have:

- **75% average grade or better for the final overall grade for the theory portion**
- **75% average grade or better for the final overall grade for the lab portion**
- **No outstanding grades of zero (0) (non-remediated) on record**

The final grand average is then calculated based on all grades listed above. If you have questions or concerns about a grade, you must contact the instructor by email. Any grade adjustments must be made within 48 business hours after receiving the original grade.

## **TESTING, GRADING & COURSE REQUIREMENTS (continued)**

### ***Theory Exams***

Theory exams are based on assigned readings, lectures, class discussions, films, videos, field trips, and/or practical application from any corresponding laboratory classes as applicable. Theory exams may be Scantron, computer based, or paper-pencil exams consisting of true/false, multiple choice, matching, fill-in-the-blank, short answer, or essay questions. If a Scantron is used for an exam, all answers must be on the Scantron and only the Scantron will be graded. If an exam is computer based, only answers recorded using the computer based exam system will be used to calculate a grade for the exam. Each theory exam may include questions on material previously covered in the course or in previous courses covering related material.

At the discretion of the instructor, time will be allotted for group exam review to allow students to review missed questions. Any student who requires individual concerns regarding the exam questions should email the instructor and make an appointment to confer in private. No access to prior exams or collected assignments will be allowed 24 hours before any exam. The theory final exam is/may be comprehensive and may include information from previous classes applicable to this course.

### ***Extra Credit***

Extra credit may be assigned throughout the semester. See course handouts for requirements, details, and due dates. Completed Eagle Online Muscles Sheets may be used as 5 points extra credit toward the lowest regular theory exam grade (NOT the final theory exam) at the end of the semester.

### ***Homework***

Homework may be assigned throughout the semester. Homework may be graded based on completion and/or quality of the work. Feedback may or may not be given based upon the assignment. Assignments are to be done individually unless otherwise specified. Homework assignments as assigned by the instructor must be turned in at the beginning of the class on the due date. Any homework assignment turned in **after the beginning of class on the due date will receive a grade of zero (0)**.

### ***Lab Exams***

Lab exams will consist of 2D or 3D model identification. Muscle and bony landmark palpation on live models will also be included as appropriate. Grading rubrics for palpation will be posted in Eagle Online for your review. Proper labelling and spelling will count toward your final grade for each model identification exam.

### ***Exam Absences***

Absence during an in-class quiz or failure to complete a quiz online by the deadline will result in a grade of zero (0), with no exceptions. Absence for a theory exam results in a ten (10) point deduction from the earned grade. Absence for a lab exam results in a MAXIMUM score of 75. All absences will be treated equally, regardless of the reason.

The student must be prepared to take the missed theory or lab exam the day the student returns to school. It is the responsibility of the student to email the lead instructor and schedule the reexam. If the student fails to email the lead instructor within 24 hours of the originally scheduled exam time, the student will receive a grade of zero (0) for the lab or theory exam. However, it is best practice to email the instructor BEFORE the originally scheduled exam time. If the student is absent during the scheduled retest, a grade of zero (0) will be given. Makeup theory exams may be paper and pencil or computer based exams covering the original content in any question format including essays. If the student knows in advance that he/she will be absent, arrangements should be made with the lead instructor and a ten (10) point deduction from the earned grade will apply.

### ***Exam and Quiz Tardiness***

There will be strict adherence to the exam and quiz time. A student who arrives late will sacrifice that portion of the total theory or lab exam time. Theory and lab exams and quizzes will be stopped at the scheduled end time. Any student who does not stop at the scheduled end time will receive a grade of "0".

## **PLAN OF INSTRUCTIONAL PRACTICES**

All course content, practice, and instructional techniques assume that the student is practicing under the direction and supervision of a licensed physical therapist.

### ***Teaching Methods***

The material in this course will be taught by a combination of lecture, discussions, demonstrations, and/or hands-on practice. Each student will experience palpation as "the patient" as well as palpate a fellow student as the SPTA. Students will be assigned lab partners who will be rotated throughout the course. At times, students will work individually, in pairs, or in larger groups. Students should be prepared for class by reading assigned materials prior to class.

### ***Instructional Aides***

Computerized presentations, textbooks, handouts, demonstration, models, films, computerized programs, dry erase board, and actual physical therapy equipment will be used in this course. No instructional aids, especially actual PT equipment, may be used without permission of the instructor.

### ***Providing for Individual Differences***

Each student will be treated as an individual with unique learning needs. Each student will be checked on his/her skills by an instructor and additional help given during lab time if needed. Study groups are encouraged. Labs can be open upon request outside class time for further practice sessions during the weekday, depending on availability of the lab and an instructor to supervise. Instructors have scheduled office hours for individual conferences.

### ***Safety***

Safety will be taught throughout the course including instruction on body mechanics, equipment usage, patient assessment, and patient handling. Student performance is monitored during lab sessions by instructors. Practice time must be monitored by an instructor for any technique in which there is a safety risk. Lab skills practice and lab exams will be **stopped immediately** if students are in danger of injury to themselves or others. Each student will be apprised of fire exits, fire extinguishers, and participate in campus disaster and fire drills. Equipment will be calibrated and checked for electrical safety by an outside agency each year before the course using that equipment begins.

### ***Class Participation***

It is necessary for satisfactory course completion that each student demonstrates professionalism, courtesy, enthusiasm, initiative, and compassion for fellow students and instructors. These skills are the basis for success in the physical therapy field. This course can be considered a pre-employment course in basic physical therapy procedures. The class will simulate as much as possible the actual working practices of a physical therapy department. During the course, each student will have the opportunity to simulate working as a physical therapist assistant under the direction and supervision of a physical therapist and functioning as part of a physical therapy department.

### ***Lab Maintenance***

Keeping the lab clean is everyone's responsibility. Work areas must be clean prior to leaving the lab. All students are responsible for adequate and sanitary working conditions in the lab. Students may be assigned specific duties in the lab on a rotating basis.

## PLAN OF INSTRUCTIONAL PRACTICES (continued)

### Professional Attire

#### **Skills Lab**

Students should be prepared for every lab by being in lab clothes **PRIOR** to the start of lab. Each student will be **required** to wear a lab uniform **at all times** during all skills labs consisting of:

- For Females: Halter top, sports bra, or top which **OPENS IN THE BACK**, and shorts which can expose the hip joint and upper thigh, closed toe shoes
- For Males: Shorts which expose the hip joint and the upper thigh, closed toe shoes

ALL STUDENTS with loose long hair must pull it back or pin it up during lab. Fingernails **MUST** be trimmed short so the nail cannot be felt when you rub the tips of the fingers along your arm. When viewing the hand from the palm side, the nail should not be seen. All cell phones & electronic devices must be put away and turned off completely. Videotaping or recording of any kind of demonstrations or equipment is not allowed unless permission is given by the Instructor.

Students should be prepared for every lab by being in lab clothes **PRIOR** to the start of lab. Students who are not in lab attire at the beginning of lab will be asked to leave class to change and receive a tardy for lab.

#### **Clinic Observations and Field Trips**

For clinic observations or field trips, the student must wear their HCC PTA polo, khaki pants, closed toe shoes, and have their HCC Student ID displayed.

### SCANS (Secretary's Commission on Achieving Necessary Skills)

A study was conducted for the Department of Labor by the American Society for Training and Development which identified the seven skills U.S. employers want most in entry level employees. These skills are motivation to learn, basic skills, communication, teamwork, critical thinking, career development, and leadership. The following SCANS skills will be emphasized.

- Seeing Things in the Mind's Eye
- Knowing How To Learn

### EARLY ALERT

The Houston Community College Early Alert program has been established to assist in the overall effort to retain students who are at risk of failing, withdrawing, or dropping a course. This process requires instructional faculty and student support staff to identify students who are performing poorly as early as possible and provide relevant support services to help students overcome their deficiencies. A student is identified when an instructor notices academic or personal difficulties that affect student's academic performance. The possible problem (s) could be tardiness, missed/failed test scores, excessive absences, or a number of other circumstances. Once a referral is made, counselors will then contact students to discuss the issues and possible solutions to their academic difficulties.

### COURSE EVALUATION

EGLS3 – Evaluation for Greater Learning Student Survey System

At Houston Community College, professors believe that thoughtful student feedback is necessary to improve teaching and learning. During a designated time, you will be asked to answer a short online survey of researched-based questions related to instruction. The anonymous results of the survey will be made available to your professors and division chairs for continual improvement of instruction. Look for the survey as part of Houston Community College Student System online near the end of the term.

## **SERVICES TO STUDENTS**

Coleman College students have many resources available to help them succeed. The Learning Success Center on the first floor of the Coleman College campus offers many services including free tutoring services, Texas Medical Center Library Orientation, weekly workshops for remediation, stress management and test anxiety workshops. The link to the Learning Success Center is: <http://coleman.hccs.edu/about-us/learning-success-center/>. In addition, student success coaches are also available to assist with any stresses, academic or personal, that may affect academic success. Students should seek out these services as needed.

## **CAMPUS CARRY**

At HCC the safety of our students, staff, and faculty is our first priority. As of August 1, 2017, Houston Community College is subject to the Campus Carry Law (SB11 2015). For more information, visit the HCC Campus Carry web page at <http://www.hccs.edu/district/departments/police/campus-carry/>.

## **SERVICES TO STUDENTS WITH DISABILITIES**

HCC strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability (including mental health, chronic or temporary medical conditions), please meet with a campus Abilities Counselor as soon as possible in order to establish reasonable accommodations. Reasonable accommodations are established through an interactive process between you, your instructor(s) and Ability Services. It is the policy and practice of HCC to create inclusive and accessible learning environments consistent with federal and state law. For more information, please go to <http://www.hccs.edu/district/students/disability-services/>.

HCCS recognizes its responsibility not to discriminate against anyone who has a documented disability that substantially limits one or more major life activities; has a record of such impairment; or is regarded as having impairment. Specific policies enable students with documented disabilities who are otherwise qualified, to request accommodations, which would allow them equal access to the College under Section 504 of the Rehabilitation Act of 1973, and under the Americans with Disabilities Act of 1990.

Obtaining reasonable accommodations is an interactive process. It begins with the student's disclosure of his/her disability directly with the ADA Counselor in Ability Services, which is located in room 101 of the Learning Success Center (LSC). The ADA Counselor may also be reached by phone at (713) 718-7376. Once accommodations are in place, instructors should receive a new, updated letter of accommodation within the first three days of each semester.

## **HURRICANE HARVEY**

Any student who faces challenges securing their food or housing and believes this may affect their performance in the course is urged to contact the Dean of Students for support. Furthermore, please notify the professor if you are comfortable in doing so. [www.hccs.edu/harveystudentresources](http://www.hccs.edu/harveystudentresources)



**TITLE IX OF THE EDUCATION AMENDMENTS OF 1972, 20 U.S.C. A§ 1681 ET. SEQ.**

Title IX of the Education Amendments of 1972 requires that institutions have policies and procedures that protect students' rights with regard to sex/gender discrimination. Information regarding these rights is on the HCC website under Students-Anti-discrimination.

Houston Community College is committed to cultivating an environment free from inappropriate conduct of a sexual or gender-based nature including sex discrimination, sexual assault, sexual harassment, and sexual violence. Sex discrimination includes all forms of sexual and gender-based misconduct and violates an individual's fundamental rights and personal dignity. Title IX prohibits discrimination on the basis of sex-including pregnancy and parental status-in educational programs and activities. If you require an accommodation due to pregnancy please contact an Abilities Services Counselor. The Director of EEO/Compliance is designated as the Title IX Coordinator and Section 504 Coordinator. All inquiries concerning HCC policies, compliance with applicable laws, statutes, and regulations (such as Title VI, Title IX, and Section 504), and complaints may be directed to:

David Cross  
**Director EEO/Compliance**  
Office of Institutional Equity & Diversity  
3100 Main  
(713) 718-8271  
Houston, TX 77266-7517  
or *Institutional.Equity@hccs.edu*

**The instructor reserves the right to modify the syllabus as needed during the semester. Any modifications will be announced during class time.**

**PTHA 1413 – Functional Anatomy**  
**Fall 2017**

**READING** assignments apply to topics for the day on which written on calendar & should be **DONE PRIOR TO THE CLASS.** Assignments are in italics with references to books as shown in the required and recommended Textbook sections.

\*\*\*Shaded cells indicate a change in the normal schedule! Please plan accordingly.\*\*\*

Week 1: Sept 11 – Sept 15

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
<p><b>8:00-9:50 Lecture (473)</b>            Body Systems:            Hepatic, GI, Reproductive,            and Urologic Systems  <i>EO Notes</i>  <i>(Obj. 2.0)</i>            Introduction to Body Terms,            Definitions, Motions,            Planes &amp; Axes  <i>Lippert Ch. 1, p. 27-28</i>  <i>CB p. 1, 2, 5, 21</i>  <i>Kendall p. 51-58</i>  <i>EO Notes</i>  <i>(Obj. 1.0, 5.0)</i>  <u>Homework: Motion and</u>  <u>Directions (due 9-11)</u>            Introduction to Bones,            Joints, and Muscles  <i>Lippert Ch. 2, 3, 5</i>  <i>CB 17, 19, 20, 42</i>  <i>EO Notes</i>  <i>(Obj. 1.0, 5.0)</i></p> <p><b>10:00-11:50 Lab 1</b>  <b>1:00-2:50 Lab 2</b>            Muscle Contractions            (Concentric/Eccentric;            Isotonic/Isometric; AG/GE)  <i>Lippert Ch. 5; CB p. 43</i>  <i>EO Notes</i>  <i>(Obj. 1.0, 5.0)</i>  <u>Homework: Muscle</u>  <u>Contractions (due 9-11)</u></p>	<p><b>8:00-9:50 AM Lecture (452)</b>            Central Nervous System  <i>Lippert Ch. 6</i>  <i>CB p. 68-69,73-77,79</i>  <i>EO Notes</i>  <i>(Obj. 1.0, 3.0, 5.0, 7.0)</i></p> <p><b>10:00-11:50 Lecture (452)</b>            PNS/ANS and Circulation            of the Brain  <i>Lippert Ch. 6</i>  <i>CB p. 69, 77,81, 83-84, 91-93, 107-108</i>  <i>EO Notes</i>  <i>(Obj. 1.0, 3.0, 5.0, 7.0)</i></p>	<p style="background-color: black; color: white; padding: 5px;"><b>THEORY EXAM #1:            TERMS AND BODY            SYSTEMS 8:00 – 10:00</b>  <i>(Obj. 1.0, 2.0, 5.0)</i></p> <p><b>10:00-11:50 Lecture (452)</b>            Facial Muscles;            Exam 2 Q&amp;A  <i>Kendall p. 121-133</i>  <i>CB p. 44-45</i>  <i>(Obj. 1.0, 4.0, 5.0-7.0)</i></p>	<p><b>8:00-9:50 Lab 1 (452)</b>            Brachial Plexus  <i>Lippert p. 65-67</i>  <i>CB p. 86, 87</i>  <i>(Obj. 1.0, 3.0, 5.0, 7.0)</i>  <u>Homework: Brachial Plexus</u>  <u>(due 9-18)</u></p> <p><b>10:00-11:50 Lab 2 (452)</b>            Brachial Plexus  <i>Lippert p. 65-67</i>  <i>CB p. 86, 87</i>  <i>(Obj. 1.0, 3.0, 5.0, 7.0)</i>  <u>Homework: Brachial Plexus</u>  <u>(due 9-18)</u></p>	<p><b>Lab</b>            Head, Neck, and Trunk            Landmarks  <i>Lippert p 198-202</i>  <i>CB p. 22-24, 26-28</i>  <i>EO Notes</i>  <i>(Obj. 1.0, 4.0, 5.0-7.0)</i></p>

Week 2: Sept 18 – Sept 22

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
<b>**NO CLASS**</b> <b>See Basic Patient Care Schedule</b>	<b>Lab</b> Spinal Vertebrae <i>Lippert p. 213-219</i> <i>CB p. 25-28</i> EO Notes In Lab Assignment: <u>Vertebrae Characteristics</u> (Obj. 1.0, 4.0, 5.0-7.0)	<b>THEORY EXAM #2:                      BRACHIAL PLEXUS AND                      CNS 8:00 – 10:00</b> (Obj. 1.0, 3.0, 5.0, 7.0)		<b>Lecture/Lab</b> Lecture and Palpation: Muscles of the Neck and Back <i>Lippert p. 219-231</i> EO Muscle Sheets (Obj. 1.0, 4.0, 5.0-7.0)

Week 3: Sept 25 – Sept 29

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
<b>Lecture</b> Muscles of the Abdomen and Thorax <i>Lippert p. 219-231</i> <i>CB p. 48-49</i> EO Muscle Sheets (Obj. 1.0, 4.0, 5.0-7.0)	<b>Lab</b> Palpation: Muscles of the Abdomen and Thorax <i>Lippert p. 219-231</i> EO Muscle Sheets (Obj. 1.0, 4.0, 5.0-7.0) <b>**ALL STUDENTS**</b> <b>Lecture 1:00 – 3:00 PM Room 452</b> Head/Neck/Trunk Bones, Joints, Ligaments, Curves; Exam #3 Q&A <i>Lippert Ch. 14-15, EO Note Kendall p. 173, 211, 223</i> <i>CB p. 25, 46</i> (Obj. 1.0, 4.0, 5.0-7.0)			<b>Lecture Room 452</b> <b>***ALL STUDENTS 10 AM – 12 PM***</b> Muscles of the Shoulder Girdle and Shoulder <i>Lippert Ch. 9, 10</i> <i>CB p. 52-54</i> EO Muscle Sheets (Obj. 1.0, 4.0, 5.0-7.0)

Week 4: Oct 2 – Oct 6

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
<b>THEORY EXAM #3:                      HEAD, NECK, AND TRUNK 8:00 – 10:30</b> (Obj. 1.0, 4.0, 5.0-7.0)	<b>Lab</b> Pectoral Girdle Bones and Landmarks <i>Lippert p. 116-117, 132-134</i> <i>CB p. 29</i> EO Notes (Obj. 1.0, 4.0, 5.0-7.0)	<b>**ALL STUDENTS 8:00-10:00**</b>  <b>Palpation begins at 8:00</b>  <b>**LAB EXAM #1: HEAD, NECK, AND TRUNK</b> (Obj. 1.0, 4.0, 5.0-7.0)		<b>Lab</b> Palpation: Muscles of the Shoulder Girdle <i>Lippert Ch. 9</i> <i>CB p. 52</i> EO Muscle Sheets (Obj. 1.0, 4.0, 5.0-7.0)

Week 5: Oct 9 – Oct 13

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
<b>Lecture</b> Shoulder Joints, Ligaments, and Scapulohumeral Rhythm; Exam # 4 Q&A <i>Lippert Ch. 9-10</i> EO Notes (Obj. 1.0, 4.0, 5.0-7.0)	<b>Lab</b> Palpation: Muscles of the Shoulder <i>Lippert Ch. 10</i> CB p. 53-54 EO Muscle Sheets (Obj. 1.0, 4.0, 5.0-7.0)	<b>Lecture</b> Synergistic Muscles with Glenohumeral Motions (Obj. 1.0, 4.0, 5.0-7.0) <u>In Class Assignment:</u> <u>Functional Movement Analysis Activity</u>		9:00 – 11:30 <b>THEORY EXAM #4: Shoulder and Shoulder Girdle</b> (Obj. 1.0, 4.0, 5.0-7.0)

Week 6: Oct 16 – Oct 20

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
<b>Lecture</b> Muscles of the Elbow; Joint of the Elbow <i>Lippert Ch. 11</i> CB p. 55 EO Muscle Sheets (Obj. 1.0, 4.0, 5.0-7.0)	<b>**ALL STUDENTS 8:00-10:00**</b> <b>Palpation begins at 8:00</b> <b>**LAB EXAM #2: SHOULDER</b> (Obj. 1.0, 4.0, 5.0-7.0)			<b>Lab</b> Distal UE Bones and Landmarks; Palpation: Muscles of the Elbow <i>Lippert Ch. 11, CB p. 31, 33</i> EO Muscle Sheets (Obj. 1.0, 4.0, 5.0-7.0)

Week 7: Oct 23 – Oct 27

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
<b>Lecture</b> Muscles of the Wrist; Wrist Muscles PP <i>Lippert Ch. 12; CB p. 56</i> EO Muscle Sheets (Obj. 1.0, 4.0, 5.0-7.0)	<b>Lab</b> Palpation: Muscles of the Elbow/Wrist ** Markers!** <i>Lippert Ch. 12; CB p. 56</i> EO Muscle Sheets (Obj. 1.0, 4.0, 5.0-7.0)	<b>THEORY EXAM #5: ELBOW AND WRIST</b> 8:00 – 10:30		<b>**No Class**</b>  <b>TPTA Annual Conference</b>

Week 8: Oct 30 – Nov 3

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
<b>Lecture</b> Muscles of the Hand; Muscles of Hand PP <i>Lippert Ch. 13</i> CB p. 57 EO Muscle Sheets (Obj. 1.0, 4.0, 5.0-7.0)	<b>Lab</b> Palpation: Muscles of the Hand <i>Lippert Ch. 13; CB p. 57</i> EO Muscle Sheets (Obj. 1.0, 4.0, 5.0-7.0)	<b>**ALL STUDENTS 8:00-10:00**</b> <b>Palpation begins at 8:00</b> <b>**LAB EXAM #3: ELBOW AND WRIST</b> (Obj. 1.0, 4.0, 5.0-7.0)		<b>THEORY EXAM #6: HAND</b> 8:00 – 11:00 <b>Lab ALL 11-12:</b> Lumbosacral Plexus <i>Lippert p. 68-70; CB p. 88,</i> EO Notes (Obj. 1.0, 3.0, 4.0, 5.0-7.0)

Week 9: Nov 6 – Nov 10

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
<b>Lecture</b> Landmarks of the Pelvis and LE, Ligaments, and Circulation <i>Lippert p 81-87; 247-252; 262-265; 286-287</i> CB p. 35-36, 38, 110 (Obj. 1.0, 4.0-7.0)	<b>Lab</b> Landmarks of the Pelvis and LE <i>Lippert p 247-252; 262-265; 286-287</i> CB p. 35-38 (Obj. 1.0, 4.0-7.0)	<b>**LAB EXAM #4 (9-10 AM): LUMBOSACRAL PLEXUS</b> (Obj. 3.0) <b>**Lecture (10-11 AM)</b> Muscles of the Hip (Part I-through Add) <i>Lippert Ch. 17-18</i> CB p. 59, 61 EO Muscle Sheets (Obj. 1.0, 4.0-7.0)		<b>Lab</b> Palpation: Muscles and Landmarks of the Hip <i>Lippert Ch. 17-18</i> CB p. 59, 61 EO Muscle Sheets (Obj. 1.0, 4.0-7.0)

Week 10: Nov 13 – Nov 17

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
<b>Lecture</b> Muscles of the Hip (Part II); Hip and Movement of the Pelvis <i>Lippert Ch. 18; p. 251-257; 287-289</i> (Obj. 1.0, 4.0-7.0)	<b>Lab</b> Palpation: Muscles of Hip EO Notes (Obj. 1.0, 4.0-7.0)			<b>8:00 – 11:00 AM</b> <b>THEORY EXAM #7: PELVIC GIRDLE AND HIP</b> (Obj. 1.0, 4.0-7.0) <b>Lecture 10 AM- 12 PM</b> Muscles of the Knee <i>Lippert Ch. 19</i> CB p. 60, 62 EO Muscle Sheets (Obj. 1.0, 4.0-7.0)

Week 11: Nov 20 – Nov 24

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
<b>**ALL STUDENTS 8:00-10:00**</b> <b>Palpation begins at 8:00</b> <b>LAB EXAM #5: PELVIC GIRDLE AND HIP</b> (Obj. 1.0, 4.0-7.0)	<b>Lab</b> Palpation: Muscles of the Knee <i>Lippert Ch. 19</i> CB p. 60, 62 EO Muscle Sheets (Obj. 1.0, 4.0-7.0)	<b>Lecture</b> Motions, Ligaments, and Circulation of the Knee <i>Lippert Ch. 19</i> CB p. 39, 110 EO Notes (Obj. 1.0, 4.0-7.0)	<b>HOLIDAY</b>	<b>HOLIDAY</b>

Week 12: Nov 27 – Dec 1

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
<b>Lab</b> <b>Lab 1: 8:00 – 9:30</b> <b>Lab 2: 9:30 – 11:00</b> Ligaments and Motions of the Knee <i>Lippert Ch. 19</i> <i>CB p. 39</i> <i>EO Notes</i> <i>(Obj. 1.0, 4.0-7.0)</i>	<b>**ALL STUDENTS 9:00-12:00**</b>  <b>THEORY EXAM #8: KNEE</b>  <i>(Obj. 1.0, 4.0-7.0)</i>	<b>**ALL STUDENTS 8:00-10:00**</b>  <b>Palpation begins at 8:00</b>  <b>LAB EXAM #6: KNEE</b> <i>(Obj. 1.0, 4.0-7.0)</i>		<b>Lecture 9 -11</b> Muscles of the Lower Leg; Extrinsic Foot Muscles; Landmarks of the Foot/Ankle <i>Lippert Ch. 20; CB p. 63-64</i> <i>EO Muscle Sheets</i> <i>(Obj. 1.0, 4.0-7.0)</i>

Week 13: Dec 4 – Dec 8

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
<b>Lecture</b> Intrinsic Muscles of the Foot; Joints, Ligaments, Arches, and Circulation of the Foot <i>Lippert Ch. 20</i> <i>CB p. 65</i> <i>EO Muscle Sheets</i> <i>(Obj. 1.0, 4.0-7.0)</i>	<b>Lab</b> Palpation: Muscles of the Lower Leg <i>Lippert Ch. 20</i> <i>CB p. 63-64</i> <i>EO Muscle Sheets</i> <i>(Obj. 1.0, 4.0-7.0)</i>	<b>**TWU Cadaver Lab Visit**</b>  <b>**ALL STUDENTS 9-11**</b> <b>Meet HCC Atrium at 8:30</b>  <b>**ALL STUDENTS 1:00 – 4:00** (No palpation)</b> <b>**THEORY EXAM #9: FOOT**</b> <i>(Obj. 1.0, 4.0-7.0)</i>		

Week 14: Dec 11 – Dec 15

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
<b>**FINAL THEORY EXAM**</b> <b>**9:30 AM – 12 PM**</b> <i>(Obj. 1.0-7.0)</i>  <b>**COMPREHENSIVE Palpations begin at 8**</b> <b>**FINAL LAB EXAM**</b> <b>**1 PM – 2 PM**</b> <i>(Obj. 1.0-7.0)</i>				