

**LANE COMMUNITY COLLEGE
PHYSICAL THERAPIST ASSISTANT PROGRAM
CLINICAL KINESIOLOGY PTA 133 Lab
SPRING QUARTER 2010**

COURSE DESCRIPTION:

Applied Kinesiology 2 Lab

This co-requisite lab to PTA 133 allows for practice of physical therapy interventions and data collection based on principles of kinesiology for the upper quarter. Skills include application and documentation of palpation, goniometry, therapeutic exercise, manual muscle testing and posture analysis and posture education. 2 credit hours lab; 6 contact hours.

Instructors	Beth Ann Thorpe, LPTA, B.S., CSCS Brian Wilkinson, PT, DPT, CCI	Office	Bldg 4/235 TBD
Phone	BT: 541-463-3274 BW: as needed	Email Email	thorpeb@lanecc.edu wilkbandit@gmail.com
Course Number	PTA 133 Lab Moodle CRN# 42549 Spring 2010	Date/Time Room	Fridays 1:00-4:50PM Building 13/106, TERC Building 4/ 205
Office Hours	<u>Thorpe</u> : Lab Th 1-3PM, office TBA, by appt <u>Wilkinson</u> : via Moodle chat TuTh 8-10PM, Fri Lab 30 min pre/post	Class Website	http://moodle.lanecc.edu
Guest Lecturers	TBD		

Required Texts (May include but are not limited to):

Required Textbooks: Title	Edition	Author
Clinical Kinesiology and Anatomy	4 th	Lippert
Laboratory Manual for Clinical Kinesiology and Anatomy	2 nd	Lippert and Duesterhaus Minor
Joint Range of Motion and Muscle Length Testing	2 nd	Berryman-Reese Bandy
Daniels and Worthingham's Muscle Testing	8 th	Hilsop Montgomery
Therapeutic Exercise	5 th	Kisner & Colby
Recommended Materials		
Kinesiology Flashcards	2 nd	Lippert and Duesterhaus Minor
Trail Guide to the Body	2005 or any	Andrew Biel

TEACHING METHODS:

Laboratory practice will involve hand-on experience of concepts learned through the week in PTA133 lecture. Instructors will use examples, demonstrations and guided practice of activities and concepts.

Student will be able to practice these activities with each other giving and receiving feedback. When students feel comfortable with their competence, they will be assessed by the instructors through skill checks. Problem-solving and critical thinking and utilization of the PTA Problem-Solving Algorithm and will be interwoven through each lab session. Lab practical exams will occur two times through the term to assess the cumulative learning of the students.

GENERAL LAB COURSE OBJECTIVES PTA 133 Lab:

Upon completion of this lab course, the successful student will be able to:	Stated outcomes will be verified by the following assessments:
1. Analyze normal and abnormal postural alignment and resulting stresses to the spine and surrounding structures	Lab Practice, Workbook Assignments, Pass/No Pass Quiz, Skill Check, Lab Practical Exam
2. Describe and demonstrate phases and structures of respiration	Lab Practice, Workbook Assignments, Pass/No Pass Quiz, Skill Check, Lab Practical Exam
3. Practice clinical observation skills and identify structures and functions of the spine and upper extremity	Lab Practice, Workbook Assignments, Pass/No Pass Quiz, Skill Check, Lab Practical Exam, Group Project
4. Perform data collection including observation, anthropometric measurements and goniometry of the upper quarter	Lab Practice, Workbook Assignments, Pass/No Pass Quiz, Skill Checks, Lab Practical Examination Exam
5. Demonstrate gross manual muscle testing procedures for the upper quarter	Lab Practice, Workbook Assignments, Pass/No Pass Quiz, Skill Check, Lab Practical Exam
6. Demonstrate different types of muscle contraction and movement of the trunk and upper extremity including their relevance to clinical setting	Lab Practice, Case Scenarios, Workbook Assignments, Skill Check, Pass/No Pass Quiz, Lab Practical Exam, Group Project
7. Demonstrate understanding of arthrokinematic principles of the upper quarter	Lab Practice, Workbook Assignments, Skill Check
8. Identify the structures, motions and functions of the trunk and upper quarter	Lab Practice, Workbook Assignments, Pass/No Pass Quiz, Skill Check, Lab Practical Exam, Group Project
9. Design, demonstrate and instruct exercise application for muscles of the trunk and upper quarter	Lab Practice, Workbook Assignments, Pass/No Pass Quiz, SOAP note, Skill Check, Lab Practical Exam
10. Demonstrate use of PNF for soft tissue ROM and strengthening	Lab Practice, Workbook Assignments, Pass/No Pass Quiz, Skill Check, Lab Practical Exam
11. Recognize common compensatory strategies and substitutions through the trunk and upper quarter	Lab Practice, Workbook Assignment, Pass/No Pass Quiz, Skill Check, Lab Practical Exam
12. Identify the components and many functions of the	Lab Practice, Workbook assignment, Pass/No Pass Quiz, Skill Check Lab Practical Exam

human hand	
13. Demonstrate professional behavior in the laboratory setting	Participation Grade, Skill Check, Lab Practical, Group Project, Self and Peer Assessment
14. Demonstrate clinical rationale and proper documentation of procedures performed.	Case scenarios, SOAP Note Assignment, Lab Practical Exam

Specific Lab Course Lesson Objectives: Students who successfully complete this course will be able to:

1. Analyze normal and abnormal postural alignment and resulting stresses to the spine and surrounding structures
 - 1.1. Differentiate between static and dynamic posture
 - 1.2. Identify normal spinal curvatures and functions compared to abnormal
 - 1.3. Observe postural alignment from all viewpoints and demonstrate optimal alignment in sitting, standing and supine
 - 1.4. Recognize implications of common postural deviations on surrounding structures
2. Describe and demonstrate phases and structures of respiration
 - 2.1. Identify bones, ligaments and muscles relevant to respiration
 - 2.2. Demonstrate thoracic movement in relation to the mechanics of inspiration and expiration
3. Practice clinical observation and identify structures and functions of the spine and upper extremity
 - 3.1. Practice visual and auditory observations of the trunk and upper extremity movement
 - 3.2. Locate and palpate key bones, landmarks and soft tissue structures of the trunk and upper extremity on self and lab partners
4. Perform data collection including anthropometric measurements and goniometry of the trunk and upper quarter
 - 4.1. Measure and record rib expansion with a tape measure
 - 4.2. Measure upper extremity joint ROM using a goniometer using proper landmarks and positions (with accuracy compared to instructor) using proper size of goniometer
 - 4.3. Record measurements with proper units and labels
5. Demonstrate gross manual muscle testing procedures for the upper extremity
 - 5.1. Select correct patient position for measurement
 - 5.2. Demonstrate hand placement and direction of force
 - 5.3. Compare findings with other side
 - 5.4. Demonstrate strength grades and optional positions
6. Demonstrate different types of muscle contraction and movement including their relevance to clinical setting
 - 6.1. Demonstrate isometric, isotonic, isokinetic, movements and their role in physical therapy
 - 6.2. Perform and instruct exercises in gravity neutral, gravity assisted and gravity resisted planes for the upper extremity
7. Demonstrate understanding of arthrokinematic principles
 - 7.1. Instruct in and assume open and closed pack joint positions and recognize clinical significance of each
 - 7.2. Demonstrate 3 types of arthrokinematic motion (roll, glide, spin)
 - 7.3. Describe types of end feels felt observed on lab partners
 - 7.4. Understand the convex-concave law of joint motion and how it relates to peripheral joint mobilization and ROM

- 7.5. Demonstrate accessory motions traction, approximation and sheer in the lower extremity and describe these may be used in the clinic
8. Identify the structures, motions and functions of the trunk and upper quarter
 - 8.1. Identify and palpate bones, bony landmarks, muscles, tendons and ligaments of trunk, shoulder, elbow, wrist and hand
 - 8.2. Understand muscle origin, insertion, action and nerve innervation of muscles of the upper extremity
 - 8.3. Demonstrate and describe motion that occurs in all planes at the joints of the spine, shoulder, elbow, wrist and hand
 - 8.4. Examine force couples acting on the trunk and upper extremity
 - 8.5. Identify the relationship of each joint through the kinetic chain
9. Design, demonstrate and instruct exercise application to stretch and strengthen muscles of the trunk and upper extremity
 - 9.1. Select and demonstrate appropriate exercises for the upperer extremity based on observations and plan of care
 - 9.2. Describe how to modify exercises and progress routine
10. Demonstrate use of PNF for soft tissue ROM and strengthening
 - 10.1. Demonstrate proper hand placement and pattern for PNF
 - 10.2. Demonstrate proper verbal and tactile cues to partner to elicit correct movement pattern
 - 10.3. Demonstrate proper rate of speed and continuity of motion
11. Recognize common compensatory strategies and substitutions through the trunk and upper quarter
 - 11.1. Identify common substitution patterns through the cervical and lumbar spine, shoulder girdle and joint and entire upper extremity
 - 11.2. Demonstrate proper verbal, tactile and visual cues to eliminate substitution
12. Identify the components and many functions of the human hand
 - 12.1. Differentiate between the two basic types of prehension – power and precision
 - 12.2. Demonstrate each of these through a functional activity
13. Demonstrate professional behavior in the laboratory setting
 - 13.1. Attend lab with on time arrival
 - 13.2. Wear appropriate lab attire
 - 13.3. Communicate in a professional manner (written, verbal and non-verbal)
 - 13.4. Participate in activity and discussion
 - 13.5. Be prepared with lab worksheet and required reading complete
14. Demonstrate clinical rationale and proper documentation of procedures performed
 - 14.1. Utilize PTA Problem Solving Algorithm for clinical reasoning of treatment
 - 14.2. Documentation of treatment intervention which supports billing and continued skilled intervention

TIME COMMITMENT:

Lab with be held for just under 4 hours each week. The lab will also be open for independent practice through the week when not in use by another class. It is suggested that you work in pairs or small groups for both safety and effective learning. You will probably have the most success with this lab section if you log on and/or work through the lab workbook at least **2 times per week**, similar to the number of class sessions we would meet if this was a traditional campus course.

PTA 133 Lab Grading Policy

ASSIGNMENTS:

All pre-lab assignments or Moodle activities must be completed at the beginning of lab each Friday to demonstrate readiness for lab activities. **NO LATE LAB MANUAL ASSIGNMENTS WILL BE ACCEPTED AFTER LAB HAS BEGUN.** All other late assignments will be penalized 20% per day. Failure to turn in the assignment will result in a zero. Students are advised not to wait until the last minute to complete or post assignments. There will be a group assignment due Week 10. It is expected that all group members participate equally and grading will also reflect this through self-assessment and peer assessment.

SKILL CHECKS:

Students must demonstrate basic competency in skills learned through class and lab before taking a Lab Practical examination. Students will analyze and correctly document ROM and MMT using safe and appropriate approaches. Students are to practice in lab and are responsible for deciding when ready for a skill check by the instructor during designated times in lab. Skill checks will be assessed on the **first** attempt but have up to **three** attempts to successfully perform a given skill.

Failure to pass a skill check after **three** attempts will result in the student failing the course. If a student needs multiple attempts on two different skill checks, a meeting will be set with the instructor and Program Coordinator to discuss performance. A third skill check needing multiple attempts will result in failure of the course.

PRACTICAL EXAMS:

Lab Practical examinations require a grade of 70% or better and pass all Red Flags to pass the course, regardless of performance on additional assignments. Only **one** attempt is given for practical exam. Failure to make up the exam will result in a zero for that test which will result in a failure of the course. If this occurs, a meeting will be set with the instructor and Program Coordinator to discuss a plan for the following year.

Red Flag Items:

All Pass/No Pass items on Skill Checks and Practical Lab Exams are marked with Red Flags. Omission of any of these items results in immediate failure. Examples of Red Flag items include, but are not limited to, body mechanics, confirmation of review of POC for contraindications/precautions, and treatment choices within POC.

Letter grades will be based on the following percentages of total points:

Letter Grades	A = 92.5 to 100	A- = 90 to 92.5
B+ = 87.5 to <90	B = 82.5 to <87.5	B- = <82.5 to 80
C+ = 77.5 to <80	C = 75 to <77.5	C- = 70 to <75

There is no option to change this course to pass(P)/no pass(NP). Due to the content and curricular design of the PTA program, students who receive an 'Incomplete', a 'D' or 'F' grade will be allowed one-year to make up the non-passing grade. The curricular design and prerequisites for cooperative education will require waiting a full academic year prior to resuming the PTA program. If a second course results in an 'Incomplete', a 'D' or 'F' grade, the student will be dismissed from the PTA program and a meeting with the PTA Coordinator will be scheduled.

Criteria	Points	Percentage
Participation (5 points per lab x 11 labs)	55 points	5%
Pass/No-Pass Quizzes (10 points x 9 labs)	90 points	10%
Lab Manual units/assignments (10 points x 9)	90 points	10%
Group Project (100 points x 1 project)	100 points	10%
Skill Checks (25 points x 5)	125 points	15%
Mid-term Lab Practical Exam (100 points x 1)	100 points	25%
Final Lab Practical Exam (100 points x 1)	100 points	25%
Total	660 points	100%

Tentative breakdown of estimated points for this course. Subject to change.

COURSE DESIGN AND EVALUATION:

PTA 133 Lab is designed to run concurrent with PTA 133 lecture. Lab Manual assignments and content will follow lecture content as closely as possible to encourage hands-on practice of skills and interventions using concepts learned in lecture. The Moodle site for lecture may contain frequent references to lab activities so it is imperative to keep up with both sites.

ACADEMIC HONESTY:

Violations of the Academic Honesty Code may result in both academic and behavioral penalties including possible suspension or expulsion from the College.

Provisions of the Academic Honesty Code are:

1. Collaboration while taking any quizzes, in-class examinations, or online examinations without the instructor's written approval is forbidden. The faculty member is responsible for defining limits for other collaborative learning activities for each course.
2. Plagiarism or representation of the work of others as one's own is forbidden. The faculty member will make clear the format for properly citing sources of information not original by the student.
3. Explicit approval by all instructors is required if the same work is to be submitted to more than one course, even if is not within the same term.

An automatic grade of zero for any work which is a violation of the Academic Honesty Code will be assigned by the instructor. The instructor may also assign a grade of "F" for the course after discussion with the respective school dean. Students may appeal the course grade to the respective school dean, who is the final level of appeal on the matter of course grades for academic dishonesty.

The faculty member is also required to file a disciplinary complaint to the Vice President for Student Affairs about any student believed to have violated the Academic Honesty Code. If deemed appropriate, hearing procedures will be implemented by a College's Hearing Officer as outlined in the Student Code of Conduct. Possible sanctions considered by the Student Conduct Committee include probation, suspension, and expulsion.

LABORATORY ATTENDANCE:

Attendance is mandatory, unless there are extenuating circumstances as evaluated by the instructor. Students will contact the instructor at least 30 minutes before scheduled class activities to describe the reason for the absence and to propose a plan for making up class time/in-class assignment and activity. Excessive absence, tardiness, or early departure from class interfere with an effective learning environment and are in direct conflict with professional behavior. Please refer to the ~Laboratory Participation Rubric~ for specific guidelines on attendance, preparedness and professionalism. Greater than 3 documented absences will result in substandard ratings in professional conduct and will require a formal consult with the Program Coordinator and Health Professions Division Dean to continue matriculation in the PTA program.

Accessibility Notification:

If you need support or assistance because of a disability, you may be eligible for academic accommodations through Disability Resources. For more information, contact Disability Resources at (541) 463-5150 (voice) or 463-3079 (TTY), or stop by Building 1, Room 218.